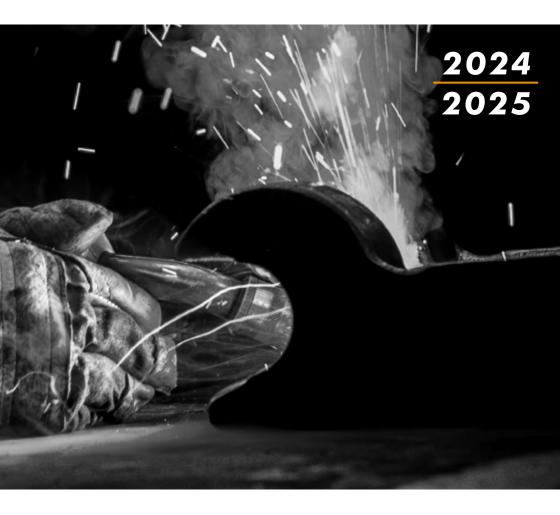


THE MEWLE



THE HENLE

THE NEW HENLE PRODUCT MANUAL





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HENLE Baumaschinentechnik

PREFACE

Dear reader,

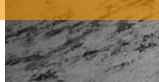
"THE HENLE" is a manual, that is designed to make your work with various excavator attachments more enjoyable. As a manufacturer of attachments, we have made it our business to collect all the information that you might need as a dealer and/or customer.

We wish you much pleasure with "THE HENLE" and hope that we can make your everyday life a little bit easier with the help of this unique manual.

Your HENLE Team

CHAPTER OVERVIEW

HENLEWORLD 8
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HENLEWORLD

As a medium-sized family business, our goal is to make the company HENLE sustainable and fit for the future. The term family business is not just a slogan to us. The company was founded by Werner and Irene Henle in 1981 and is now led by Gerhard and Gabriele Henle. In the meantime, the third generation has also joined the company and is part of the extended management team — thus the succession is assured.

HENLE is independent and completely autonomous: we are owner-managed and the succession in the management team has already been initiated. Our team works like a family: with all the advantages and disadvantages that this special structure entails. Our values of quality, reliability and sustainability flow into our daily work and determine the standards we demand of ourselves as well as the way we interact with our valued customers.

We stand for individuality: our customers receive both high-standard products as well as special solutions – depending on individual requirements. Talk to us and we will find a technical solution for an extraordinary application. We can make this possible thanks to the large range of manufactured products and our in-house design and development department.

We are flexible: we chose our location in southern Germany many years ago and continue to invest in on-site production. This enables us to quickly intervene, prioritize and react without hesitation.

FOR US, THE CUSTOMER ALWAYS TAKES CENTRE STAGE.

This includes not only the sale of our products, but also a friendly and courteous service. We see ourselves as problem solvers for all our customers. That is why the HENLE team is constantly trained and further educated.

For many years we have had a loyal customer base, which we advise and supply directly from Rammingen, Baden-Württemberg. In addition, we work with partners and suppliers from all over the world. In some cases, these connections have existed for decades.

We remain true to our values and philosophies in everything we do. It is particularly important to us to maintain an open, honest and fair relationship with our customers and suppliers.



HENLESERVICE

It is important to us to provide you with helpful and considerate advice. For this reason, we have created the manual that you are now holding in your hands. Our aim is to offer you a practical and comprehensive piece of work. You will therefore find a lot of information that is not only meant for HENLE products but also for excavation devices in general – for manufacturers quite important and interesting.

Nevertheless, we are happy to help you via phone or by email, especially when it comes to technical advice. We value the exchange with our customers! So please let us know if you have something on your mind. We believe that through teamwork we can find the best solutions. We look forward to hearing from you and your individual suggestions.

WE ARE CLEANSYSTEM PARTNER WITH OILQUICK

We have been an award-winning CleanSystem Partner of OilQuick Germany since 2019. Our priority is the service and quality we promise and offer. We also take responsibility for the installation of original OilQuick parts.



OilQuick CleanSystem is a free partner program which the partner undertakes to provide excavator equipment with an OilQuick product. Only original OilQuick parts or parts approved by OilQuick are allowed. With is cooperation, the customer is guaranteed the highest quality. It also symbolizes trust and accountability.









MORE THAN

35

PRODUCT CATEGORIES

SALES IN

19 COUNTRIES

19,000 customers

PARTNERS

WORLDWIDE

YOUR STRONG PARTNER

135



H

HENLECERTIFICATES



ISO 9001

HENLE Baumaschinentechnik GmbH has been ISO 9001 certified since 2008, a quality management system, and is audited annually. An audit takes place every three years according to the latest ISO 9001 standards.



ISO 14001

HENLE Baumaschinentechnik GmbH has been ISO 14001 certified since 2011, the environmental and resource management system, and is audited annually. Recertification takes place every three years according to the latest standards.



Ökoprofit is a coherent concept that makes it easy for companies to think more ecologically. Every resource and energy-saving measures can also save a lot of money. Therefore, we successfully completed this project in 2010.



HENLEQUALITY

We use high-quality materials in our products, which we purchase from long-standing suppliers. Our design department ensures that products and components are technically up to date. Should new requirements arise, our products are immediately reviewed and revised if necessary. We do not place our designs above the demands of the market and the requirements of the customer. It is important to us to honestly clarify and communicate what is technically possible – and if something is not possible.

- Quality that impresses.
- High wear resistance.
- Tested materials.
- Customised solutions.
- Top service.

Well-thought-out quality management also includes all elements to ensure the superiority of our products. We have a functioning and individually tailored incoming goods inspection process as well as conduct an outgoing inspection on all products that we deliver to you. Our welding team is regularly trained and certified.



HENLE

AWARENESS

For us at HENLE, sustainability is not just a simple phrase. For years we have been trying to improve our overall concept in this important area. HENLE sustainability is based on three pillars: ecological, economic, and social. We believe that our company can only grow on a long-term basis with the help of these pillars.

ECONOMICAL SUSTAINABILITY

We are a family business and strive to remain a family business. We believe that this is an essential component in being economically sustainable. We pay attention to long-term partnerships with customers and suppliers plus invest in integration to secure our company's future. In addition, our team is demographically heterogeneous: we are a colorful mix of long-standing and young employees. This is how we create an interplay of generations – the perfect mix of experience and new ideas: tradition and innovation.

As a manufacturing company, we are aware of our responsibility towards the environment and the finite resources that this planet provides us. Resource and energy efficient measures are taken with every acquisition, including machinery and new buildings. We are also concerned with the establishment of environmental goals, such as the responsible use of resources, efficient use

of energy, raw use of materials and the improvement of our over-all environmental impact. Our corporate policy reflects the importance of ecological sustainability at HENLE. Beyond mere compliance with legal regulations, we apply our social responsibility to those around us, our employees, and the environment. We also invest in ecologically sustainable technologies to supply our site.

SOCIAL SUSTAINABILITY

Acting in a socially sustainable way is a matter very close to our hearts. This begins with our location. We know what the region and the community in which we are situated gives us. Many employees come directly from Rammingen. It goes without saying that we feel obligated in giving something back to the region: through active support in social and cultural spheres. Thinking in a social way naturally also applies to the HENLE team itself. The team is the basis of the company's success. That is why we invest not only in the business but also in our team through social benefits and health management offers.





HENLEPARTNER



We work together with well-known and long-standing partners. A good and open relationship with our suppliers is important to us. Together we strive to improve all properties and components of the products that are eventually delivered to our customers.

Many of our regular suppliers are well known in the metal industry and beyond. They represent quality and performance. When we enter and develop a supplier relationship, it is important to us to build a long-term partnership, to offer our customers reliable products.

SSAR

The Swedish manufacturer SSAB is an epitome supplier when it comes to high-quality structural steel with the brands Hardox and Strenx. We purchase both materials from SSAB and use them in several of our products.



EST

A long-standing collaboration connects us with the Italian producer Esti. There we mostly source cutting edge steel, which in turn is used in all our buckets. Esti is a very reliable and loyal partner.



VeRotool

VeRoTool is our main supplier for wear parts. We have been working with this German company for decades now and have jointly developed optimal solutions, i. e., reinforced screwed teeth for our smallest buckets.



HKS Rotary Motors

In the field of tilt couplers, the German family-owned business HKS with their rotary motors are amongst the best-known manufacturers. We can offer all our products in combination with their large BV series.



PowerTil

We have been installing PowerTilt motors in our tilt coupler systems for some years now. As the market leader in tilt motors, PowerTilt impresses with its ingenious oil connection which can be combined with a hydraulic quick coupler.



Salzgitter

We also work closely with the company Salzgitter Mannesmann. There we purchase steel, which we further process into our products. As a well-known German manufacturer, Salzgitter is recognized for its high quality and flexibility.



Weir ESCO

In the world of tooth systems, Weir ESCO is one of our most important partners. We mostly purchase and install the patented Ultralok tooth system on our buckets for excavators with an operating weight of up to 12 tons.



Combi Wear Parts

We enjoy a decadelong partnership with Combi Wear Parts, formerly Componenta. We mainly purchase Pejo load hooks from this Swedish manufacturer. These load hooks can be found on our quick couplers and tilt couplers.



Stiefel Hydrauli

We work closely together with the Fritz Stiefel GmbH when it comes to hydraulic hoses and components. The company is in Burlafingen and is therefore situated not far from us. This means that we can react flexibly and are sure to receive high-quality products.





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HENLEPRODUCTS

QUICK COUPLING SYSTEMS

TILT COUPLER



QUICKCHANGE MECHANICAL



QUICKCHANGE **HYDRAULIC** SINGLE-ACTING



HKS TILT QC MECHANICAL



HKS TILT QC HYDRAULIC



QUICKCHANGE **HYDRAULIC** DOUBLE-ACTING



QUICKCHANGE **HYDRAULIC PROTECTTM**



POWERTILT TILT QC MECHANICAL



POWERTILT TILT QC HYDRAULIC



HQ MECHANICAL



HKS TILT HQ MECHANICAL



POWERTILT TILT HQ MECHANICAL

ABBREVIATIONS

QC - QUICKCHANGE **HD** - HEAVY DUTY VHD - VERY HEAVY DUTY

DCB - DITCH-CLEANING BUCKET

LH-VERSION - IDEAL FOR LIEBHERR-, VER-ACHTERT-SYSTEMS OR DIRECT ATTACHMENT SW-VERSION - IDEAL FOR LEHNHOFF AND OILQUICK SYSTEMS

EARTHMOVING



BACKHOE BUCKET 0.5 - 3.8 T



HD-BACKHOE **BUCKET** 1 - 3.8 T



BACKHOE BUCKET 3.8 - 12 T



HD-BACKHOE **BUCKET** 3.8 - 12 T



BACKHOE BUCKET SW-VERSION 12 - 45 T



BACKHOE BUCKET LH-VERSION 12 - 45 T



VHD-BACKHOE BUCKET SW-VERSION 12 - 45 T



VHD-BACKHOE **BUCKET** LH-VERSION 12 - 45 T



DCB RIGID 0.5 - 2.5 T



DCB RIGID 2.5 - 12 T



DCB RIGID 12 - 36 T



DCB TILTING 0.5 - 2.5 T



DCB TILTING 2.5 - 12 T



DCB TILTING 12 - 36 T



DCB WITH MOTOR 2.5 - 12 T



DCB WITH MOTOR 12 - 45 T



H

EARTHMOVING

CABLE CONSTRUCTION

DEMOLITION & RECYCLING



SLOPE BUCKET WITH MOTOR 12 – 45 T



SLOPE BUCKET WITH CYLINDER 12 – 36 T



TBB 2.5 - 12 T



TBB 12 - 45 T



TELE BUCKET 1 – 8.5 T



SORTING BUCKET WITH SKELETON BARS 1 – 3.8 T



SORTING BUCKET WITH SKELETON BARS 3.8 – 12 T



SORTING BUCKET WITH CROSS BARS 2.5 - 12 T



TBB WITH MOTOR 2.5 - 11 T



TBB WITH MOTOR 11 - 45 T



LOADING BUCKET 2.5 - 12 T



LOADING BUCKET 12 – 45 T



SPADE BUCKET 1 - 12 T



SORTIING BUCKET WITH SKELETON BARS SW-VERSION 12 – 45 T



SORTING BUCKET WITH SKELETON BARS LH-VERSION 12 – 45 T



SORTING BUCKET WITH CROSS BARS SW-VERSION 12 – 45 T



LOADING BUCKET CHAMFERED 2.5 - 12 T



LOADING BUCKET CHAMFERED 12 – 45 T



ROCK BACKHOE BUCKET 12 - 45 T



RIPPER BUCKET 16 – 45 T



CLAY BUCKET 1 - 12 T



SORTING BUCKET WITH CROSS BARS LH-VERSION 12 - 45 T



STONE LAYING BUCKET 16 – 45 T



RIPPER TOOTH 1 - 16 T



RIPPER TOOTH 16 - 45 T



TBB - TILT BACKHOE BUCKET

GARDENING AND LANDSCA-PING & CLEARING WORK

ADAPTER AND PLATES

CUSTOMISED SOLUTIONS - REFERENCES



GRIPPER BACKHOE BUCKET 1.7 - 10 T



GRAB RAKE 1 - 12 T



WELDING ADAPTER QC 1 - 12 T



WELDING ADAPTER QC 12 – 45 T



DEMOLITION ARM



TRIGGER BAR



GRAB RAKE 12 – 45 T



GRAB RAKE HOLD-DOWN CLAMP 1.7 - 10.T



GRIPPER ADAPTER WITHOUT UNIVERSAL JOINT



GRIPPER ADAPTER WITH UNIVERSAL JOINT



TILTROTATOR-BUCKET



STACKING SYSTEM



EXCAVATOR RAKE 1 - 12 T



ROOT CUTTER 1 - 21 T



SCREW ADAPTER PLATE 1 - 45 T



LIFTING HOOK-ADAPTER 1 – 45 T



TRAPEZOIDAL BUCKET



TUNNEL BUCKET







QUICK COUPLER

Quick couplers are available in various systems and designs. There is a wide range of systems, depending on the region and excavator size. In Germany, for example, the quick coupler systems Lehnhoff, OilQuick or Liebherr are strongly represented, while in Austria the Martin System is predominant and in the Benelux countries the Verachtert system can be found on most excavators. Moreover, these systems are supplied by many dealers. In Germany, Lehnhoffbased quick couplers are the most widespread. However, for some years

now, the OilQuick system has been on the

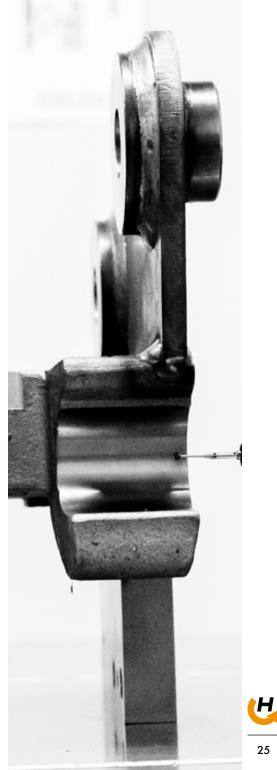
The design of the quick coupler refers to the locking technology. There are currently three common variants: mechanical, hydraulic, and fully hydraulic. The locking of quick couplers has also become a much-discussed topic in recent years. More about this can be found in Chapter 8, Safety.

QUICK COUPLING SYSTEMS:

Quick coupler systems with a mechanical design have a lock mechanism that works manually. Different systems have different locking techniques. However, the basics are the same: a socket wrench is necessary to lock and unlock the quick coupler.

With hydraulic quick coupler systems, the locking and unlocking between the attachment and the quick coupler occurs hydraulically. This means that in various design solutions, hydraulic pressure is exerted on the inside of the quick coupler. The excavator operator does not have to leave the cab - he can initiate the locking and unlocking process from the cab at the touch of a button.

A fully hydraulic quick coupler system currently offers the highest possible degree of hydraulic locking and unlocking. The attachment can be hydraulically locked and unlocked with this coupler. Furthermore, the hydraulic attachments are automatically connected with the oil lines. This means that the excavator operator no longer must leave the driver's cab. Because of their relatively high acquisition costs, fully hydraulic quick coupler systems are mostly suitable for excavators with an operating weight of 12 tons or more.



HENLE QUICKCHANGE QUICK COUPLER

The HENLE QuickChange quick coupler (QC) is a Lehnhoff-compatible quick coupler system. The QuickChange is available as mechanical and hydraulic versions. The range of the QC stretches from carrier machines with an operating weight from 1 to 40 tons.

With QuickChange, the quick coupler is manufactured with the individual mount for the desired excavator type.

HENLE offers two different locking variants for the hydraulic QuickChange in the sizes QC01 and QC03 which are intended for carrier machines of up to 6.5 tons.

Firstly, the quick coupler is equipped with a single-acting cylinder. Here, only one extra hydraulic line is required for installation. You don't have to retrofit anything to the excavator itself. This is also the more cost-effective variant for the QC quick coupler.

Secondly, the quick coupler can also be equipped with a double-acting cylinder. This safe system has already been in use for some time. Here two extra hydraulic lines are required for installation. However, these must be retrofitted to many excavator types. Nevertheless, if the excavator is equipped with two hydraulic lines, the hydraulic quick coupler with double-acting cylinder is the safer and technically more advanced variant.

More information about single-acting and double-acting cylinders can be found on page 323.

The QuickChange in size QC08 is only available with a double-acting cylinder.

HENLE HQ QUICK COUPLER

The HENLE Quick (HQ) quick coupler is an OilQuick-compatible quick coupler system. It is a modern quick coupler that was developed in 2014 according to the requirements. The HQ is modern in its locking mechanism, safe and efficient. As an OilQuick-compatible coupler, the HQ is the perfect introduction to the OilQuick system and makes a future upgrade to a fully hydraulic OilQuick quick coupler easier. In this case, the mechanical attachments would already be equipped with the correct mounting and do not need to be converted.

The HQ is available as a mechanical or hydraulic version. The mechanical HQ is secured via a dead center lock.

VIDEOS



Product video HQ quick coupler



Product video QC03Hp



Product video QC08Hp

QUICK COUPLER QUICKCHANGE MECHANICAL

OPERATING WEIGHT 0 TO 40 T

The HENLE Quick coupler "QuickChange", also simply called QC, is a Lehnhoff compatible quick coupling system. It is available in mechnical and hydraulic versions, for machines with an operating weight of 1 to 40 tonnes. With the appropriate adapter, it can be manufactured for any type of excavator.



TECHNICAL DETAILS

Sizes: QC01 M, QC03 M, QC08 M, QC10 M and QC21 M/25 M

Operating weight: 0 to 40 t Locking: Mechanical

OPTIONAL

Welded lifting hook

CHARACTERISTICS

- Mechanical version
- Compatible with Lehnhoff system

Туре	Operating weight [t]	Weight [kg]
QC01M	0 to 2	21
QC03M	2 to 6.5	30
QC08M	6.5 to 12	85
QC10M	12 to 19	185
QC21M/25M	19 to 40	320

All weights are theoretically calculated and therefore without guarantee.



QUICK COUPLER

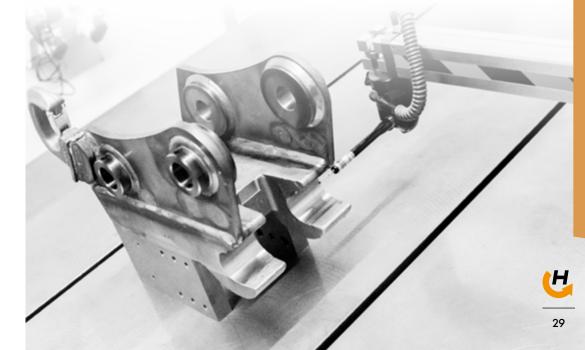
PROS

- Quick change of attachments.
- Simple, proven system.
- Compatible with Lehnhoff system.

CONS

 Depending on the system, there is a certain loss of tearing force.





QUICK COUPLER QUICKCHANGE HYDRAULIC SINGLE-ACTING

OPERATING WEIGHT 0 TO 6.5 T

The HENLE Quick coupler "QuickChange", also simply called QC, is a Lehnhoff compatible quick coupling system. It is available in mechnical and hydraulic versions, for machines with an operating weight of 1 to 40 tonnes. With the appropriate adapter, it can be manufactured for any type of excavator.

TECHNICAL DETAILS

Sizes: QC01 SHF and QC03 SHF Operating weight: 0 to 6.5 t

Locking: Hydraulic

OPTIONAL

- Welded lifting hook
- Installation kit 12V or 24V for retrofitting to the excavator

CHARACTERISTICS

- Hydraulic lockable quick coupling system
- Equipped with single-acting cylinder
- Compatible with Lehnhoff system
- With drop protection

Туре	Operating weight [t]	Weight [kg]
QC01SHF	0 to 2	22
QC03SHF	2 to 6.5	32

All weights are theoretically calculated and therefore without guarantee.

ABBREVIATIONS

QC01<u>SHE</u> – HYDRAULIC WITH SINGLE-ACTING CYLINDER WITH DROP PROTECTION QC01<u>HE</u> – HYDRAULIC WITH DOUBLE-ACTING CYLINDER WITH DROP PROTECTION

PROS

- Quick change of attachments.
- Simple, proven system.
- Compatible with Lehnhoff system.

CONS

 Depending on the system, there is a certain loss of tearing force.



RETROFITTING AN ADDITIONAL HYDRAULIC CIRCUIT ON THE EXCAVATOR WITH THE INSTALLATION KIT

Legislation stipulates in the standard for earth-moving machinery that hydraulic quick couplers with wedge-shaped locking systems must be permanently pressurized. This means that a separate hydraulic circuit must be used for the 'open/close quick coupler' functions. If necessary – and if not available – this must be retrofitted to the excavator.

The installation kit offered by HENLE Baumaschinentechnik GmbH provides you with a basic kit consisting of parts that must be used: 4/2-way solenoid valve, distributor block, electric switch with buzzer.



QUICK COUPLER QUICKCHANGE HYDRAULIC DOUBLE-ACTING

OPERATING WEIGHT 0 TO 40 T

The HENLE Quick coupler "QuickChange", also simply called QC, is a Lehnhoff compatible quick coupling system. It is available in mechnical and hydraulic versions, for machines with an operating weight of 0 to 40 tonnes. With the appropriate adapter, it can be manufactured for any type of excavator.

TECHNICAL DETAILS

Sizes: QC01 HF, QC10HF, QC21 HF and QC25HF

Operating weight: 0 to 40 t

Locking: Hydraulic

OPTIONAL

- Welded lifting hook
- Installation kit 12V or 24V for retrofitting to the excavator

CHARACTERISTICS

- · Hydraulic lockable quick coupling system
- Equipped with double-acting Cylinder
- Compatible with Lehnhoff system
- With safety hook

Туре	Operating weight [t]	Weight [kg]
QC01HF	0 to 2	23
QC 10HF	12 to 19	200
QC21HF	19 to 28	270
QC25HF	28 to 40	360

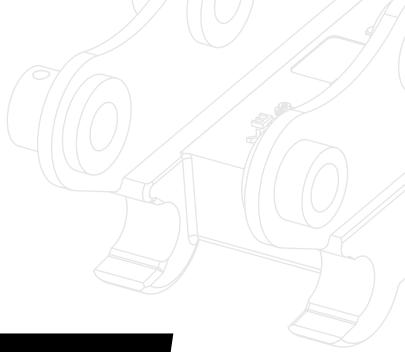
All weights are theoretically calculated and therefore without guarantee.

PROS

- Quick change of attachments.
- Simple, proven system.
- Compatible with Lehnhoff system.

CONS

 Depending on the system, there is a certain loss of tearing force.



You can find further indormation about singleacting and double-acting cylinder on page 323.



QUICK COUPLER

QUICK COUPLER QUICKCHANGE **HYDRAULIC** QCprotectTM

OPERATING WEIGHT 2 TO 12 T

The QuickChange Quick coupler is a mechanically and hydraulically available quick coupling system. It is compatible with Lehnhoff. The hydraulic version with double-acting cylinder uses the HENLEprotect Technology in the sizes QC03 and QC08. Therefore it can prevent the attachment from falling off in th event of improper locking. The versions with the HENLEprotect Technology will be available degreesually.



TECHNICAL DETAILS

Sizes: QC03Hp and QC08Hp Operating weight: 2 to 12 t Compatible: With Lehnhoff system **Locking:** Hydraulic

EQUIPPED

- With double-acting cylinder
- With QCprotectTM Technology
- With indicator wire or indicator pen

OPTIONAL

- Welded lifting hook
- Installation kit 12V or 24V for retrofitting to the excavator

CHARACTERISTICS

- Drop protection through HENLEprotect Technology
- Indicator wire or indicator pen for visual conrol
- With double-acting cylinder

Туре	Operating weight [t]	Weight [kg]
QC03Hp	2 to 6.5	33
QC08Hp	6.5 to 12	100

All weights are theoretically calculated and therefore without guarantee.



PROS

- Surpasses safety standards ISO 13031 and EN 474.
- No limitation on attachment options.
- No additional effort in daily work.
- Prevents serious accidents on construction site.
- Eligible for funding by the BG Bau.

CONS

Depending on the system, there is a certain loss of tearing force.

HENLEAdvice!

QCprotectTM:

THE NEW HENLEprotect TECHNOLOGY

When working on a construction site, you are exposed to a wide variety of risks every day. Your safety is important to us - that's why we have developed the QCprotectTM.

The hydraulic Quick coupling system is equipped with the new HENLEprotect Technology: it narrows the opening of the Quick coupler claw with an additional claw so that the attachment is prevented from dropping in the event of an incorrect locking. If a load is lifted despite mislocking, the QCprotectTM still holds it in the most critical position: when the excavator arm is fully extended.







Product video QC03Hp

Product video QC08Hp



More information about our QCprotectTM on pages 290 to 293.

QUICK COUPLER **HQ MECHANICAL**

OPERATING WEIGHT 0.5 TO 28 T

The HQ quick coupler is a modern and for mechanical attachments OilQuick compatible system for the safe and quick change of attachments on the carrier machine. As a mechanical version, it offers the perfect introduction to the OilQuick system, allowing you to switch to a fully hydraulic quick coupler at a later date.



TECHNICAL DETAILS

Sizes: HQ40M, HQ45M

and HQ70M

Operating weight: 0.5 to 28 t

Locking: Mechanical

OPTIONAL

Welded lifting hook

CHARACTERISTICS

- Mechanical lockable quick coupling system
- · Compatible with OilQuick system with mechanical attachments

Туре	Operating weight [t]	Weight [kg]
HQ40M	0.5 to 6.5	41
HQ45M	6.5 to 12	60
HQ70M	12 to 28	230

All weights are theoretically calculated and therefore without guarantee.



QUICK COUPLER

PROS

- Compatible with OilQuick system with mechanical attachments.
- Modern locking through dead centre locking.
- Designed as standard with HT-Function.
- Quick change of different tools.

CONS

Depending on the system, there is a certain loss of tearing force.

FAST AND EFFICIENT TOOL CHANGE

MECHANICAL LOCKING

- 1. Attach the quick coupler to the excavator.
- 2. Insert the coupling into the adapter of the attachment.
- 3. Lock the quick coupler and the attachment with the locking key.
- » The attachment ist correctly attached to the excavator arm and ready for use.





LEHNHOFF

The Lehnhoff quick coupler system is the most widely deployed system in Germany and is mostly used in the compact machines sector.

OILQUICK

The OilQuick quick coupler system is a fully hydraulic solution, which has gained importance on the market in recent years. It is a modern and secure system.

LIEBHERR

This quick coupler system comes from the Liebherr company. It is especially used for machines above the compact machine range.

MARTIN

The Martin system is most common in Austria. Its focus is on compact machines. In principle, the Martin system covers a range of machines with an operating weight of up to 17 tons.

STEELWRIST

Steelwrist offers a fully hydraulic quick coupler system. Steelwrist pursues an open system philosophy, with which they want to achieve compatibility with comparable systems.

VERACHTERT

The Verachtert system is the oldest mentioned here and is available in mechanical and hydraulic versions. It is a tried and tested system that is widely used internationally.

SPECIAL CASE: UNIVERSAL QUICK COUPLER

The so called universal quick couplers were more widespread in the past but are hardly found in Germany today. When using a universal quick coupler, two bolts are inserted into the existing mountings of an attachment, into which the quick coupler retracts. The universal quick coupler therefore has claws at the front and rear. They are available as both mechanical and hydraulic versions.

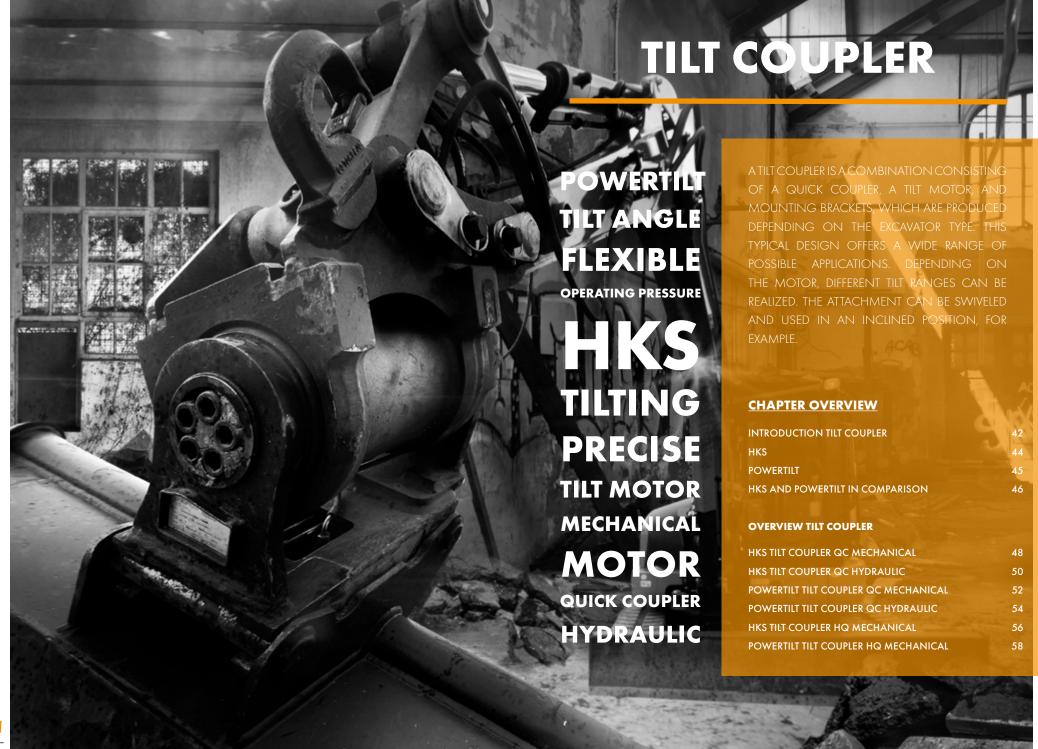
The advantage of the universal quick coupler is that, generally but not always, the existing

attachments do not have to be converted to fit with the quick coupler.

However, there are also considerable disadvantages. The attachments will only fit this special quick coupler, which in turn is specialized for the excavator type. It cannot be used on other excavators. In the meantime, universal quick couplers are no longer desired. They are built higher, and the attachments are not tailored to this quick coupler system.









The tilt coupler as well as the quick coupler is technically declared as a machine. It replaces the quick coupler as the connecting element between the excavator arm and the attachment. The tilt coupler combines three components: the quick coupler, the tilt motor and the excavator mounting. As a result, a tilt coupler allows the joined attachment to swivel a certain number of degrees to the left and right, while the quick coupler offers all the possibilities of a simple quick coupler. Tilt couplers are available with mechanical, hydraulic as well as fully hydraulic quick couplers.

Tilt couplers have increased significantly on the German market in recent years. Tilt couplers are manufactured even for the smallest excavators, in fact many excavators are no longer sold without a tilt coupler device. For example, in Switzerland and Austria, there is almost no machine that is not equipped with at least one tilt coupler. Unfortunately, the continuous spread is currently limited by the motor manufacturers' production capacities who are struggling to meet the huge demand in Europe.

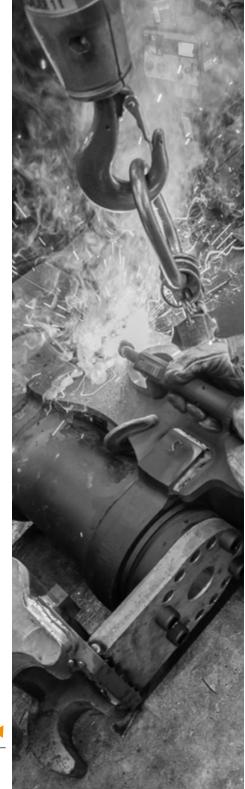
Special Case: Rotator/Tiltrotator

The enhancement of a tilt coupler is to equip it with a rotator or a tilt rotator. While a tilt coupler can tilt sideways and is therefore very flexible, other options can be realized with the construction of a rotator instead of a motor. Although the normal rotator does not allow lateral swivel motion, it allows the attachment to be rotated 360 degrees. This means that the rotator is intended for a very special application and does not necessarily make it useful on every construction site.

A tilt rotator combines the properties of a tilt coupler and a rotator. With the help of a tilt rotator an attachment can be swiveled sideways and rotated 360 degrees.







HKS

HKS is a southern German company that has many years of experience with motors. The motor line, which is installed on our tilt couplers, is called XtraTilt.

The XtraTilt motor has special wipers on both sides. This means that the motor's technical design disables dirt from entering the housing and is therefore maintenance-free. This naturally reduces maintenance costs.

Tilt couplers with HKS tilt motors are available in a wide range of sizes. They can realize a torque from 2,480 to 165,000 Nm. HKS tilt motors have a tilt angle of 100, 140 or 180 degrees. For proper functioning an operating pressure of up to 210 bar is required.

TILT COUPLER

POWERTILT

Tilt couplers with an integrated tilt motor of the brand PowerTilt are currently the most used devices in Germany. In contrast to competing tilt motor models, the PowerTilt motor offers various advantages.

The greatest advantage of the PowerTilt motor lies in the hydraulic oil connection. This enables the better mounting of a PowerTilt tilt coupler with a hydraulic quick coupler. In other words, a simplified hose routing can be realized.

A torque from 2,400 to 70,000 Nm can be realized with the PowerTilt tilt coupler. They have a tilt angle of 120 or 180 degrees and work with an operating pressure of up to 210 bars.



HQ with PowerTilttilt coupler

HKS AND POWERTILT

IN COMPARISON

The HKS and PowerTilt tilt motors have been on the market for years. Both products have been tried and tested in practice and have a number of technical features and product advantages.

Please find the technical data of the individual motor sizes and their specific features below.

technical details hks

Motor sizes	Operating weight [t]	Holding torques	Operating pressure	Tilt angle
BV85	0 to 1.9	2.000 Nm	210 bar	180°
BV 100	1.6 to 2.5	2.400 Nm	210 bar	178°
BV 115	2.3 to 4.2	4.300 Nm	210 bar	178°
BV 125	4 to 6.2	8.200 Nm	210 bar	178°
BV130	6 to 7.5	11.000 Nm	210 bar	178°
BV 160	7.5 to 10	17.500 Nm	210 bar	178°
BV200	9.8 to 12	24.000 Nm	210 bar	180°

Sizes BV 180 upon request.

PRODUCT ADVANTAGES

- End flange with plain bearing, mounting thread and special wiper on both sides
- Paired gears of the highest manufacturing accuracy
- Drive centring on both sides for optimum force distribution

- Shaft with adapter flange and plain bearing
- Surface-hardened piston with guide element
- Surface-hardened and corrosion-protected housing with foot mounting in screw or welded version

TECHNICAL DETAILS POWERTILT

	Motor sizes	Operating weight [t]	Holding torques	Operating pressure	Tilt angle
	PT4.5	0 to 1.8	2.470 Nm	210 bar	180°
	PTO30	1.8 to 3	6.425 Nm	210 bar	180°
	PTO50	3 to 5	9.350 Nm	210 bar	180°
	PT0 7 0	5 to 7	14.850 Nm	210 bar	180°
Ī	PT 100	7 to 10	20.450 Nm	210 bar	180°
	PT 180	10 to 18	40.725 Nm	210 bar	120°

PRODUCT ADVANTAGES

- Integrated
 Oil connection
- Reduced weight ensures greater stability and lower fuel costs
- Imporved holding power promotes productivity

- Hardened sealing and bearing surfaces
- Integrated cross-connection overload valve provides overload protection
- Versatile coupling configurations

H

HKS TILT COUPLER WITH QC MECHANICAL

OPERATING WEIGHT 0 TO 38 T

Tilt coupler with a tilt motor from HKS are available in a wide range of sizes. They have holding torques from 2.000 to 24.000 Nm and can realise a tilt range of 100, 140, 178 or 180 degrees. They are equipped with an optional load safety valve for exact holding of the approached position.





TECHNICAL DETAILS

Sizes:

QC01 M-BV85 to QC21 M/25M-BV300

Tilt range:

- BV85 to BV180: 180°/178°
- BV240 to BV300: 100°/140°

Operating weight: 0 to 38 t

OPTIONAL

- Welded lifting hook
- Load safety valve

Туре	Operating weight [t]	Weight [kg]
QC01 M-BV85	0 to 1.8	45
QC01 M-BV 100	1.6 to 2	50
QC03M-BV100	2 to 2.5	55
QC03M-BV115	2.3 to 4.2	<i>7</i> 5
QC03M-BV125	4 to 6.2	100
QC03M-BV130	6 to 6.5	115
QC08M-BV130	6.5 to 7.5	155
QC08M-BV160	7.5 to 10	185
QC08M-BV180	8.5 to 11	205
QC08M-BV200	9,8 to 12	n. s.
QC 10M-BV225	12 to 13	n. s.
QC10M-BV240	12 to 16	400
QC10M-BV250	15 to 19	500
QC21 M/25M-BV250	19 to 23	n. s.
QC21 M/25M-BV260	22 to 26	n. s.
QC21M/25M-BV270	25 to 29	n. s.
QC21 M/25M-BV290	28 to 34	n. s.
QC21 M/25M-BV300	28 to 38	n. s.

All weights are theoretically calculated and therefore without guarantee.

CHARACTERISTICS

- Fitted with a mechanical lockable quick coupler
- Compatible with Lehnhoff system
- Equipped with a tilt motor from the HKS-BV series

PROS

- Possible realisation of tilt ranges from 100, 140, 178 or 180 degrees.
- Low maintenance and user friendly.
- Easy assembly.

CONS

- Higher weight than using only a quick coupler.
- Loss of tearing force due to extension of the excavator arm by the tilt coupler.





HKS TILT COUPLER WITH QC HYDRAULIC

OPERATING WEIGHT 0 TO 38 T

Tilt coupler with a tilt motor from HKS are available in a wide range of sizes. They have holding torques from 2.000 to 24.000 Nm and can realise a tilt range of 100, 140, 178 or 180 degrees. They are equipped with an optional load safety valve for exact holding of the approached position.





TECHNICAL DETAILS

Sizes: QC01-BV85 to QC25-BV300

Tilt range:

- $\bullet~$ BV85 to BV180: 180°/178°
- BV240 to BV300: 100°/140°

Operating weight: 0 to 38 t

OPTIONAL

- Welded lifting hook
- Installation kit 12V or 24V for retrofitting to the excavator
- Load safety valve

Туре	Operating weight [t]	Weight [kg]
QC01 SHF-BV85	0 to 1.8	50
QC01HF-BV85	0 to 1.8	52
QC01 SHF-BV 100	1.6 to 2	55
QC01 HF-BV 100	1.6 to 2	57
QC03SHF-BV100	2 to 2.5	60
QC03Hp-BV100	2 to 2.5	65
QC03SHF-BV115	2.3 to 4.2	80
QC03Hp-BV115	2.3 to 4.2	85
QC03SHF-BV125	4 to 6.2	100
QC03Hp-BV125	4 to 6.2	105
QC03SHF-BV130	6 to 6.5	115
QC03Hp-BV130	6 to 6.5	120
QC08Hp-BV130	6.5 to 7.5	1 <i>7</i> 5
QC08Hp-BV160	7.5 to 10	205
QC08Hp-BV180	8.5 to 12	225
QC 10HF-BV240	12 to 16	425
QC 10HF-BV250	15 to 19	525
QC21HF-BV250	19 to 23	k. A.
QC21HF-BV260	22 to 26	k. A.
QC21 HF-BV270	25 to 28	k. A.
QC25HF-BV290	28 to 34	k. A.
QC25HF-BV300	28 to 38	k. A.

CHARACTERISTICS

- · Equipped with a hydraulic lockable quick coupler
- Quick coupler with single or double-acting cylinder (only QC01 and QC03)
- Compatible with Lehnhoff system
- Equipped with a tilt motor from the HKS-BV series
- BV85 to BV180 included hose holder

PROS

- Possible realisation of tilt ranges from 100, 140, 178 or 180 degrees.
- Low maintenance and user friendly.
- Easy assembly.

CONS

- Higher weight than using only a quick coupler.
- Loss of tearing force due to extension of the excavator arm cmade ofed by the tilt coupler.

HENLEAdvice!

RETROFITTING AN ADDITIONAL HYDRAULIC CIRCUIT ON THE EXCAVATOR WITH THE INSTALLATION KIT

Legislation stipulates in the standard for earth-moving machinery that hydraulic quick couplers with wedge-shaped locking systems must be permanently pressurized. This means that a separate hydraulic circuit must be used for the 'open/close quick coupler' functions. If necessary – and if not available – this must be retrofitted to the excavator.

The installation kit offered by HENLE Baumaschinentechnik GmbH provides you with a basic kit consisting of parts that must be used: 4/2-way solenoid valve, distributor block, electric switch with buzzer.





All weights are theoretically calculated and therefore without guarantee.

POWERTILT TILT COUPLER WITH QC MECHANICAL

OPERATING WEIGHT 0 TO 18 T

Tilt couplers with a tilt motor from PowerTilt have holding torques of 2.470 to 40.725 Nm and can realise a tilt range of 120 or 180 degrees. They require an operating pressure of up to 210 bar. Sizes PT030 and above do not require a load safety valve. PowerTilt tilt couplers have a low weight and compact dimensions.



POWERTILT

TECHNICAL DETAILS

Sizes: QC01 M-PT4.5 to QC10M-PT180

Tilt range:

- PT4.5 to PT100: 180°
- PT180: 120°

Operating weight: 0 to 18 t

OPTIONAL

Welded lifting hook

CHARACTERISTICS

- Equipped with a mechanical lockable quick coupler
- Compatible with Lehnhoff system
- Equipped with a tilt motor of the PowerTilt-PT series
- Integrated overload valve and oil connection as of PT030

Туре	Operating weight [t]	Weight [kg]
QC01 M-PT4.5	0 to 1.8	45
QC01 M-PT030	1.8 to 2	52
QC03M-PT030	2 to 3	61
QC03M-PT050	3 to 5	<i>7</i> 9
QC03M-PT070	5 to 6.5	119
QC08M-PT100	6.5 to 10	190
QC 10M-PT 180	10 to 18	380

All weights are theoretically calculated and therefore without guarantee.

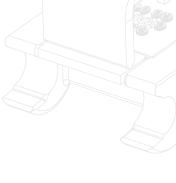
PROS

- Realisation of tilt ranges from 120 or 180 Degrees.
- Low maintenance and user friendly.
- Manifold for single installation on the carrier device.
- Low overall height.
- Light weight and compact dimensions.

CONS

- Higher weight than using only a quick coupler.
- Loss of tearing force due to extension of the excavator arm by the tilt coupler.









POWERTILT TILT COUPLER WITH QC HYDRAULIC

OPERATING WEIGHT 0 TO 18 T

Tilt couplers with a tilt motor from PowerTilt have holding torques of 2.470 to 40.725 Nm and can realise a tilt range of 120 or 180 degrees. They require an operating pressure of up to 210 bar. Sizes PT030 and above do not require a load safety valve. PowerTilt tilt couplers have a low weight and compact dimensions. As standard PowerTilt motors are equipped with an integrated overload valve and oil connection. This enables individual mounting on hydraulic quick coupling systems. They have a manifold for individual installation on the carrier device as standard.



PROS

- Realisation of tilt ranges from 120 or 180 degrees.
- Low maintenance and user friendly.
- Manifold for single installation on the carrier device.
- Oil connection enables a singlees and neat assembly of hydraulic quick coupling systems.

CONS

- Higher weight than using only a quick coupler.
- Loss of tearing force due to extension of the excavator arm by the tilt coupler.

HENLEAdvice!

POWER*TILT*

TECHNICAL DETAILS

Sizes: QC01-PT4.5 to QC10-PT180

Tilt range:

- PT4.5 to PT100: 180°
- PT 180: 120°

Operating weight: 0 to 18 t

OPTIONAL

- Welded lifting hook
- Installation kit 12V or 24V for retrofitting to the excavator

CHARACTERISTICS

- Equipped with a hydraulic lockable quick coupler
- Quick coupler with single- (QC01/QC03) or double-acting cylinder (QC01 – QC10)
- Compatible with Lehnhoff system
- Equipped with a tilt motor from the PowerTilt-PT series
- Integrated overload valve and oil connection from PTO30
- PT4.5 inclusive hose holder

Туре	Operating weight [t]	Weight [kg]
QC01SHF-PT4.5	0 to 1.8	48
QC01 HF-PT4.5	0 to 1.8	50
QC03SHF-PT030	1.8 to 3	63
QC03Hp-PT030	1.8 to 3	65
QC03SHF-PT050	3 to 5	80
QC03Hp-PT050	3 to 5	82
QC03SHF-PT070	5 to 6.5	120
QC03Hp-PT070	5 to 6.5	122
QC08Hp-PT100	6.5 to 10	198
QC10HF-PT180	10 to 18	395

OIL CONNECTION

An oil feed-through on a tilt motor with an integrated oil line and does therefore not need any hydraulic hoses. This means that working with the tilt coupler becomes easier. This is achieved by the integrated oil line, for there is a higher risk that any installed hydraulic hoses could potentially move with the motor and initiate damage. The integrated oil line is best used with a hydraulic quick coupler.

HOSE HOLDER

Tilt couplers in combination with a hydraulic quick coupler without integrated oil connection are additionally equipped with a hose holder. The hoses are protected from kinking and damage by means of the adapted mudguard.





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HKS TILT COUPLER WITH HQ MECHANICAL

OPERATING WEIGHT 2 TO 11 T

Tilt coupler with a tilt motor from HKS are available in a wide range of sizes. They have holding torques from 2.000 to 24.000 Nm and can realise a tilt range of 100, 140, 178 or 180 degrees. They are equipped with an optional load safety valve for exact holding of the approached position.





TECHNICAL DETAILS

Sizes: HQ40M-BV100 to HQ45M-BV180

Tilt range:

• BV 100 to BV 180: 180°

Operating weight: 2 to 11 t

OPTIONAL

Welded lifting hook

CHARACTERISTICS

- Equipped with a mechanical lockable quick coupler
- Compatible with OilQuick system
- HT-Function as standard
- Equipped with a tilt motor from the HKS-BV series

Туре	Operating weight [t]	Weight [kg]
HQ40M-BV100	2 to 2.5	67
HQ40M-BV115	2.5 to 4.2	83
HQ40M-BV125	4.2 to 6.2	101
HQ40M-BV130	6.2 to 7.5	126
HQ45M-BV160	7.5 to 10	155
HQ45M-BV180	10 to 11	162

All weights are theoretically calculated and therefore without guarantee.

PROS

- Possible realisation of tilt ranges from 100, 140, 178 or 180 degrees.
- Low maintenance and user friendly.
- Easy assembly.

CONS

- Higher weight than using only a quick coupler.
- Loss of tearing force due to extension of the excavator arm by the tilt coupler.





POWERTILT TILT COUPLER WITH HQ MECHANICAL

OPERATING WEIGHT 0.5 TO 10 T

Tilt couplers with a tilt motor from PowerTilt have holding torques of 2.470 to 40.725 Nm and can realise a tilt range of 120 or 180 degrees. They require an operating pressure of up to 210 bar. Sizes PT030 and above do not require a load safety valve. PowerTilt tilt couplers have a low weight and compact dimensions.



POWERTILT

TECHNICAL DETAILS

Sizes: HQ40M-PT030 to HQ45M-PT100

Tilt range:

PT030 to PT100: 180°

Operating weight: 0.5 to 10 t

OPTIONAL

Welded lifting hook

CHARACTERISTICS

- Equipped with a mechanical lockable quick coupler
- Compatible with OilQuick system
- HT-Function as standard
- Equipped with a tilt motor from the PowerTilt-PT series
- Integrated overload valve and oil connection

Туре	Operating weight [t]	Weight [kg]
HQ40M-PT030	0.5 to 3	79
HQ40M-PT050	3 to 5	97
HQ40M-PT070	5 to 6.5	137
HQ45M-PT100	6.5 to 10	197

All weights are theoretically calculated and therefore without guarantee.

PROS

- Realisation of tilt ranges from 120 or 180 degrees.
- Low maintenance and user friendly.
- Manifold for single installation on the carrier device.
- Low overall height.
- Light weight and compact dimensions.

CONS

- Higher weight than using only a quick coupler.
- Loss of tearing force due to extension of the excavator arm by the tilt coupler.





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EARTHMOVING

THE EARTH MOVEMENT SECTOR COVERS A WIDE RANGE OF APPLICATIONS: FROM ROAD CONSTRUCTION AND CIVIL ENGINEERING TO HYDRAULIC ENGINEERING AND TRENCHING. BASICALLY, THIS INCLUDES EVERYTHING THAT CAN CHANGE THE SHAPE, POSITION, OR STORAGE PROPERTIES OF SOIL THERE ARE VARIOUS WORK PROCESSES INVOLVED: LOOSENING, LOADING, CONVEYING, OR COMPACTING. IN EARTHMOVING, THE CLASSIC ATTACHMENTS SUCH AS BACKHOE BUCKET OR DITCH CLEANING BUCKET ARE MAINLY USED.

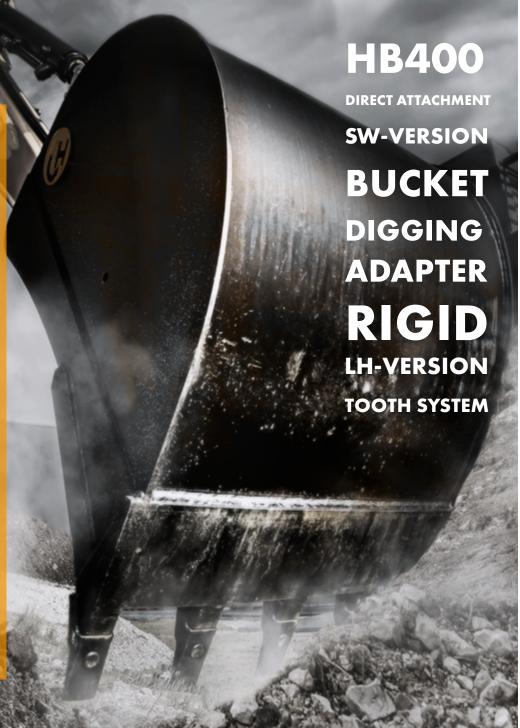
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Classic earthmoving encompasses a variety of different areas of application. Basically, it is the generic term for some of the areas mentioned in the product manual.

However, in the following chapter, only typical construction sector areas of application are listed: civil engineering, road construction, hydraulic engineering, and trench construction.

All these areas of application are summarized here under "Earthmoving".

Work processes within earthmoving are diverse. They include soil removal, filling and backfilling as well as the production of embankments or excavations. The basic processes that are used here are loosening, loading, conveying, installing, or compacting soil.

Due to the wide range of possible applications, there is a complex variety of attachments that can be used. The decisive factor is always what goal needs to be achieved with the tool.

When selecting the attachment, the nature of the soil should be observed. Depending on its consistency, certain attachments may be more advantageous.





EARTHMOVING

BACKHOE BUCKET

OPERATING WEIGHT 0.5 TO 3.8 T

As a versatile attachment, the standard backhoe bucket offers a wide variety of working applications. Its shape makes it ideal for picking up, transporting, lifting or dumping. It is ideal for working in the ground and in medium-heavy soils.



APPLICATION AREAS

- Earthmoving
- Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 0 to 2S

Operating weight: 0.5 to 3.8 t

Material: cutting edge and

side sickles made of HB400

Standard adapter: QC01 and QC03

OPTIONAL

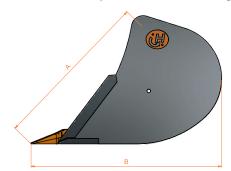
- Front-insert blade
- Cutting edge moved forward
- HT-Adapter
- Without teeth

CHARACTERISTICS

- Screwed or welded tooth system
- Individual adapter
- Equipped with side sickles

	Class	Operating weight [t]	A [mm]	B [mm]
Ī	0	0.5 to 1	397	474
	1	1 to 2	454	543
	2	2 to 2.5	507	613
Ī	2S	2.5 to 3.8	610	<i>7</i> 21

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- Classic attachment for earthmoving applications.
- Versatile application possibilities.

CONS

 Not ideal for use in very hard soils and rocky terrain. The HD-Backhoe bucket is better suited for this in order to minimise wear on the attachment.

HENLEAdvice!



HT-ADAPTER

Our HT-Adapter (high-low mount) is made up to two identical shafts with a recess. This allows the attachments to be rotated by 180 degrees. It is therefore possible to move it in both directions – both towards the machine and away from the machine. This enables more flexible use in day-to-day work. The HT-Adapter is available as optional equipment.

FLEXIBLE USE WITH SCREWED TOOTH SYSTEM

When working in very light soils, it is advisable to use a screwed tooth system. If necessary, the teeth can be easily unscrewed and the bucket can be used with a bare cutting edge. In addition, worn out teeth can be replaced quickly.



H

BUCKET CAPACITIES p. 66 – 67

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BACKHOE BUCKET CLASS O

OPERATING WEIGHT 0.5 TO 1 T

Bottom and side parts 5mm, side sickles HB400 5mm, cutting edge HB400 110x12mm, screwed tooth system, suitable QC01

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
200*	0.012	23	2
250	0.016	26	3
300	0.020	28	3
350	0.025	30	3
400	0.029	32	3
500	0.038	37	4

The longer teeth can cause collisions with the excavator stick.

BACKHOE BUCKET CLASS 1

OPERATING WEIGHT 1 TO 2 T

Bottom and side parts 5mm, side sickles HB400 6mm, cutting edge HB400 150x16mm, welded or screwed tooth system, suitable QC01

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
200*	0.016	28	2
220	0.018	29	2
250	0.022	31	3
300	0.027	34	3
350	0.033	37	3
400	0.039	39	3
500	0.051	45	4
600	0.063	50	4

^{*}Marked cutting widths only with limited digging depth with quick coupler employment QC01.

BACKHOE BUCKET CLASS 2

OPERATING WEIGHT 2 TO 2.5 T

Bottom and side parts 6mm, side sickles HB400 6mm, cutting edge HB400 150x16mm, welded or screwed tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
220*	0.024	41	2
250	0.028	44	3
300	0.036	47	3
350	0.043	51	3
400	0.051	54	3
500	0.067	62	4
600	0.083	68	4
<i>7</i> 00	0.099	<i>7</i> 6	5
800	0.115	83	5

We recommend a welded tooth system.

BACKHOE BUCKET CLASS 2S

OPERATING WEIGHT 2.5 TO 3.8 T

Bottom and side parts 8mm, side sickles HB400 6mm, cutting edge HB400 150x20mm, welded or screwed tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
250	0.038	62	2
300	0.048	69	3
350	0.059	<i>7</i> 4	3
400	0.070	79	3
500	0.093	91	4
600	0.116	101	4
<i>7</i> 00	0.140	113	5
800	0.164	123	5
900	0.187	133	5
1000	0.211	145	6

We recommend a welded tooth system.





^{*}Marked cutting widths only with limited digging depth with quick coupler employment QC01.

^{*}Marked cutting widths only with limited digging depth with quick coupler employment QC03.

HD-BACKHOE BUCKET

OPERATING WEIGHT 1 TO 3.8 T

The HD-backhoe bucket series ("Heavy Duty") was designed for a more demanding use in the compact sector. Bottom, side parts, side cutting edges and cutting edge are made of highly wear-resistant HB400 steel. The weld seams are better protected against wear through the protruding bottom.



APPLICATION AREAS

- Earthmoving
- Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 1 to 2S

Operating weight: 1 to 3.8 t

Material: side sickles and bucket body made of highly wear-resistant HB450, cutting edge made of HB500

Standard adapter: QC01 and

QC03

OPTIONAL

- Front-insert blade
- Cutting edge moved forward
- HT-Adapter
 - Without teeth

CHARACTERISTICS

- Side parts put on bottom
- Welded tooth system
- Individual adapter or direct attachment
- Equipped with side sickles

Class	Operating weight [t]	A [mm]	B [mm]
1	1 to 2	451	530
2	2 to 2.5	505	602
2S	2.5 to 3.8	597	<i>7</i> 00

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- The weld seams are better protected against wear by the protruding bottom.
- The HD series is equipped with a selfsharpening tooth system with up to 70% wear.

CONS

 When working in very light soils, the HD backhoe bucket is more stable due to his equipment than it would be necessary. The standard backhoe bucket may be more suitable here.

HENLEAdvice!





LONGER STANDING TIMES WHEN USED IN **RENTAL FLEET**

The HD-backhoe bucket is more suitable for a rental fleet than a standard backhoe bucket. Thanks to its higher quality equipment, the HD-backhoe bucket can be used for longer time in the rental fleet, whereby the additional purchase costs are comparatively low.

The protruding bottom and the self-sharpening tooth system of the HD-backhoe bucket significantly reduce wear on the bucket, allowing it to be used for longer in the hire fleet.

BUCKET CAPACITIES p. 70 – 71



HD-BACKHOE BUCKET CLASS 1

OPERATING WEIGHT 1 TO 2 T

Bottom and side parts 5mm as well as side sickles HB450, side parts put on bottom, cutting edge HB500 150×16 mm, welded tooth system, suitable QC01

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
220	0.018	29	2
250	0.022	31	3
300	0.027	34	3
350	0.033	37	3
400	0.039	39	3
500	0.051	45	4
600	0.063	50	4

Depending on the quick coupler employment the cutting width can be limited.

HD-BACKHOE BUCKET CLASS 2

OPERATING WEIGHT 2 TO 2.5 T

Bottom and side parts 6mm as well as side sickles HB450, side parts put on bottom, cutting edge HB500 150×16mm, welded tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
300	0.036	47	3
400	0.051	54	3
500	0.067	62	4
600	0.083	68	4
700	0.099	76	5
800	0.115	83	5

HD-BACKHOE BUCKET CLASS 2S

OPERATING WEIGHT 2.5 TO 3.8 T

Bottom and side parts 8mm as well as side sickles HB450, side parts put on bottom, cutting edge HB500 150x20mm, welded tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
300	0.048	69	3
400	0.070	79	3
500	0.093	91	4
600	0.116	101	4
700	0.140	113	5
800	0.164	123	5
900	0.187	133	5
1000	0.211	145	6



BACKHOE BUCKET

OPERATING WEIGHT 3.8 TO 12 T

As a versatile attachment, the standard backhoe bucket offers a wide variety of working applications. Its shape makes it ideal for picking up, transporting, lifting or dumping. It is ideal for working in the ground and in medium-heavy soils.



APPLICATION AREAS

- Earthmoving
- Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 3 to 4S

Operating weight: 3.8 to 12 t

Material: cutting edge and

side sickles made of HB400

Standard adapter:

QC03 and QC08

OPTIONAL

- Front-insert blade
- Cutting edge moved forward
- HT-Adapter
- Without teeth

CHARACTERISTICS

- Screwed or welded tooth system
- Individual adapter or direct attachment

8.5 to 12

Up to class 3S equipped with side sickles

Class	Operating weight [t]	A [mm]	B [mm]
3	3.8 to 5	684	805
3S	5 to 6.5	<i>7</i> 54	882
4	6.5 to 8.5	794	954

All dimensions are theoretically calculated and therefore without guarantee..

928



KL3 and 3S



1093

KL4 and 4S

PROS

- Classic attachment for earthmoving applications.
- Basic equipment.
- · Versatile application possibilities.
- Different equipment options.
- Ideal filling characteristics.
- Flexible use.

CONS

 Not ideal for use in very hard soils and rocky terrain. The HD-Backhoe bucket is better suited for this in order to minimise wear on the attachment.

HENLEAdvice!



USE WITH FRONT-INSERT BLADE

A front-insert blade can be retrofitted to an existing dental bucket. It is usually welded to the existing teeth under the tooth caps. The main advantage is that the cutting edge can be replaced quickly. The cutting edge can be removed using the tooth locks and the bucket can be used again as a teeth bucket.

With the front-insert blade, the bucket has a smooth edge that is ideal for working in cable construction without damaging cables. It also has a smaller volume thanks to the front-insert blade – practical for simple earthworks.





BACKHOE BUCKET CLASS 3

OPERATING WEIGHT 3.8 TO 5 T

Bottom and side parts 8mm, side cutting edges 12mm, side sickles HB400 6mm, cutting edge HB400 150x20mm, welded or screwed tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
250	0.048	<i>7</i> 4	2
300	0.061	81	3
400	0.089	93	3
500	0.119	107	4
600	0.149	118	4
<i>7</i> 00	0.181	132	5
800	0.212	143	5
900	0.243	155	5
1000	0.274	167	5

We recommend a welded tooth system.

BACKHOE BUCKET CLASS 3S

OPERATING WEIGHT 5 TO 6.5 T

Bottom and side parts 8mm, side cutting edges 12mm, side sickles HB400 6mm, cutting edge HB400 150x20mm*, welded or screwed tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
300	0.078	93	3
350	0.096	99	3
400	0.114	105	3
500	0.152	120	4
600	0.192	133	4
<i>7</i> 00	0.233	148	5
800	0.274	160	5
900	0.316	172	5
1000	0.357	188	6

^{*} for screwed teeth - cutting edge 200x20mm

BACKHOE BUCKET CLASS 4

OPERATING WEIGHT 6.5 TO 8.5 T

Bottom and side parts 8mm, side cutting edges 15mm, cutting edge HB400 200x20mm, welded tooth system, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
300*	0.078	122	3
350*	0.097	130	3
400	0.116	137	3
500	0.156	156	4
600	0.197	171	4
700	0.240	190	5
800	0.283	205	5
900	0.327	220	5
1000	0.371	235	6
1100	0.415	254	6

^{*}Marked cutting widths have a limited digging depth.

BACKHOE BUCKET CLASS 4S

OPERATING WEIGHT 8.5 TO 12 T

Bottom and side parts 8mm, side cutting edges 15mm, cutting edge HB400 200x25mm, welded tooth system, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
350*	0.125	154	3
400	0.150	162	3
500	0.201	179	3
600	0.255	201	4
700	0.311	218	4
800	0.368	235	4
900	0.426	258	5
1000	0.484	274	5
1200	0.601	314	6

^{*}Marked cutting widths have a limited digging depth.



HD-BACKHOE BUCKET

OPERATING WEIGHT 3.8 TO 12 T

The HD-backhoe bucket series ("Heavy Duty") was designed for a more demanding use in the compact sector. Bottom, side parts, side cutting edges and cutting edge are made of highly wear-resistant HB400 steel. The weld seams are better protected against wear through the protruding bottom.





APPLICATION AREAS

- Earthmoving
- Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 3 to 4S

Operating weight: 3.8 to 12 t

Material: cutting edge made of HB500, side sickles and bucket

body made of highly wear-resistant

HB450

Standard adapter:

QC03 and QC08

OPTIONAL

- Front-insert blade
- Cutting edge moved forward
- HT-Adapter
 - Without teeth

CHARACTERISTICS

- Side parts put on bottom
- Welded tooth system
- Individual adapter or direct attachment
- Up to class 3S equipped with side sickles

Class	Operating weight [t]	A [mm]	B [mm]
3	3.8 to 5	680	799
3S	5 to 6.5	<i>7</i> 49	8 7 4
4	6.5 to 8.5	<i>7</i> 97	953
4S	8.5 to 12	928	1092

All dimensions are theoretically calculated and therefore without guarantee.



KL4 and 4S

PROS

- The weld seams are better protected against wear by the protruding bottom.
- The HD series is equipped with a selfsharpening tooth system with up to 70% wear.

CONS

 When working in very light soils, the HD backhoe bucket is more stable due to his equipment than it would be necessary. The standard backhoe bucket may be more suitable here.

HENLEAdvice!

HIGHLY WEAR-RESISTANT HD-STEEL

Our HD-backhoe bucket is made of highly wear-resistant steel (HB450/HB500). The higher the number, the harder the material. Although the product may appear more expensive at first, an investment in wear-resistant side cutting edges and bases quickly pays off. The bucket is more robust, wears less and can therefore be used for longer. Our heavy-duty line is also worth considering in terms of sustainability. Especially for rental parks, they offer pros that pay off economically. Satisfied customers included.

LONGER STANDING TIMES WHEN USED IN RENTAL FLEET

The HD-backhoe bucket is more suitable for a rental fleet than a standard backhoe bucket. Thanks to its higher quality equipment, the HD-backhoe bucket can be used for longer time in the rental fleet, whereby the additional purchase costs are comparatively low.

The protruding bottom and the self-sharpening tooth system of the HD-backhoe bucket significantly reduce wear on the bucket, allowing it to be used for longer in the rental fleet.

BUCKET CAPACITIES p. 78 – 79



HD-BACKHOE BUCKET CLASS 3

OPERATING WEIGHT 3.8 TO 5 T

Bottom and side parts 8mm as well as side cutting edges HB450 12mm, side parts put on bottom, cutting edge HB500 150x20mm, welded tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
300	0.061	81	3
400	0.089	93	3
500	0.119	107	4
600	0.149	118	4
700	0.181	132	5
800	0.212	143	5
900	0.243	155	5
1000	0.274	167	5

HD-BACKHOE BUCKET CLASS 3S

OPERATING WEIGHT 5 TO 6.5 T

Bottom and side parts 8mm as well as side cutting edges HB450 12mm, side parts put on bottom, cutting edge HB500 150x20mm, welded tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
300	0.078	93	3
400	0.114	105	3
500	0.152	120	4
600	0.192	133	4
800	0.274	160	5
1000	0.357	188	6

HD-BACKHOE BUCKET CLASS 4

OPERATING WEIGHT 6.5 TO 8.5 T

Bottom and side parts 8mm as well as side cutting edges HB450 15mm, side parts put on bottom, cutting edge HB500 200x25mm, welded tooth system, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
300*	0.078	122	3
400	0.116	137	3
500	0.156	156	3
600	0.197	171	4
800	0.283	205	4
1000	0.371	235	5
1100	0.415	254	6

^{*}Marked cutting widths have a limited digging depth.

HD-BACKHOE BUCKET CLASS 4S

OPERATING WEIGHT 8.5 TO 12 T

Bottom and side parts 8mm as well as side cutting edges HB450 15mm, side parts put on bottom, cutting edge HB500 200x25mm, welded tooth system, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
400	0.150	162	3
500	0.201	179	3
600	0.255	201	4
800	0.368	235	4
900	0.426	258	5
1000	0.484	274	5
1200	0.601	314	6





BACKHOE BUCKET SW-VERSION

OPERATING WEIGHT 12 TO 45 T

As a versatile attachment, the standard backhoe bucket offers a wide variety of working applications. Its shape makes it ideal for picking up, transporting, lifting or dumping. It is ideal for working in the ground and in medium-heavy soils.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 5 to 7S

Operating weight: 12 to 45 t

Material: cutting edge made

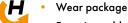
of HB500, bottom, side cutting edges and side wear plates made

eages and side wear pidles in

of HB450

Standard adapter: QC10, QC21/25, OQ60, OQ65, OQ70, OQ70/55 and OQ80

OPTIONAL



- Front-insert blade
- Cutting edge moved forward
 - Without teeth

CHARACTERISTICS

- Side parts put on bottom
- Welded tooth system
- Version "SW" ideal for Lehnhoff or OilQuick adapters

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	1107	1290
5S	16 to 21	1179	1387
6	21 to 26	1278	1506
6S	26 to 30	1346	1583
7	30 to 36	1468	1727
7S	36 to 45	1570	1806

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- The "SW-Version" is ideal for Lehnhoff or OilQuick adapters.
- Optimum filling and emptying characteristics.

CONS

The version "SW" is not suitable for Verachtert or Liebherr adapters and also not for direct attachment to the excavator. In these cases the "LH-Version" is more suitable.

HENLEAdvice!



EQUIPPED WITH ESCO-ULTRALOK-TOOTH SYSTEM

The ESCO-Ultralok-Tooth system is a patented system with included safety device. Its high-quality workmanship and the optimised version lead to a longer service life as well as a firm and tight fit. The Teeth are single change, hammerless and can be handled without special tools. Made from an economic and sustainable point of view, it is worth investing in a durable and stable product.

WEAR PACKAGE

The backhoe bucket can be equipped with an additional wear package. This consists of two vertical strips in the digging direction as well as several cross strips made of HB500. These wear strips are significantly thicker than the bucket bottom, so they take longer to wear out. The wear package is particularly worthwhile for heavy-duty work, as the bucket is not only durable, but also perfectly suited to its area of application.



BUCKET CAPACITIES p. 82 – 84



BACKHOE BUCKET SW-VERSION CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 10mm, side parts 8mm, side cutting edges HB450 20mm, cutting edge HB500 250x30mm, side wear plates HB450 10mm, side parts put on bottom, welded tooth system Cat J300 or ESCO U25, suitable QC10 or OQ65

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
400	0.213	301	3
600	0.369	358	3
650	0.410	372	3
700	0.451	398	4
800	0.536	427	4
850	0.579	441	4
900	0.622	455	4
1000	0.710	484	4
1050	0.755	504	5
1200	0.888	553	5
1250	0.933	564	5

BACKHOE BUCKET SW-VERSION CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10mm, side parts 8mm, side cutting edges HB450 20mm, cutting edge HB500 250x30mm, side wear plates HB450 10mm, side parts put on bottom, welded tooth system Cat J300 or ESCO U30, suitable QC10 or OQ60

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.406	379	3
650	0.451	394	3
700	0.496	421	4
800	0.589	451	4
850	0.636	466	4
900	0.684	480	4
1000	0. <i>7</i> 81	510	4
1050	0.830	531	5
1200	0.977	582	5
1250	1.026	596	5
1400	1.175	653	6

BACKHOE BUCKET SW-VERSION CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 12mm, side parts 8mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, side wear plates HB450 12mm, side parts put on bottom, welded tooth system Cat J350 or ESCO U35, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.446	502	3
650	0.496	522	3
800	0.652	597	4
850	0. <i>7</i> 05	617	4
1000	0.868	677	4
1050	0.923	697	4
1200	1.090	773	5
1250	1.147	<i>7</i> 93	5
1400	1.316	853	5
1500	1.429	893	5
1600	1.541	948	6

BACKHOE BUCKET SW-VERSION CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, side wear plates HB450 12mm, side parts put on bottom, welded tooth system Cat J350 or ESCO U35, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.509	584	3
650	0.566	607	3
800	0. <i>7</i> 43	689	4
850	0.804	712	4
1000	0.989	779	4
1050	1.051	802	4
1200	1.242	885	5
1250	1.306	907	5
1400	1.500	974	5
1500	1.630	1019	5
1600	1. <i>7</i> 59	1080	6
1800	2.018	1169	6





BACKHOE BUCKET SW-VERSION CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom HB450 12mm, side parts 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x50mm, side wear plates HB450 12mm, side parts put on bottom, welded tooth system Cat J460 or ESCO U40, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
800	0.834	779	4
850	0.902	806	4
1000	1.110	887	4
1050	1.181	914	4
1200	1.396	1010	5
1250	1.468	1036	5
1400	1.688	1117	5
1500	1.835	1171	5
1600	1.982	1240	6
1800	2.277	1347	6

BACKHOE BUCKET SW-VERSION CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom HB450 12mm, side parts 12mm, side cutting edges HB450 30mm, Cutting edge HB500 300x50mm, side wear plates HB450 15mm, side parts put on bottom, welded tooth system Cat J460 or ESCO U45, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
1000	1.266	1082	4
1200	1.596	1227	5
1400	1.935	1340	5
1500	2.106	1396	5
1600	2.278	1485	6
1800	2.623	1598	6
2000	2.967	1711	6





BACKHOE BUCKET LH-VERSION

OPERATING WEIGHT 12 TO 45 T

As a versatile attachment, the standard backhoe bucket offers a wide variety of working applications. Its shape makes it ideal for picking up, transporting, lifting or dumping. It is ideal for working in the ground and in medium-heavy soils.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 5 to 7S

Operating weight: 12 to 45 t

Material: cutting edge made of HB500, bottom, side cutting edges

and side wear plates made of

HB450

Standard adapter: SW33, SW48, SW66 and CW20/30/40/45

CHARACTERISTICS

- Side parts put on bottom
- Welded tooth system
- Version "LH" ideal for Verachtert or Liebherr adapters and for direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	1109	1286
5S	16 to 21	1223	1414
6	21 to 26	1337	1543
6S	26 to 30	1386	1618
7	30 to 36	1484	1717
<i>7</i> S	36 to 45	1600	1818

All dimensions are theoretically calculated and therefore without guarantee.

OPTIONAL

- Wear package
- Front-insert blade
- Cutting edge moved forward
- Without teeth

PROS

- The "LH-Version" is ideal for Liebherr or Verachtert adapter and for direct attachment.
- Optimum filling and emptying characteristics.

CONS

The version "LH" is not suitable for Lehnhoff or OilQuick adapters. In these cases the "SW-Version" is more suitable.

HENLEAdvice!

Single tooth holder



Double tooth holder



SINGLE TOOTH HOLDER VS. **DOUBLE TOOTH HOLDER**

Our buckets can be equipped with both a single and double tooth holder, according to customer requirements.

A single tooth holder is also referred to as an internal tooth system. It is situated on the cutting edge and thus enables a smooth underside of the blade.

A double holder is welded to the top and bottom of the cutting edge. It encloses the blade and therefore has more contact surface to the bucket.

BUCKET CAPACITIES p. 88 - 90

BACKHOE BUCKET LH-VERSION CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 10mm, side parts 8mm, side cutting edges HB450 20mm, cutting edge HB500 250x30mm, side wear plates HB450 10mm, side parts put on bottom, welded tooth system Cat J300 or ESCO U25, suitable SW33 or CW20

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
400	0.213	307	3
600	0.366	360	3
650	0.406	373	3
700	0.446	399	4
800	0.529	425	4
850	0.571	438	4
900	0.613	452	4
1000	0.698	478	4
1050	0.741	497	5
1200	0.871	543	5
1250	0.914	556	5

BACKHOE BUCKET LH-VERSION CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10mm, side parts 8mm, side cutting edges HB450 20mm, cutting edge HB500 250x30mm, side wear plates HB450 10mm, side parts put on bottom, welded tooth system Cat J300 or ESCO U30, suitable SW48 or CW30

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.421	385	3
650	0.467	399	3
700	0.513	425	4
800	0.608	454	4
850	0.656	468	4
900	0. <i>7</i> 05	482	4
1000	0.804	510	4
1050	0.853	531	5
1200	1.004	579	5
1250	1.054	594	5
1400	1.204	648	6

BACKHOE BUCKET LH-VERSION CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 12mm, side parts 8mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, side wear plates HB450 12mm, side parts put on bottom, welded tooth system Cat J350 or ESCO U35, suitable SW48 or CW40

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.463	533	3
650	0.515	553	3
800	0.676	627	4
850	0.731	646	4
1000	0.898	<i>7</i> 05	4
1050	0.955	724	4
1200	1.127	799	5
1250	1.185	818	5
1400	1.359	877	5
1500	1.475	916	5
1600	1.590	970	6

BACKHOE BUCKET LH-VERSION CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, side wear plates HB450 12mm, side parts put on bottom, welded tooth system Cat J350 or ESCO U35, suitable SW48 or CW40

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.516	582	3
650	0.573	603	3
800	0. <i>7</i> 49	680	4
850	0.810	<i>7</i> 01	4
1000	0.994	<i>7</i> 63	4
1050	1.056	<i>7</i> 84	4
1200	1.246	862	5
1250	1.310	882	5
1400	1.502	945	5
1500	1.630	986	5
1600	1. <i>7</i> 58	1043	6
1800	2.014	1126	6





BACKHOE BUCKET LH-VERSION CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom HB450 12mm, side parts 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x50mm, side wear plates HB450 12mm, side parts put on bottom, welded tooth system Cat J460 or ESCO U40, suitable SW66 or CW45

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
800	0.811	752	4
850	0.877	774	4
1000	1.078	842	4
1050	1.146	865	4
1200	1.353	948	5
1250	1.423	971	5
1400	1.634	1039	5
1500	1.774	1084	5
1600	1.915	1145	6
1800	2.197	1235	6

BACKHOE BUCKET LH-VERSION CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom HB450 12mm, side parts 12mm, side cutting edges HB450 30mm, cutting edge HB500 300x50mm, side wear plates HB450 15mm, side parts put on bottom, welded tooth system Cat J460 or ESCO U45, suitable SW66 or CW45

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
1000	1.256	1053	4
1200	1.581	1183	5
1400	1.914	1281	5
1500	2.083	1330	5
1600	2.252	1412	6
1800	2.590	1510	6
2000	2.929	1608	6





VHD-BACKHOE BUCKET **SW-VERSION**

OPERATING WEIGHT 12 TO 45 T

The VHD-backhoe bucket ("Very-Heavy-Duty") was specially developed for the heaviest applications with maximum wear protection. It is available in the SW version (adapters OilQuick, Lehnhoff) and LH version (adapters Liebherr, Verachtert, direct attachment).





APPLICATION AREAS

- Earthmoving
- Demolition and recycling

TECHNICAL DETAILS

Sizes: class 5 to 7S

Operating weight: 12 to 45 t

Standard adapter: QC10, QC21/25, OQ60, OQ65, OQ70, OQ70/55 and OQ80

Material: cutting edge made of HB500, bucket body made of

highly wear-resistant HB450

CHARACTERISTICS

- Side parts put on bottom
- Wear stripes lengthwise and crosswise
- Welded tooth system

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	1136	1340
5S	16 to 21	1219	1437
6	21 to 26	1278	1505
6S	26 to 30	1340	15 <i>7</i> 8
7	30 to 36	1482	1 <i>7</i> 42
7S	36 to 45	1570	1806

All dimensions are theoretically calculated and therefore without guarantee.

PROS

- The "SW-Version" is ideal for Lehnhoff or OilQuick adapters.
- Optimum filling and emptying characteristics.
- · Very strong materials for maximum wear protection and more robustness for working in heavy soils and rocky terrain.
- Additional wear stripes.

CONS

 The version "SW" is not suitable for Verachtert or Liebherr adapters and also not for direct attachment to the excavator. In these cases the "LH-Version" is more suitable.

HENLEAdvice!

WEAR PACKAGE

The backhoe bucket is always equipped with an additional wear package. This consists of two vertical strips in the digging direction as well as several cross strips made of HB500. These wear strips are significantly thicker than the bucket bottom, so they take longer to wear out. The wear package is particularly worthwhile for heavy-duty work, as the bucket is not only durable, but also perfectly suited to its area of application.

BUCKET CAPACITIES p. 94 - 96







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OPTIONAL

Without teeth

VHD-BACKHOE BUCKET SW-VERSION CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom and side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x35mm, side wear plates HB450, wear stripes HB500 80x10mm, welded tooth system ESCO U30, suitable QC10 or OQ60

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.369	430	3
650	0.410	446	3
800	0.536	512	4
850	0.579	529	4
1000	0.710	581	4
1050	0.755	605	5
1200	0.888	664	5
1250	0.933	677	5

VHD-BACKHOE BUCKET SW-VERSION CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom and side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x35mm, side wear plates HB450, wear stripes HB500 80x10mm, welded tooth system ESCO U30, suitable QC10 or OQ65

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.406	455	3
650	0.451	473	3
800	0.589	541	4
850	0.636	559	4
1000	0.781	612	4
1050	0.830	637	5
1200	0.977	698	5
1250	1.026	715	5
1400	1.175	784	6

VHD-BACKHOE BUCKET SW-VERSION CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom and side parts HB450 12mm, side cutting edges HB450 30mm, cutting edge HB500 300x40mm, side wear plates HB450, wear stripes HB500 100x15mm, welded tooth system ESCO U35, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.446	602	3
650	0.496	626	3
800	0.652	716	4
850	0. <i>7</i> 05	<i>7</i> 40	4
1000	0.868	812	4
1050	0.923	836	4
1200	1.090	928	5
1250	1.147	952	5
1400	1.316	1024	5

VHD-BACKHOE BUCKET SW-VERSION CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom and side parts HB450 12mm, side cutting edges HB450 30mm, cutting edge HB500 300x40mm, side wear plates HB450, wear stripes HB500 100x15mm, welded tooth system ESCO U35, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.509	<i>7</i> 01	3
650	0.566	728	3
800	0. <i>7</i> 43	827	4
850	0.804	854	4
1000	0.989	935	4
1050	1.051	962	4
1200	1.242	1062	5
1250	1.306	1088	5
1400	1.500	1169	5
1600	1 <i>.7</i> 59	1296	6





VHD-BACKHOE BUCKET SW-VERSION CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom and side parts HB450 12mm, side cutting edges HB450 35mm, cutting edge HB500 300x50mm, side wear plates HB450, wear stripes HB500 100x15mm, welded tooth system ESCO U45, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
800	0.834	935	4
850	0.902	967	4
1000	1.110	1064	4
1050	1.181	1097	4
1200	1.396	1212	5
1250	1.468	1243	5
1400	1.688	1340	5
1600	1.982	1488	6
1800	2.277	1616	6

VHD-BACKHOE BUCKET SW-VERSION CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom and side parts HB450 15mm, side cutting edges HB450 40mm, cutting edge HB500 400x60mm, side wear plates HB450, wear stripes HB500 150x20mm, welded tooth system ESCO U55, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
1000	1.266	1298	4
1200	1.596	1472	5
1400	1.935	1608	5
1600	2.278	1782	6
1800	2.623	1918	6
2000	2.967	2053	6





VHD-BACKHOE BUCKET LH-VERSION

OPERATING WEIGHT 12 TO 45 T

The VHD-backhoe bucket ("Very-Heavy-Duty") was specially developed for the heaviest applications with maximum wear protection. It is available in the SW version (adapters OilQuick, Lehnhoff) and LH version (adapters Liebherr, Verachtert, direct attachment).





APPLICATION AREAS

- Earthmoving
- Demolition and recycling

TECHNICAL DETAILS

Sizes: class 5 to 7S

Operating weight: 12 to 45 t

Material: Cutting edge made of HB500, bucket body made of highly wear-resistant HB450

Standard adapter:

SW33, SW48, SW66, CW20/30/40/45



CHARACTERISTICS

- Side parts put on bottom
- Wear stripes lengthwise and crosswise
- Welded tooth system
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	1109	1286
5S	16 to 21	1259	1464
6	21 to 26	1337	1545
6S	26 to 30	1390	1627
7	30 to 36	1492	1705
<i>7</i> S	36 to 45	1600	1818

All dimensions are theoretically calculated and therefore without guarantee.

PROS

- The "LH-Version" is ideal for Liebherr or Verachtert adapter and for direct attachment.
- Optimum filling and emptying characteristics.
- Very strong materials for maximum wear protection and more robustness for working in heavy soils and rocky terrain.
- Additional wear stripes.

CONS

The version "LH" is not suitable for Lehnhoff or OilQuick adapters. In these cases the "SW-Version" is more suitable.

HENLEAdvice!





WEAR PACKAGE - PROS AND BENEFITS

The backhoe bucket is always equipped with an additional wear package. This consists of two vertical strips in the digging direction as well as several cross strips made of HB500. These wear strips are significantly thicker than the bucket bottom, so they take longer to wear out. The wear package is particularly worthwhile for heavy-duty work, as the bucket is not only durable, but also perfectly suited to its area of application.





VHD-BACKHOE BUCKET LH-VERSION CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom and side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x35mm, side wear plates HB450, wear stripes HB500 80x10mm, welded tooth system ESCO U30, suitable SW33 or CW20

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.366	432	3
650	0.406	448	3
800	0.529	510	4
850	0.571	526	4
1000	0.698	574	4
1050	0.741	596	5
1200	0.871	652	5
1250	0.914	667	5

VHD-BACKHOE BUCKET LH-VERSION CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom and side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x35mm, side wear plates HB450, wear stripes HB500 80x10mm, welded tooth system ESCO U30, suitable SW48 or CW30

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.421	462	3
650	0.467	479	3
800	0.608	545	4
850	0.656	562	4
1000	0.804	612	4
1050	0.853	637	5
1200	1.004	695	5
1250	1.054	<i>7</i> 13	5
1400	1.204	778	6

VHD-BACKHOE BUCKET LH-VERSION CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom and side parts HB450 12mm, side cutting edges HB450 30mm, cutting edge HB500 300x40mm, side wear plates HB450, wear stripes HB500 100x15mm, welded tooth system ESCO U35, suitable SW48 or CW40

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.463	640	3
650	0.515	664	3
800	0.676	752	4
850	0.731	775	4
1000	0.898	846	4
1050	0.955	869	4
1200	1.127	959	5
1250	1.185	982	5
1400	1.359	1052	5

VHD-BACKHOE BUCKET LH-VERSION CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom and side parts HB450 12mm, side cutting edges HB450 30mm, cutting edge HB500 300x40mm, side wear plates HB450, wear stripes HB500 100x15mm, welded tooth system ESCO U35, suitable SW48 or CW40

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.516	698	3
650	0.573	<i>7</i> 24	3
800	0. <i>7</i> 49	816	4
850	0.810	841	4
1000	0.994	916	4
1050	1.056	941	4
1200	1.246	1034	5
1250	1.310	1058	5
1400	1.502	1134	5
1600	1. <i>7</i> 58	1252	6





VHD-BACKHOE BUCKET LH-VERSION CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom and side parts HB450 12mm, side cutting edges HB450 35mm, cutting edge HB500 300x50mm, side wear plates HB450, wear stripes HB500 100x15mm, welded tooth system ESCO U45, suitable SW66 or CW45

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
800	0.811	902	4
850	0.877	929	4
1000	1.078	1010	4
1050	1.146	1038	4
1200	1.353	1138	5
1250	1.423	1165	5
1400	1.634	1247	5
1600	1.915	1374	6
1800	2.197	1482	6

VHD-BACKHOE BUCKET LH-VERSION CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom and side parts HB450 15mm, side cutting edges HB450 40mm, cutting edge HB500 400x60mm, side wear plates HB450, wear stripes HB500 150x20mm, welded tooth system ESCO U55, suitable SW66 or CW45

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
1000	1.256	1264	4
1200	1.581	1420	5
1400	1.914	1537	5
1600	2.252	1694	6
1800	2.590	1812	6
2000	2.929	1930	6





DITCH-CLEANING BUCKET RIGID

OPERATING WEIGHT 0.5 TO 2.5 T

The standard-ditch-cleaning bucket is used for picking up, transporting, lifting and dumping. It is suitable for loose and easy soils where there is light to medium use. As a product for such applications, the ditch-cleaning bucket is ideal for trench and swale construction, for creating embankments and verges, for levelling and trench cleaning and for creating complex terrain versions.



APPLICATION AREAS

- Earthmoving
- · Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 0 to 1S

Operating weight: 0.5 to 2.5 t

Material: cutting edge and

side sickles made of HB400

Standard adapter:

QC01 and QC03

OPTIONAL

- Screw on and reversible blade
- Rear cutting edge
- HT-Adapter

CHARACTERISTICS

- · Stiffening sickle for stability
- Rigid version
- Individual adapter or direct attachment
- Equipped with side sickle

Class	Operating weight [t]	A [mm]	B [mm]
0	0.5 to 1	271	298
1	1 to 2	348	404
15	2 to 2.5	390	443

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- Ideal for slope work.
- Simple construction.

CONS

 Due to its lightweight construction, the ditch-cleaning bucket is not suitable for tearing or working in hard floors.

HENLEAdvice!





EQUIPPED WITH REAR CUTTING EDGE

The rear cutting edge is an additional cutting edge that is placed on the back of the bucket. As the ditch-cleaning bucket is often used for surface levelling, a rear cutting edge is standard for this bucket type from a certain size upwards. This allows a flat surface to be created quickly and easily. However, it should be noted that this additional component always means more weight. For small sizes, it could therefore be advantageous to carefully consider equipping with a rear cutting edge.

HEAVY DUTY: LOADING BUCKET AS AN ALTERNATIVE

The ditch-cleaning bucket is perfect for loose soil as well as for surface levelling and modelling. However, it should not be used for heavy work. Its wide design means that a lot of weight is reached very quickly and the levers are correspondingly oversized. If heavy work is also to be carried out, our loading bucket is the ideal choice. It combines the characteristics of a ditch-cleaning bucket and backhoe bucket and can therefore be used flexibly.

DITCH-CLEANING BUCKET RIGID

OPERATING WEIGHT 2.5 TO 12 T

The standard-ditch-cleaning bucket is used for picking up, transporting, lifting and dumping. It is suitable for loose and easy soils where there is light to medium use. As a product for such applications, the ditch-cleaning bucket is ideal for trench and swale construction, for creating embankments and verges, for levelling and trench clearing and for creating complex terrain versions.



APPLICATION AREAS

- Earthmoving
- · Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 2 to 3S

Operating weight: 2.5 to 12 t

Material: cutting edge and side

parts made of HB400

Standard adapter:

QC03 and QC08

OPTIONAL

- Screw on and reversible blade
- HT-Adapter

CHARACTERISTICS

- Stiffening sickle for stability
- Rigid version
- Rear cutting edge
- Individual adapter or direct attachment

	Class	Operating weight [t]	A [mm]	B [mm]
Ξ	2	2.5 to 3.8	410	471
	3	3.8 to 6.5	463	515
	3S	6.5 to 12	525	585

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- Ideal for slope work.
- Simple constrcution.
- · Rear cutting edge for surface levelling.

CONS

 Due to its lightweight construction, the ditch-cleaning bucket is not suitable for tearing or working in hard floors. In these cases our loading bucket is more suitable.



HEAVY DUTY: LOADING BUCKET AS AN ALTERNATIVE

The ditch-cleaning bucket is perfect for loose soil as well as for surface levelling and modelling. However, it should not be used for heavy work. Its wide design means that a lot of weight is reached very quickly and the levers are correspondingly oversized. If heavy work is also to be carried out, our loading bucket is the ideal choice. It combines the characteristics of a ditch-cleaning bucket and backhoe bucket and can therefore be used flexibly.

BUCKET CAPACITIES p. 111

DITCH-CLEANING BUCKET RIGID

OPERATING WEIGHT 12 TO 36 T

The standard-ditch-cleaning bucket is used for picking up, transporting, lifting and dumping. It is suitable for loose and easy soils where there is light to medium use. As a product for such applications, the ditch-cleaning bucket is ideal for trench and swale construction, for creating embankments and verges, for levelling and trench clearing and for creating complex terrain versions.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 4 to 7

Operating weight: 12 to 36 t

Material: cutting edge made of HB500, bucket body made of

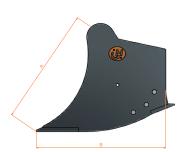
highly wear-resistant HB450

Standard adapter: QC10,

QC21/25, OQ60, OQ65,

OQ70, OQ70/55, OQ80,

SW33, SW48 and SW66



CHARACTERISTICS

- Stiffening sickle for stability
- Rigid version
- Rear cutting edge
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
4	12 to 16	605	<i>67</i> 0
5	16 to 21	683	<i>77</i> 3
6	21 to 26	<i>7</i> 66	830
6S	26 to 30	850	910
7	30 to 36	945	987

All dimensions are theoretically calculated and therefore without guarantee.

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OPTIONAL

Screw on and reversible blade

PROS

- Ideal for slope work.
- Highly wear-resistant materials.
- Simple constrcution.
- · Rear cutting edge for surface levelling.

CONS

Due to its lightweight construction, the ditch-cleaning bucket is not suitable for tearing or working in hard floors. In these cases our loading bucket is more suitable.

HENLEAdvice!

HEAVY DUTY: LOADING BUCKET AS AN ALTERNATIVE

The ditch-cleaning bucket is perfect for loose soil as well as for surface levelling and modelling. However, it should not be used for heavy work. Its wide design means that a lot of weight is reached very quickly and the levers are correspondingly oversized. If heavy work is also to be carried out, our loading bucket is the ideal choice. It combines the characteristics of a ditch-cleaning bucket and backhoe bucket and can therefore be used flexibly.



DITCH-CLEANING BUCKET RIGID CLASS 0

OPERATING WEIGHT 0.5 TO 1 T

Bottom and side parts 4mm, side sickles HB400 5mm, cutting edge HB400 110x12mm, stiffening sickle, suitable QC01

Cutting width [mm]	Capacity [m³]	Weight [kg]
600	0.026	30
700	0.031	33
750	0.034	35
800	0.036	36
850	0.038	38
1000	0.046	42

DITCH-CLEANING BUCKET RIGID CLASS 1

OPERATING WEIGHT 1 TO 2 T

Bottom and side parts 4mm, side sickles HB400 6mm, cutting edge HB400 110x12mm, stiffening sickle, suitable QC01

Cutting width [mm]	Capacity [m³]	Weight [kg]
800	0.061	48
850	0.065	50
1000	0.077	56
1100	0.085	60
1200	0.093	64

DITCH-CLEANING BUCKET RIGID CLASS 1S

OPERATING WEIGHT 2 TO 2.5 T

Bottom and side parts 5mm, side sickles HB400 6mm, cutting edge HB400 150x16mm, stiffening sickle, suitable QC03

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1000	0.097	77
	1100	0.108	83
. [1200	0.118	88
	1300	0.129	94

DITCH-CLEANING BUCKET RIGID CLASS 2

OPERATING WEIGHT 2.5 TO 3.8 T

Bottom 6mm, side parts HB400 8mm, cutting edge HB400 150x20mm, stiffening sickle, rear cutting edge HB400, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1000	0.133	129
1200	0.162	149
1300	0.176	159
1400	0.191	169
1500	0.205	179

DITCH-CLEANING BUCKET RIGID CLASS 3

OPERATING WEIGHT 3.8 TO 6.5 T

Bottom 8mm, side parts HB400 10mm, cutting edge HB400 150x20mm, stiffening sickle, rear cutting edge HB400, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1200	0.197	172
1300	0.215	183
1400	0.232	194
1500	0.250	206
1600	0.268	217
1800	0.304	245

DITCH-CLEANING BUCKET RIGID CLASS 3S

OPERATING WEIGHT 6.5 TO 12 T

Bottom 8mm, side parts HB400 10mm, cutting edge HB400 200x20mm, stiffening sickle, rear cutting edge HB400, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]
1400	0.311	268
1500	0.335	283
1600	0.360	297
1700	0.384	312
1800	0.408	333
2000	0.456	362



DITCH-CLEANING BUCKET RIGID CLASS 4

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 8mm, side parts HB450 10mm, cutting edge HB500 200x25mm, stiffening sickle, rear cutting edge HB500, suitable QC10 or OQ60

Cutting width [mm]	Capacity [m³]	Weight [kg]
1600	0.461	417
1800	0.523	442
2000	0.585	494
2200	0.647	527

DITCH-CLEANING BUCKET RIGID CLASS 5

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10mm, side parts HB450 15mm, cutting edge HB500 250x25mm, stiffening sickle, rear cutting edge HB500, suitable QC10 or OQ65

Cutting width [mm]	Capacity [m³]	Weight [kg]
1800	0.642	604
2000	0.720	649
2200	0.798	694
2400	0.876	739

DITCH-CLEANING BUCKET RIGID CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 10mm, side parts HB450 15mm, cutting edge HB500 300x30mm, stiffening sickle, rear cutting edge HB500, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]
1800	0.803	800
2000	0.901	859
2200	0.999	919
 2400	1.097	978

DITCH-CLEANING BUCKET RIGID CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts HB450 20mm, cutting edge HB500 300x35mm, stiffening sickle, rear cutting edge HB500, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]
2000	1.137	1042
2200	1.262	1113
2400	1.386	1184
2600	1.511	1254

DITCH-CLEANING BUCKET RIGID CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom HB450 12mm, side parts HB450 20mm, cutting edge HB500 300x40mm, stiffening sickle, rear cutting edge HB500, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]
2000	1.304	1195
2200	1.449	1277
2400	1.593	1360
2600	1.738	1443

DITCH-CLEANING BUCKET TILTING

OPERATING WEIGHT 0.5 TO 2.5 T

The standard-ditch-cleaning bucket is used for picking up, transporting, lifting and dumping. It is suitable for loose and easy soils where there is light to medium use. As a product for such applications, the ditch-cleaning bucket is ideal for trench and swale construction, for creating embankments and verges, for levelling and trench cleaning and for creating complex terrain versions.



APPLICATION AREAS

- Earthmoving
- · Gardening and landscaping

TECHNICAL DETAILS

Sizes: Class 0 to 1S

Operating weight: 0.5 to 2.5 t

Material: Cutting edge and

side sickles made of HB400

Standard adapter:

QC01 and QC03

OPTIONAL

- Screw on and reversible blade
- Rear cutting edge
- HT-Adapter

CHARACTERISTICS

- Stiffening sickle for stability
- Tilting version
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
0	0.5 to 1	346	298
1	1 to 2	440	404
18	2 to 2.5	482	443

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- Ideal for slope work.
- Simple construction.

CONS

 Due to its lightweight construction, the ditch-cleaning bucket is not suitable for tearing or working in hard floors.

HENLEAdvice!





EQUIPPED WITH REAR CUTTING EDGE

The rear cutting edge is an additional cutting edge that is placed on the back of the bucket. As the ditch-cleaning bucket is often used for surface levelling, a rear cutting edge is standard for this bucket type from a certain size upwards. This allows to quickly and easily create a flat surface. However, it should be noted that this additional component always means more weight. For small sizes, it could therefore be advantageous to carefully consider equipping with a rear cutting edge.

HEAVY DUTY: TILT BACKHOE BUCKET AS AN ALTERNATIVE

The ditch-cleaning bucket is perfect for loose soil as well as for surface levelling and modelling. However, it should not be used for heavy work. Its wide design means that a lot of weight is reached very quickly and the levers are correspondingly oversized. If heavy work is also required, our tilt backhoe bucket is the right choice. It combines the characteristics of the ditch-cleaning bucket and backhoe bucket and can therefore be used flexibly.



DITCH-CLEANING BUCKET TILTING

OPERATING WEIGHT 2.5 TO 12 T

The standard-ditch-cleaning bucket is used for picking up, transporting, lifting and dumping. It is suitable for loose and easy soils where there is light to medium use. As a product for such applications, the ditch-cleaning bucket is ideal for trench and swale construction, for creating embankments and verges, for levelling and trench cleaning and for creating complex terrain versions.



APPLICATION AREAS

- Earthmoving
- Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 2 to 3S

Operating weight: 2.5 to 12 t

Material: cutting edge and side

parts made of HB400

Standard adapter:

QC03 and QC08

OPTIONAL

- Screw on and reversible blade
- Version with 2. cylinder
- HT-Adapter

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CHARACTERISTICS

- Stiffening sickle for stability
- Tilting version
- Rear cutting edge
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
2	2.5 to 3.8	543	471
3	3.8 to 6.5	590	515
3S	6.5 to 12	690	585

All dimensions are theoretically calculated and therefore without guarantee.





Product video ditch-cleaning bucket tilting

PROS

- Ideal for slope work.
- Simple construction.
- · Rear cutting edge for surface levelling.

CONS

 Due to its lightweight construction, the ditch-cleaning bucket is not suitable for tearing or working in hard floors. In these cases the tilt backhoe bucket is more suitable.

HENLEAdvice!

HEAVY DUTY: TILT BACKHOE BUCKET AS AN ALTERNATIVE

The ditch-cleaning bucket is perfect for loose soil as well as for surface levelling and modelling. However, it should not be used for heavy work. Its wide design means that a lot of weight is reached very quickly and the levers are correspondingly oversized. If heavy work is also required, our swivelling backhoe bucket is the right choice. It combines the characteristics of the ditch-cleaning bucket and backhoe bucket and can therefore be used flexibly.

BUCKET CAPACITIES p. 121

DITCH-CLEANING BUCKET TILTING

OPERATING WEIGHT 12 TO 36 T

The standard-ditch-cleaning bucket is used for picking up, transporting, lifting and dumping. It is suitable for loose and easy soils where there is light to medium use. As a product for such applications, the ditch-cleaning bucket is ideal for trench and swale construction, for creating embankments and verges, for levelling and trench clearing and for creating complex terrain versions.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 4 to 7

Operating weight: 12 to 36 t

Material: cutting edge made of

HB500, bucket body made of

highly wear-resistant HB450

Standard adapter: QC10,

QC21/25, OQ60, OQ65, OQ70, OQ70/55, OQ80,

SW33, SW48 and SW66

CHARACTERISTICS

- Stiffening for stability
- Tiltinge version
- Rear cutting edge
- 2 cylinder with piston rod protection, 2x45°
- Lock valve with overpressure function
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
4	12 to 16	852	670
5	16 to 21	929	<i>77</i> 3
6	21 to 26	1018	830
6S	26 to 30	1120	910
7	30 to 36	1224	987



CONS

Due to its lightweight construction, the ditch-cleaning bucket is not suitable for tearing or working in hard floors. In these cases the tilt backhoe bucket is more suitable.

HENLEAdvice!



PROS

Ideal for slope work.

Simple construction.

Highly wear-resistant materials.

Rear cutting edge for surface levelling.

SCREW ON AND REVERSIBLE BLADE

The screw on and reversible blade is screwed under the main cutting edge and protects it from wear. The holes are located in the centre. This has the advantage that if one side is worn out, as the name suggests, it can be turned over and used again. The cutting edge only needs to be replaced once both sides are blunt. As it is drilled and not welded, changing it is much less time-consuming than it would be with the welded main cutting edge.

HEAVY DUTY: TILT BACKHOE BUCKET AS AN ALTERNATIVE

The ditch-cleaning bucket is perfect for loose soil as well as for surface levelling and modelling. However, it should not be used for heavy work. Its wide design means that a lot of weight is reached very quickly and the levers are correspondingly oversized. If heavy work is also required, our swivelling backhoe bucket is the right choice. It combines the characteristics of the ditch-cleaning bucket and backhoe bucket and can therefore be used flexibly.

OPTIONAL

Screw on and reversible blade





DITCH-CLEANING BUCKET TILTING CLASS 0

OPERATING WEIGHT 0.5 TO 1 T

Bottom and side parts 4mm, cutting edge HB400 110×12mm, stiffening sickle, no tubing, 1 cylinder 2×45°, suitable QC01

Cutting width [mm]	Capacity [m³]	Weight [kg]
<i>7</i> 50	0.034	55
800	0.036	57
850	0.038	58
1000	0.046	63

DITCH-CLEANING BUCKET TILTING CLASS 1

OPERATING WEIGHT 1 TO 2 T

Bottom and side parts 4mm, cutting edge HB400 110×12 mm, stiffening sickle, 1 cylinder $2 \times 45^{\circ}$, suitable QC01

Cutting width [mm]	Capacity [m³]	Weight [kg]
850	0.065	86
1000	0.077	93
1100	0.085	97
1200	0.093	101

DITCH-CLEANING BUCKET TILTING CLASS 1S

OPERATING WEIGHT 2 TO 2.5 T

Bottom and side parts 5mm, cutting edge HB400 150x16mm, stiffening sickle, 1 cylinder 2x45°, suitable QC03

Cutting	width [mm]	Capacity [m³]	Weight [kg]
	1000	0.097	113
	1100	0.108	119
	1200	0.118	124
	1300	0.129	130

DITCH-CLEANING BUCKET TILTING CLASS 2

OPERATING WEIGHT 2.5 TO 3.8 T

Bottom 6mm, side parts HB400 8mm, cutting edge HB400 150x20mm, stiffening sickle, rear cutting edge HB400, 1 cylinder 2x45°, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1000	0.133	180
1200	0.162	200
1300	0.176	210
1400	0.191	220
1500	0.205	230

DITCH-CLEANING BUCKET TILTING CLASS 3

OPERATING WEIGHT 3.8 TO 6.5 T

Bottom 8mm, side parts HB400 10mm, cutting edge HB400 150x20mm, stiffening sickle, rear cutting edge HB400, 1 cylinder 2x45°, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1200	0.197	225
1300	0.215	236
1400	0.232	248
1500	0.250	259
1600	0.268	270
1800	0.304	298

DITCH-CLEANING BUCKET TILTING CLASS 3S

OPERATING WEIGHT 6.5 TO 12 T

Bottom 8mm, side parts HB400 10mm, cutting edge HB400 200x20mm, stiffening sickle, rear cutting edge HB400, 1 cylinder 2x45°, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]
1400	0.311	375
1500	0.335	389
1600	0.360	404
1700	0.384	419
1800	0.408	439
2000	0.456	469



DITCH-CLEANING BUCKET TILTING CLASS 4

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 8mm, side parts HB450 10mm, cutting edge HB500 200x25mm, stiffening sickle, rear cutting edge HB500, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC10

Cutting width [mm]	Capacity [m³]	Weight [kg]
1600	0.461	568
1800	0.523	611
2000	0.585	645
2200	0.647	679

DITCH-CLEANING BUCKET TILTING CLASS 5

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10mm, side parts HB450 15mm, cutting edge HB500 250x25mm, stiffening sickle, rear cutting edge HB500, 2 cylinder with piston rod protection 2x45° incl. lock valve with overpressure function, suitable QC10

Cutting width [mm]	Capacity [m³]	Weight [kg]
1800	0.642	<i>7</i> 95
2000	0.720	840
2200	0.798	885
2400	0.876	930

DITCH-CLEANING BUCKET TILTING CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 10mm, side parts HB450 15mm, cutting edge HB500 300x30mm, stiffening sickle, rear cutting edge HB500, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC21/25

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1800	0.803	1020
	2000	0.901	1079
. –	2200	0.999	1139
	2400	1.097	1198

DITCH-CLEANING BUCKET TILTING CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts HB450 20mm, cutting edge HB500 300x35mm, stiffening sickle, rear cutting edge HB500, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
2000	1.137	1467
2200	1.262	1538
2400	1.386	1609
2600	1.511	1679

DITCH-CLEANING BUCKET TILTING CLASS 7

OPERATING WEIGHT 30 TO 36 T

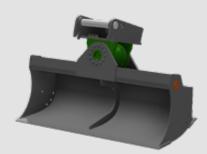
Bottom HB450 12mm, side parts HB450 20mm, cutting edge HB500 300x40mm, stiffening sickle, rear cutting edge HB500, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
2000	1.304	1620
2200	1.449	1 <i>7</i> 02
2400	1.593	1785
2600	1 738	1868

DITCH-CLEANING BUCKET WITH MOTOR

OPERATING WEIGHT 2.5 TO 12 T

The ditch-cleaning bucket with tilt motor is suitable for working in loose soil and where there is a light to medium heavy use. As a product for such applications, the ditch-cleaning bucket with tilt motor is ideal for creating complex terrain versions.



APPLICATION AREAS

- Earthmoving
- Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 2 to 3S

Operating weight: 2.5 to 12 t

Material: cutting edge and side

parts made of HB400

Standard adapter:

QC03 and QC08

OPTIONAL

- Screw on and reversible blade
- HT-Adapter

CHARACTERISTICS

- Equipped with stiffening sickle and rear cutting edge
- With HKS-tilt motor from the BV series
- Tilt angle 2x50°
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
2	2.5 to 3.8	537	471
3	3.8 to 6.5	<i>7</i> 20	515
35	6.5 to 12	829	585

All dimensions are theoretically calculated and therefore without guarantee.



PROS

By eliminating the bearing points of the cylinder version, the attachment remains free of play and maintenance in the long term (particularly important for machines with GPS support).

CONS

 The ditch-cleaning bucket is not suitable for tearing or working in hard floors. In this case, a tilt backhoe bucket is more suitable.

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SCREW ON AND REVERSIBLE BLADE

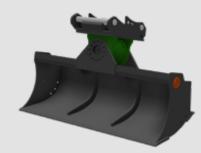
The screw on and reversible blade is screwed under the main cutting edge and protects it from wear. The holes are located in the centre. This has the advantage that if one side is worn out, as the name suggests, it can be turned over and used again. The cutting edge only needs to be replaced once both sides are blunt. As it is drilled and not welded, changing it is much less time-consuming than it would be with the welded main cutting edge.



DITCH-CLEANING BUCKET WITH MOTOR

OPERATING WEIGHT 12 TO 45 T

The ditch-cleaning bucket with tilt motor is suitable for working in loose soil and where there is a light to medium heavy use. As a product for such applications, the ditch-cleaning bucket with tilt motor is ideal for creating complex terrain versions.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 4 to 7S

Operating weight: 12 to 45 t

Material: cutting edge made of

HB500, bucket body made of

highly wear-resistant HB450

Standard adapter: QC10,

QC21/25, OQ60, OQ65,

OQ70, OQ70/55, OQ80,

SW33, SW48 and SW66



CHARACTERISTICS

- · Equipped with stiffening sickle and rear cutting edge
- With HKS-tilt motor from the BV series
- Tilt angle 2x50°
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
4	12 to 14	932	670
4 S	13 to 16	982	692
5	15 to 21	1041	<i>77</i> 6
6	21 to 26	1129	830
6S	26 to 29	1265	905
7	28 to 34	1375	987
7S	28 to 45	1400	1060

All dimensions are theoretically calculated and therefore without quarantee.

PROS

By eliminating the bearing points of the cylinder version, the attachment remains free of play and maintenance in the long term (particularly important for machines with GPS support).

CONS

The ditch-cleaning bucket is not suitable for tearing or working in hard floors. In this case, a tilt backhoe bucket is more suitable.

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TIGTHEN SCREW CONNECTIONS REGULARLY



The motor is bolted to both the flanges and the adapter plate. These screws must be checked and tightened regularly, otherwise there is a risk of the construction coming loose. It is important to pay attention to the motor manufacturer's specifications. They specify how much torque the screws must be tightened to ensure that they are tight enough.

MORE BUCKET CAPACITIES p. 129 – 131

OPTIONAL

Screw on and reversible blade



DITCH-CLEANING BUCKET WITH TILT MOTOR CLASS 2

OPERATING WEIGHT 2.5 TO 3.8 T

Bottom 6mm, side parts HB400 8mm, cutting edge HB400 150x20mm, stiffening sickle, rear cutting edge HB400, with HKS BV115- 100° , tilt range $2x50^{\circ}$, suitable QC03

 Cutting width [mm]	Capacity [m³]	Weight [kg]
1000	0.128	232
1200	0.156	256
1300	0.171	270
1400	0.184	280

DITCH-CLEANING BUCKET WITH TILT MOTOR CLASS 3

OPERATING WEIGHT 3.8 TO 6.5 T

Bottom 8mm, side parts HB400 10mm, cutting edge HB400 150x20mm, stiffening sickle, rear cutting edge HB400, with HKS BV125-100°, tilt range 2x50°, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1200	0.192	295
1400	0.226	309
1600	0.261	323
1800	0.296	338

DITCH-CLEANING BUCKET WITH TILT MOTOR CLASS 3S

OPERATING WEIGHT 6.5 TO 12 T

Bottom 8mm, side parts HB400 10mm, cutting edge HB400 200x20mm, stiffening sickle, rear cutting edge HB400, with HKS BV130-100 $^{\circ}$ to 7.5 t, HKS-BV160 to 8.5 t or HKS-BV180 to 12 t, tilt range 2x50 $^{\circ}$, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight with BV130 [kg]	Weight with BV160 [kg]	Weight with BV180 [kg]
1400	0.308	455	515	605
1600	0.355	490	550	630
1800	0.402	530	590	675
2000	0.449	560	620	710

DITCH-CLEANING BUCKET WITH TILT MOTOR CLASS 4

OPERATING WEIGHT 12 TO 14 T

Bottom HB450 8mm, side parts HB450 10mm, cutting edge HB500 200x25mm, stiffening sickle, rear cutting edge HB500, with HKS BV225-100°, tilt range 2x50°, suitable QC08

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1600	0.460	790
	1800	0.515	850
Ī	2000	0.575	890
	2200	0.635	930

DITCH-CLEANING BUCKET WITH TILT MOTOR CLASS 4S

OPERATING WEIGHT 13 TO 16 T

Bottom HB450 10mm, side parts HB450 15mm, cutting edge HB500 200x25mm, stiffening sickle, rear cutting edge HB500, with HKS BV240-100°, tilt range 2x50°, suitable QC10

Cutting width [mm]	Capacity [m³]	Weight [kg]
1600	0.510	900
1800	0.580	930
2000	0.650	960
2200	0.720	990

DITCH-CLEANING BUCKET WITH TILT MOTOR CLASS 5

OPERATING WEIGHT 15 TO 21 T

Bottom HB450 10mm, side parts HB450 15mm, cutting edge HB500 250x25mm, stiffening sickle, rear cutting edge HB500, with HKS BV250-100°, tilt range 2x50°, suitable QC10

Cutting width [mm]	Capacity [m³]	Weight [kg]
1800	0.635	1010
2000	0.710	1050
2200	0. <i>7</i> 85	1100
2400	0.860	1140





DITCH-CLEANING BUCKET WITH TILT MOTOR CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 10mm, side parts HB450 15mm, cutting edge HB500 300x30mm, stiffening sickle, rear cutting edge HB500, with HKS BV250 to 23 t or HKS BV260 to 26 t, tilt range $2x50^{\circ}$, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight with BV250 [kg]	Weight with BV260 [kg]
1800	0.780	1260	1330
2000	0.875	1320	1390
2200	0.965	1390	1460
2400	1.060	1450	1520

DITCH-CLEANING BUCKET WITH TILT MOTOR CLASS 6S

OPERATING WEIGHT 26 TO 29 T

Bottom HB450 12mm, side parts HB450 20mm, cutting edge HB500 300x35mm, stiffening sickle, rear cutting edge HB500, with HKS BV270-100°, tilt range 2x50°, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
2000	1.085	1 <i>77</i> 0
2200	1.200	1840
2400	1.315	1910
2600	1.435	1980

DITCH-CLEANING BUCKET WITH TILT MOTOR CLASS 7

OPERATING WEIGHT 28 TO 34 T

Bottom HB450 12mm, side parts HB450 20mm, cutting edge HB500 300x40mm, stiffening sickle, rear cutting edge HB500, with HKS BV290-100°, tilt range 2x50°, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
2000	1.300	1864
2200	1.440	1953
2400	1.580	2042
2600	1 720	2131

DITCH-CLEANING BUCKET WITH TILT MOTOR CLASS 7S

OPERATING WEIGHT 28 TO 45 T

Bottom HB450 12mm, side parts HB450 20mm, cutting edge HB500 300x40mm, stiffening sickle, rear cutting edge HB500, with HKS BV300 to 38 t or HKS BV350 to 45 t, tilt range $2x50^{\circ}$, suitable QC21/25

	Cutting width [mm]	Capacity [m³]	Weight with BV300 [kg]	Weight with BV350 [kg]
	2200	1.440	2470	n. s.
	2400	1.580	2560	n. s.
	2600	1.720	2650	n. s.
ĺ	2800	1.860	2740	n. s.





SLOPE BUCKET WITH MOTOR

OPERATING WEIGHT 12 TO 45 T

The slope bucket is a tilt bucket, equipped with a HKS tilt motor from the BV series. As such, it can realise a tilt range of 2x50°. The slope bucket combines the advantages of a ditch-cleaning bucket (the compact version) and those of a tilt backhoe bucket (larger capacity). Its special design and reinforced materials make it particularly suitable for levelling and loading work. With the help of the rear cutting edge, surfaces can be levelled.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 5 to 7S

Operating weight: 12 to 45 t

Material: cutting edge made of

HB500, bucket body made of

highly wear-resistant HB450

Standard adapter: QC10,

QC21/25, OQ60, OQ65,

OQ70, OQ70/55 and OQ80

CHARACTERISTICS

- · Stiffening sickle for stability
- Wear stripes lengthwise and crosswise
- Rear cutting edge
- With HKS-Tilt motor from the BV series
- Tilt angle 2x50°
- Individual adapter or direct attachment

	Class	Operating weight [t]	A [mm]	B [mm]
	5	12 to 16	663	911
	5S	16 to 21	804	1070
Ξ	6	21 to 26	995	1271
	6S	26 to 29	1050	1365
	7 – 7S	29 to 45	1118	1467

All dimensions are theoretically calculated and therefore without



OPTIONAL

- Screw on and reversible blade
- Second bottom
- Profile cutting edge type 151

PROS

- Reinforced bucket body for use in hard soils.
- High capacity for removing soils.

CONS

• The slope bucket is not suitable for tearing.

HENLEAdvice!

TIGTHEN SCREW CONNECTIONS REGULARLY



The motor is bolted to both the flanges and the adapter plate. These screws must be checked and tightened regularly, otherwise there is a risk of the construction coming loose. It is important to pay attention to the motor manufacturer's specifications. They specify how much torque the screws must be tightened to ensure that they are tight enough.

BUCKET CAPACITIES p. 134 – 135



SLOPE BUCKET WITH TILT MOTOR CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 8mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 200×25 mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, with HKS BV225-100° to 13 t or HKS BV240-100° to 16 t, tilt range 2×50 °, suitable QC10

	Cutting width [mm]	Capacity [m³]	Weight with BV225 [kg]	Weight with BV240 [kg]
	1700	0.600	805	n. s.
	1800	0.640	830	n. s.
ĺ	1900	0.680	855	n. s.
ĺ	2000	0.720	880	n. s.

SLOPE BUCKET WITH TILT MOTOR CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10mm, side parts HB450 8mm, side cutting edges HB450 25mm, cutting edge HB500 200x25mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, with HKS BV250-100°, tilt range 2x50°, suitable QC10

Cutting width [mm]	Capacity [m³]	Weight [kg]
1700	0.800	1070
1800	0.856	1100
1900	0.900	1130
2000	0.960	1150

SLOPE BUCKET WITH TILT MOTOR CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 10mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 250x30mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, with HKS BV250-100° to 23 t or HKS BV260-100° to 26 t, tilt range $2x50^\circ$, suitable QC21/25

	Cutting width [mm]	Capacity [m³]	Weight with BV250 [kg]	Weight with BV260 [kg]
	1800	1.280	1335	n. s.
	2000	1.440	1405	n. s.
	2100	1.520	1440	n. s.
- '	2200	1.600	1475	n. s.

SLOPE BUCKET WITH TILT MOTOR CLASS 6S

OPERATING WEIGHT 26 TO 29 T

Bottom HB450 10mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 250x30mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, with HKS BV270-100°, tilt range 2x50°, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1800	1.480	n. s.
2000	1.670	n. s.
2100	1 <i>.7</i> 60	n. s.
2200	1.850	n. s.

SLOPE BUCKET WITH TILT MOTOR CLASS 7

OPERATING WEIGHT 29 TO 36 T

Bottom HB450 12mm, side parts HB450 12mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, with HKS BV290-100° to 34 t or HKS BV300-100° to 36 t, tilt range $2x50^\circ$, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight BV290 [kg]	Weight BV300 [kg]
1800	1.680	1860	1860
2000	1.900	1970	1970
2100	2.000	2025	2025
2200	2.100	2080	2080

SLOPE BUCKET WITH TILT MOTOR CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom HB450 12mm, side parts HB450 12mm, side cutting edges HB450 30mm, cutting edge HB500 300x40mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, with HKS BV300-100 $^{\circ}$ to 38 t or HKS BV350-100 $^{\circ}$ to 45 t, tilt range 2x50 $^{\circ}$, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight with BV300 [kg]	Weight with BV350 [kg]
1800	1.680	2330	n. s.
2000	1.900	2465	n. s.
2100	2.000	2533	n. s.
2200	2.100	2600	n. s.



SLOPE BUCKET WITH CYLINDER

OPERATING WEIGHT 12 TO 36 T

The slope bucket with cylinder is an alternative version to the slope bucket with built-in motor. It can realise a tilt range of $2\times45^{\circ}$ through the cylinder. The slope bucket combines the advantages of a ditch-cleaning bucket (the compact version) and those of a tilt backhoe bucket (the larger capacity). This special design and reinforced materials make the slope bucket particularly suitable for levelling and loading work. With the help of the rear cutting edge, surfaces can be levelled.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 5 to 7

Operating weight: 12 to 36 t

Material: cutting edge made of HB500, bucket body made of

highly wear-resistant HB450

Standard adapter: QC 10,

QC21/25, OQ60, OQ65,

OQ70, OQ70/55 and OQ80

CHARACTERISTICS

- · Stiffening sickle for stability
- Wear stripes lengthwise and crosswise
- Rear cutting edge
- Tilt angle 2x45°
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	663	911
5S	16 to 21	804	1070
6	21 to 26	995	1271
6S	26 to 30	1050	1365
7	30 to 36	1118	1467

All dimensions are theoretically calculated and therefore without quarantee



PROS

- Reinforced bucket body for use in hard soils.
- High capacity for removing soils.

CONS

The slope bucket is not suitable for tearing.

HENLEAdvice!

REGULAR BUSHING



It is important to replace the bolts and bushes before the bearings are worn out. Otherwise it is possible that the tilt head will be damaged. Replacing this is considerably more expensive than maintaining the wearing parts. They are specially designed for wear and must therefore be replaced individually. The bushes have a spiral groove, which lubricates the bearing surface of the bolt. They are also provided with a spiral (spiral lubrication groove), which facilitates the lubrication of the head and thus ensures a smooth work process. Overall, (lubricate) pins and bushes should be checked regularly and if necessary, replaced by time.

BUCKET CAPACITIES p. 138 - 139

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Screw on and reversible blade

OPTIONAL

- Second bottom
- Profile cutting edge type 151



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SLOPE BUCKET WITH CYLINDER CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 8mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 200x25mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, 2 cylinder with piston rod protection 2x45° incl. lock valve with overpressure function, suitable QC10

Cutting width [mm]	Capacity [m³]	Weight [kg]
1700	0.634	<i>57</i> 3
1800	0.676	597
1900	0.717	621
2000	0. <i>7</i> 59	646

SLOPE BUCKET WITH CYLINDER CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 200x25mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, 2 cylinder with piston rod protection 2x45° incl. lock valve with overpressure function, suitable QC10

Cutting width [mm]	Capacity [m³]	Weight [kg]
1700	0.837	655
1800	0.892	680
1900	0.948	<i>7</i> 05
2000	1.004	<i>7</i> 30

SLOPE BUCKET WITH CYLINDER CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 10mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 250x30mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, 2 cylinder with piston rod protection 2x45° incl. lock valve with overpressure function, suitable QC21/25

	Cutting width [mm]	Capacity [m³]	Weight [kg]
1	1800	1.281	860
	2000	1.443	922
	2100	1.524	953
,	2200	1.605	983

SLOPE BUCKET WITH CYLINDER CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x30mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, 2 cylinder with piston rod protection 2x45° incl. lock valve with overpressure function, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1800	1.501	1073
2000	1.693	1153
2100	1.790	1193
2200	1.886	1233

SLOPE BUCKET WITH CYLINDER CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, rear cutting edge HB500, with wear stripes lengthwise and crosswise, 2 cylinder with piston rod protection 2x45° incl. lock valve with overpressure function, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1800	1. <i>7</i> 20	1280
2000	1.944	1379
2100	2.055	1428
2200	2.167	1477

TILT BACKHOE BUCKET

OPERATING WEIGHT 2.5 TO 12 T

The tilt backhoe bucket is used in classic earthworks, as well as landscaping. The bucket's tilt function allows it to be used in a wide range of applications: in addition to excavating pits, the tilt backhoe bucket can also be used for working on slopes and modelling terrain topologies independently of the excavator stand area.



APPLICATION AREAS

- Earthmoving
- Gardening and landscaping

TECHNICAL DETAILS

Sizes: Class 2S to 4S
Operating weight: 2.5 to 12 t

Material: Cutting edge made of HB500, side cutting edges made of highly wear-resistant HB450

Standard adapter: QC03 and QC08

OPTIONAL

- Chamfered version
- Second bottom
- Wear stripes
- Profile cutting edge
- Screw on and reversible blade
- With tilt motor
- HT-Adapter

CHARACTERISTICS

- Steel bushes in tilt head
- 2 cylinder
- Tilt angle 2x45°
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
2S	2.5 to 3.8	575	555
3	3.8 to 5	645	644
3S	5 to 6.5	686	682
4	6.5 to 8.5	747	<i>7</i> 56
4S	8.5 to 12	857	889

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- The tilt backhoe bucket is a combination of the backhoe bucket and ditch-cleaning bucket.
- Significantly larger volume than the ditchcleaning bucket.

CONS

 Solutions with hydraulic cylinders are not ideal for use with GPS on the excavator.
 For this purpose motorised buckets are better suited.

HENLEAdvice!



PROFILED STEEL

Profiled steel serves as additional wear protection. It is placed in front of the cutting edge as a kind of buffer. On the one hand, it can protect the undamaged cutting edge and, on the other hand, prevent further wear on a worn cutting edge. It is easy to replace and that means, that the cutting edge on the bucket does not have to be replaced.

BUCKET CAPACITIES p. 142 - 143



TILT BACKHOE BUCKET CLASS 2S

OPERATING WEIGHT 2.5 TO 3.8 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 150x20mm, center pin 40mm, steel bushes in tilt head, 2 cylinder 2x45°, suitable QC03

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1000	0.151	194
	1200	0.185	214
Ī	1400	0.219	235

TILT BACKHOE BUCKET CLASS 3

OPERATING WEIGHT 3.8 TO 5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, center pin 40mm, steel bushes in tilt head, 2 cylinder 2x45°, suitable QC03

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1000	0.196	234
	1200	0.241	259
Ī	1400	0.286	285

TILT BACKHOE BUCKET CLASS 3S

OPERATING WEIGHT 5 TO 6.5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, center pin 50mm, Steel bushes in tilt head, 2 cylinder 2x45°, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0.301	294
1400	0.327	308
1500	0.353	321

TILT BACKHOE BUCKET CLASS 4

OPERATING WEIGHT 6.5 TO 8.5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, center pin 50mm, steel bushes in tilt head, 2 cylinder 2x45°, suitable QC08

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1300	0.380	336
	1400	0.413	351
Ī	1500	0.446	366

TILT BACKHOE BUCKET CLASS 4S

OPERATING WEIGHT 8.5 TO 12 T

Bottom HB450 10mm, side parts HB450 8mm, side cutting edges HB450 15mm, cutting edge HB500 250x25mm, center pin 60mm, steel bushes in tilt head, 2 cylinder 2x45°, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0.499	482
1400	0.543	504
1500	0.587	525
1600	0.631	547

TILT BACKHOE BUCKET

OPERATING WEIGHT 12 TO 45 T

The tilt backhoe bucket is used in classic earthworks, as well as landscaping. The bucket's tilt function allows it to be used in a wide range of applications: in addition to excavating pits, the tilt backhoe bucket can also be used for working on slopes and modelling terrain topologies independently of the excavator stand area.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: Class 5 to 7S

Operating weight: 12 to 45 t

Material: Cutting edge made of

HB500, bucket body made of highly wear-resistant HB450

Standard adapter: QC10,

QC21/25, OQ60, OQ65,

OQ70, OQ70/55 and OQ80

OPTIONAL

- Chamfered version
- Second bottom
- Wear stripes
- Profile cutting edge/screw on and reversible blade
- With tilt motor

CHARACTERISTICS

- Steel bushes in tilt head
- 2 cylinder with piston rod protection
- Incl. lock valve with overpressure function
- Tilt angle 2x45°
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	1012	1007
5S	16 to 21	1118	1139
6	21 to 26	1550	1272
6 light	21 to 26	1546	1 <i>77</i> 2
6S	26 to 30	1693	1357
6S light	26 to 30	1609	1357
7	30 to 36	1770	1451
7S	36 to 45	2013	1625
7S light	36 to 45	1905	1625

All dimensions are theoretically calculated and therefore without quarantee.



PROS

- The tilt backhoe bucket is a combination of the backhoe bucket and ditch-cleaning bucket.
- Significantly larger volume than the ditchcleaning bucket.

CONS

 Solutions with hydraulic cylinders are not ideal for use with GPS on the excavator.
 For this purpose motorised buckets are better suited.

HENLEAdvice!

REGULAR BUSHING



It is important to replace the bolts and bushes before the bearings are worn out. Otherwise it is possible that the tilt head will be damaged. Replacing this is considerably more expensive than maintaining the wearing parts. They are specially designed for wear and must therefore be replaced individually. The bushes have a spiral groove, which lubricates the bearing surface of the bolt. They are also provided with a spiral (spiral lubrication groove), which facilitates the lubrication of the head and thus ensures a smooth work process. Overall, (lubricate) pins and bushes should be checked regularly and if necessary, replaced by time.

LIGHT VERSION

Various sizes of the tilt backhoe bucket are also available in an light version. This version is built with lighter materials and still has the same dimensions as the standard sizes. A lightweight version is mainly used when the buckets weight needs to be kept as low as possible.





TILT BACKHOE BUCKET CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 10mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 250x30mm, center pin 80mm, steel bushes in tilt head, 2 cylinder with piston rod protection 2x45°, incl. lock valve with overpressure function, suitable QC10

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1300	0.631	<i>7</i> 30
	1400	0.688	<i>7</i> 56
	1500	0.745	782
Ī	1600	0.802	807

TILT BACKHOE BUCKET CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10 mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 300x30mm, center pin 80mm, steel bushes in tilt head, 2 cylinder with piston rod protection 2x45° incl. lock valve with overpressure function, suitable QC10

Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0.802	<i>7</i> 60
1400	0.877	<i>7</i> 84
1500	0.951	808
1600	1.025	832

TILT BACKHOE BUCKET CLASS 6 - LIGHT VERSION

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 10mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 300x30mm, center pin 100mm, steel bushes in tilt head, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1400	1.052	1035
1500	1.142	1069
1600	1.233	1102
1800	1.414	1169

TILT BACKHOE BUCKET CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x35mm, center pin 100mm, steel bushes in tilt head, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1400	1.048	1131
1500	1.139	1170
1600	1.229	1209
1800	1.410	1286

TILT BACKHOE BUCKET CLASS 6S - LIGHT VERSION

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, center pin 100mm, steel bushes in tilt head, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1500	1.261	1222
1600	1.363	1263
1800	1.565	1346
2000	1.767	1429

TILT BACKHOE BUCKET CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, center pin 100mm, steel bushes in tilt head, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1500	1.279	1392
1600	1.382	1436
1800	1.587	1524
2000	1. <i>7</i> 93	1612





TILT BACKHOE BUCKET CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom HB450 15mm, side parts HB450 10mm, side cutting edges HB450 30mm, cutting edge HB500 300x40mm, center pin 100mm, steel bushes in tilt head, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1500	1.426	1597
1600	1.542	1647
1800	1 <i>.77</i> 2	1746
2000	2.003	1845

TILT BACKHOE BUCKET CLASS 7S - LIGHT VERSION

OPERATING WEIGHT 36 TO 45 T

Bottom HB450 15mm, side parts HB450 10mm, side cutting edges HB450 30mm, cutting edge HB500 400x50mm, center pin 120mm, steel bushes in tilt head, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1800	2.179	1952
2000	2.472	2072
2200	2.765	2192
2400	3.058	2312

TILT BACKHOE BUCKET CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom HB450 15mm, side parts HB450 10mm, side cutting edges HB450 30mm, cutting edge HB500 400x50mm, center pin 120mm, steel bushes in tilt head, 2 cylinder with piston rod protection $2x45^{\circ}$ incl. lock valve with overpressure function, suitable QC21/25

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1800	2.209	2348
	2000	2.507	2473
. [2200	2.804	2597
_	2400	3.102	2721





TILT BACKHOE BUCKET WITH MOTOR

OPERATING WEIGHT 2.5 TO 11 T

The tilt backhoe bucket with tilt motor is predestined for use in gardening and landscaping and for the construction of excavations. It is becoming increasingly important in embankment construction and in the versioning of terrain topologies. Equipped with a tilt motor, the attachment can realise a tilt range of $2\times50^\circ$.



APPLICATION AREAS

- Earthmoving
- · Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 2S to 4S

Operating weight: 2.5 to 11 t

Material: cutting edge made of HB500, side cutting edges made

of highly wear-resistant HB450

Standard adapter:

QC03 and QC08

OPTIONAL

- Chamfered version
- Second bottom
- Wear stripes
- Profile cutting edge
- Screw on and reversible blade
- HT-Adapter

CHARACTERISTICS

- With HKS tilt motor from BV series
- Tilt angle 2x50°
- · Individual adapter or direct attachment

	Class	Operating weight [t]	A [mm]	B [mm]	
	2S	2.5 to 3.8	530	551	
	3	3.8 to 5	590	643	
Ī	3S	5 to 6.5	<i>7</i> 96	682	
	4	6.5 to 8.5	806	<i>7</i> 58	
Ī	4S	8.5 to 11	970	889	

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- The tilt backhoe bucket is a combination of the backhoe bucket and ditch-cleaning bucket.
- By eliminating the bearing points of the cylinder version, the attachment remains free of play and maintenance in the long term.
- The tilt drive is more wear and maintenance free than the version with cylinder.

CONS

 The purchase of a tilt backhoe bucket with motos is more costly compared to the version with cylinder.

HENLEAdvice!





TIGTHEN SCREW CONNECTIONS REGULARLY

The motor is bolted to both the flanges and the adapter plate. These screws must be checked and tightened regularly, otherwise there is a risk of the construction coming loose. It is important to pay attention to the motor manufacturer's specifications. They specify how much torque the screws must be tightened to ensure that they are tight enough.

BUCKET CAPACITIES p. 152 - 153





TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 2S

OPERATING WEIGHT 2.5 TO 3.8 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 150x20mm, with HKS BV115-100°, tilt range 2x50°, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1000	0.140	205
1200	0.170	230
1400	0.200	255

TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 3

OPERATING WEIGHT 3.8 TO 5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, with HKS BV125-100°, tilt range 2x50°, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1000	0.168	269
1200	0.202	286
1400	0.240	316

TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 3S

OPERATING WEIGHT 5 TO 6.5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, with HKS BV125-100 $^{\circ}$ to 6.2 t or HKS BV130-100 $^{\circ}$ to 6.5 t, tilt range 2x50 $^{\circ}$, suitable QC03

	Cutting width [mm]	Capacity [m³]	Weight BV125 [kg]	Weight BV130 [kg]
	1300	0.277	343	379
	1400	0.300	356	392
Ī	1500	0.323	372	408

TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 4

OPERATING WEIGHT 6.5 TO 8.5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, with HKS BV130 to 7.5 t or HKS BV160 to 8.5 t, tilt range $2x50^{\circ}$, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight with BV130 [kg]	Weight with BV160 [kg]
1300	0.332	538	478
1400	0.361	545	505
1500	0.410	565	530

TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 4S

OPERATING WEIGHT 8.5 TO 11 T

Bottom HB450 10mm, side parts HB450 8mm, side cutting edges HB450 15mm, cutting edge HB500 250x25mm, with HKS BV160 to 10 t or HKS BV180 to 11 t, tilt range $2x50^{\circ}$, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight with BV160 [kg]	Weight with BV 180 [kg]
1300	0.460	613	648
1400	0.500	635	670
1500	0.540	658	692
1600	0.580	680	<i>7</i> 15



TILT BACKHOE BUCKET WITH MOTOR

OPERATING WEIGHT 11 TO 45 T

The tilt backhoe bucket with tilt motor is predestined for use in gardening and landscaping and for the construction of excavations. It is becoming increasingly important in embankment construction and in the versioning of terrain topologies. Equipped with a tilt motor, the attachment can realise a tilt range of $2\times50^{\circ}$.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 5 to 7S

Operating weight: 11 to 45 t

Material: cutting edge made of

HB500, bucket body made of

highly-wear-restistant HB450

Standard adapter: QC10,

QC21/25, OQ60, OQ65,

OQ70, OQ70/55 and OQ80

OPTIONAL

- Chamfered version
- Second bottom
- Profile cutting edge
- Screw on and reversible blade
- Wear stripes

CHARACTERISTICS

- With HKS tilt motor from BV series
- Tilt angle 2x50°
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
5	11 to 16	1102	1007
5S	16 to 21	1216	1139
6	21 to 26	1344	1272
6S	26 to 30	1489	1299
7	30 to 34	1515	1447
7S	36 to 45	1 <i>7</i> 05	1625

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- The tilt backhoe bucket is a combination of the backhoe bucket and ditch-cleaning bucket.
- By eliminating the bearing points of the cylinder version, the attachment remains free of play and maintenance in the long term.
- The tilt drive is more wear and maintenance free than the version with cylinder.

CONS

 The purchase of a tilt backhoe bucket with motos is more costly compared to the version with cylinder.

HENLEAdvice!





TIGTHEN SCREW CONNECTIONS REGULARLY

The motor is bolted to both the flanges and the adapter plate. These screws must be checked and tightened regularly, otherwise there is a risk of the construction coming loose. It is important to pay attention to the motor manufacturer's specifications. They specify how much torque the screws must be tightened to ensure that they are tight enough.

WORKING WITH GPS SUPPORT

The use of a motorised bucket is particularly useful for work where the excavator is supported by GPS. In contrast to a tilting bucket with cylinders, the tilt motor can hold positions more precisely. Due to the fact that the motor also requires considerably less maintenance than a cylinder and only develops very little play, the use of GPS with a motorbucket works ideally. Through the combination of GPS and the motorised bucket, the attachment can be held in the exact position to create complex versions or perform precise work.



TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 5

OPERATING WEIGHT 11 TO 16 T

Bottom HB450 10mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 250x30mm, with HKS BV225-100 $^{\circ}$ to 14 t or HKS BV240-100 $^{\circ}$ to 16 t, tilt range 2x50 $^{\circ}$, suitable QC10

Cutting width [mm]	Capacity [m³]	Weight with BV225 [kg]	Weight with BV240 [kg]
1300	0.583	<i>7</i> 85	<i>7</i> 95
1400	0.635	820	830
1500	0.688	855	865
1600	0.740	890	900

TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 300x30mm, with HKS BV250-100°, tilt range 2x50°, suitable QC10

Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0. <i>7</i> 45	1150
1400	0.810	1190
1500	0.875	1230
1600	0.940	1270

TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, with HKS BV250-100° to 23 t or HKS BV260-100° to 26 t, tilt range $2x50^\circ$, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight with BV250 [kg]	Weight with BV260 [kg]
1400	0.980	1310	1380
1500	1.060	1360	1430
1600	1.140	1410	1480
1800	1.305	1510	1580

TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, with HKS BV270-100°, tilt range 2x50°, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1500	1.250	1675
1600	1.350	1730
1800	1.550	1840
2000	1 <i>.7</i> 50	1950

TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 7

OPERATING WEIGHT 30 TO 34 T

Bottom HB450 15mm, side parts HB450 10mm, side cutting edges HB450 30mm, cutting edge HB500 300×40mm, with HKS BV290-100°, tilt range 2×50°, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight [kg]
1500	1.312	1763
1600	1.415	1823
1800	1.620	1942
2000	1.825	2061

TILT BACKHOE BUCKET WITH TILT MOTOR CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom HB450 15mm, side parts HB450 10mm, side cutting edges HB450 30mm, cutting edge HB500 400x50mm, with HKS BV300-100 $^{\circ}$ to 38 t or HKS BV350 to 45 t, tilt range 2x50 $^{\circ}$, suitable QC21/25

Cutting width [mm]	Capacity [m³]	Weight with BV300 [kg]	Weight with BV350 [kg]
1800	2.250	2450	n. s.
2000	2.550	2570	n. s.
2200	2.845	2690	n. s.
2400	3.145	2810	n. s.
	1800 2000 2200	1800 2.250 2000 2.550 2200 2.845	1800 2.250 2450 2000 2.550 2570 2200 2.845 2690





LOADING BUCKET

OPERATING WEIGHT 2.5 TO 12 T

The loading bucket has been specially developed for use with a tilt coupler. The loading bucket is combining the low construction height of a ditch-cleaning bucket and the stable construction of a backhoe bucket. This ensures optimum power transmission during excavation and material installation.



APPLICATION AREAS

- Earthmoving
- · Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 2S to 4S

Operating weight: 2.5 to 12 t

Material: cutting edge made of

HB500, side cutting edges made of highly-wear-resistant HB450

Standard adapter:

QC03 and QC08

OPTIONAL

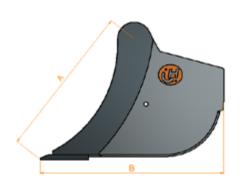
- Chamfered version
- Second bottom
- HT-Adapter

CHARACTERISTICS

• Individual adapter or direct attachment

Operating weight [t]	A [mm]	B [mm]
2.5 to 3.8	458	551
3.8 to 5	529	644
5 to 6.5	563	682
6.5 to 8.5	629	<i>7</i> 54
8.5 to 12	<i>7</i> 39	889
	weight [t] 2.5 to 3.8 3.8 to 5 5 to 6.5 6.5 to 8.5	weight [t] A [mm] 2.5 to 3.8 458 3.8 to 5 529 5 to 6.5 563 6.5 to 8.5 629

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- · Ideal for working in combination with a tilt coupler.
- The loading bucket is a combination of the ditchcleaning bucket and backhoe bucket.

HENLEAdvice!

REINFORCING THE LOADING BUCKET WITH A SECOND BOTTOM

To increase the wear resistance of the loading bucket, a second bottom can additionally be attached to the bucket. This allows the bucket to be used in very hard soils and rocky terrain.

A second bottom has several advantages. In particular, the actual bucket bottom is optimally protected against wear and the bucket body itself remains intact for a long time. The second bottom can be replaced when worn out.

BUCKET CAPACITIES p. 160 - 161



LOADING BUCKET CLASS 2S

OPERATING WEIGHT 2.5 TO 3.8 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 150x20mm, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1000	0.151	124
1200	0.185	144
1400	0.219	165

LOADING BUCKET CLASS 3

OPERATING WEIGHT 3.8 TO 5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1000	0.196	152
1200	0.241	1 <i>77</i>
1400	0.286	203

LOADING BUCKET CLASS 3S

OPERATING WEIGHT 5 TO 6.5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, suitable QC03

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1300	0.301	202
	1400	0.327	216
Ī	1500	0.353	229

LOADING BUCKET CLASS 4

OPERATING WEIGHT 6.5 TO 8.5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0.380	251
1400	0.413	266
1500	0.446	281

LOADING BUCKET CLASS 4S

OPERATING WEIGHT 8.5 TO 12 T

Bottom 10mm, side parts 8mm, side cutting edges HB450 15mm, cutting edge HB500 250x25mm, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0.499	347
1400	0.543	369
1500	0.587	390
1600	0.631	412

LOADING BUCKET

OPERATING WEIGHT 12 TO 45 T

The loading bucket has been specially developed for use with a tilt coupler. The loading bucket is combining the low construction height of a ditchcleaning bucket and the stable construction of a backhoe bucket. This ensures optimum power transmission during excavation and material installation.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 5 to 7S

Operating weight: 12 to 45 t

Material: cutting edge made of HB500, bucket body made of

highly wear-resistant HB450

Standard adapter: QC10,

QC21/25, OQ60, OQ65,

OQ70, OQ70/55, OQ80,

SW33, SW48 and SW66

OPTIONAL

- Chamfered version
- Second bottom
- Wear stripes

CHARACTERISTICS

Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	841	1007
5S	16 to 21	953	1139
6	21 to 26	1067	1271
6S	26 to 30	1162	1299
7	30 to 36	1195	1447
7S	36 to 45	1356	1622

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- Ideal for working in combination with a tilt coupler.
- The loading bucket is a combination of the ditchcleaning bucket and backhoe bucket.

HENLEAdvice!

REINFORCING THE LOADING BUCKET WITH A SECOND BOTTOM

To increase the wear resistance of the loading bucket, a second bottom can additionally be attached to the bucket. This allows the bucket to be used in very hard soils and rocky terrain. A second bottom has several advantages. In particular, the actual bucket bottom is optimally protected against wear and the bucket body itself remains intact for a long time. The second bottom can be replaced when worn out.

BUCKET CAPACITIES p. 164 – 165

LOADING BUCKET CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 10mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 250x30mm, suitable QC10 or OQ60

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1300	0.631	415
	1400	0.688	441
	1500	0. <i>7</i> 45	467
_	1600	0.802	492

LOADING BUCKET CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10 mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 300x30mm, suitable QC10 or OQ65

 Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0.802	430
1400	0.877	454
1500	0.951	478
1600	1.025	502

LOADING BUCKET CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x35mm, suitable QC21/25 or QQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]
1400	1.048	706
1500	1.139	<i>7</i> 45
1600	1.229	784
1800	1.410	861

LOADING BUCKET CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]
1500	1.279	817
1600	1.382	861
1800	1.587	949
2000	1.793	1037

LOADING BUCKET CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom HB450 15mm, side parts HB450 10mm, side cutting edges HB450 30mm, cutting edge HB500 300x40mm, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]
1500	1.426	942
1600	1.542	992
1800	1.772	1091
2000	2.003	1190

LOADING BUCKET CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom HB450 15mm, side parts HB450 10mm, side cutting edges HB450 30mm, cutting edge HB500 400x50mm, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]
1800	2.209	1363
2000	2.507	1488
2200	2.804	1612
2400	3.102	1736





CHAMFERED LOADING BUCKET

OPERATING WEIGHT 2.5 TO 12 T

The loading bucket has been specially developed for use with a tilt coupler. The loading bucket is combining the low construction height of a ditch-cleaning bucket and the stable construction of a backhoe bucket. This ensures optimum power transmission during excavation and material installation.

The chamfered version of the loading bucket also makes it possible to work efficiently and flexibly in confined spaces and on house walls.



APPLICATION AREAS

- Earthmoving
- Gardening and landscaping

TECHNICAL DETAILS

Sizes: class 2S to 4S

Operating weight: 2.5 to 12 t

Material: cutting edge made of HB500, side cutting edges made

of highly wear-resistant HB450

Standard adapter:

QC03 and QC08

OPTIONAL

- Second bottom
- HT-Adapter

CHARACTERISTICS

• Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]	
2S	2.5 to 3.8	458	551	
3	3.8 to 5	529	644	
3S	5 to 6.5	563	682	
4	6.5 to 8.5	629	<i>7</i> 54	
4S	8.5 to 12	<i>7</i> 39	889	

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- · Ideal for working in combination with a tilt coupler.
- The loading bucket is a combination of the ditchcleaning bucket and backhoe bucket.

HENLEAdvice!

REINFORCING THE LOADING BUCKET WITH A SECOND BOTTOM

To increase the wear resistance of the loading bucket, a second bottom can additionally be attached to the bucket. This allows the bucket to be used in very hard soils and rocky terrain.

A second bottom has several advantages. In particular, the actual bucket bottom is optimally protected against wear and the bucket body itself remains intact for a long time. The second bottom can be replaced when worn out.

BUCKET CAPACITIES p. 168 - 169



CHAMFERED LOADING BUCKET CLASS 2S

OPERATING WEIGHT 2.5 TO 3.8 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 150x20mm, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1000	0.148	122
1200	0.182	143
1400	0.216	163

CHAMFERED LOADING BUCKET CLASS 3

OPERATING WEIGHT 3.8 TO 5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]
1000	0.193	156
1200	0.238	181
1400	0.301	207

CHAMFERED LOADING BUCKET CLASS 3S

OPERATING WEIGHT 5 TO 6.5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, suitable QC03 $\,$

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1300	0.301	210
	1400	0.327	223
Ī	1500	0.353	240

CHAMFERED LOADING BUCKET CLASS 4

OPERATING WEIGHT 6.5 TO 8.5 T

Bottom and side parts 8mm, side cutting edges HB450 12mm, cutting edge HB500 200x20mm, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0.372	240
1400	0.405	255
1500	0.438	270

CHAMFERED LOADING BUCKET CLASS 4S

OPERATING WEIGHT 8.5 TO 12 T

Bottom 10mm, side parts 8mm, side cutting edges HB450 15mm, cutting edge HB500 250x25mm, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0.487	342
1400	0.531	360
1500	0.573	378
1600	0.621	396

CHAMFERED LOADING BUCKET

OPERATING WEIGHT 12 TO 45 T

The loading bucket has been specially developed for use with a tilt coupler. The loading bucket is combining the low construction height of a ditch-cleaning bucket and the stable construction of a backhoe bucket. This ensures optimum power transmission during excavation and material installation. The chamfered version of the loading bucket also makes it



possible to work efficiently and flexibly in confined spaces and on house walls.



APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 5 to 7S

Operating weight: 12 to 45 t

Material: cutting edge made of HB500, bucket body made of

highly wear-resistant HB450

Standard adapter: QC10,



CHARACTERISTICS

Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	841	1007
5S	16 to 21	953	1139
6	21 to 26	1067	1271
6S	26 to 30	1162	1299
7	30 to 36	1195	1447
7S	36 to 45	1356	1622

All dimensions are theoretically calculated and therefore without guarantee

QC21/25, OQ60, OQ65, OQ70, OQ70/55, OQ80, SW33, SW48 and SW66 **OPTIONAL**

- Second bottom
- Wear stripes

PROS

- · Ideal for working in combination with a tilt coupler.
- The loading bucket is a combination of the ditchcleaning bucket and backhoe bucket.

HENLEAdvice!

REINFORCING THE LOADING BUCKET WITH A SECOND BOTTOM

To increase the wear resistance of the loading bucket, a second bottom can additionally be attached to the bucket. This allows the bucket to be used in very hard soils and rocky terrain. A second bottom has several advantages. In particular, the actual bucket bottom is optimally protected against wear and the bucket body itself remains intact for a long time. The second bottom can be replaced when worn out.

BUCKET CAPACITIES p. 172 - 173

CHAMFERED LOADING BUCKET CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 10mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 250x30mm, suitable QC10 or OQ60

Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0.613	450
1400	0.670	480
1500	0. <i>7</i> 28	510
1600	0.785	540

CHAMFERED LOADING BUCKET CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10 mm, side parts HB450 8mm, side cutting edges HB450 20mm, cutting edge HB500 300x30mm, suitable QC10 or OQ65

Cutting width [mm]	Capacity [m³]	Weight [kg]
1300	0.772	535
1400	0.845	<i>57</i> 0
1500	0.918	605
1600	0.990	640

CHAMFERED LOADING BUCKET CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x35mm, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]
1400	1.055	<i>7</i> 90
1500	1.147	840
1600	1.240	890
1800	1.425	990

CHAMFERED LOADING BUCKET CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts HB450 10mm, side cutting edges HB450 25mm, cutting edge HB500 300x40mm, suitable QC21/25 or OQ70/55

	Cutting width [mm]	Capacity [m³]	Weight [kg]
	1500	1.327	900
	1600	1.465	950
Ī	1800	1.680	1050
Ī	2000	1.955	1150

CHAMFERED LOADING BUCKET CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom HB450 15mm, side parts HB450 10mm, side cutting edges HB450 30mm, cutting edge HB500 300x40mm, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]
1500	1.382	940
1600	1.490	990
1800	1 <i>.7</i> 05	1090
2000	1.920	1180

CHAMFERED LOADING BUCKET CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom HB450 15mm, side parts HB450 10mm, side cutting edges HB450 30mm, cutting edge HB500 400x50mm, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]
1800	2.160	1310
2000	2.430	1450
2200	2.755	1630
2400	3.060	1710





ROCK BACKHOE BUCKET

OPERATING WEIGHT 12 TO 45 T

The rock backhoe bucket is a specially reinforced backhoe bucket for use on rock and hard ground. Compared to the standard backhoe bucket, it has a slightly longer design which makes it easier to pick up blocks of rock. To meet the extreme requirements, the rock backhoe bucket is made of HB450 material and reinforced at the back with wear stripes. It is also equipped with two set noses, which allow better positioning of large stones or stone blocks.





APPLICATION AREAS

- Earthmoving
- Demolition and recycling

TECHNICAL DETAILS

Sizes: class 5 to 7S

Operating weight: 12 to 45 t

Material: cutting edge made of HB500, bucket body made of

highly wear-resistant HB450

Standard adapter: QC10, QC21/25, QQ60, QQ65,

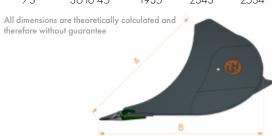
OQ70, OQ70/55 and OQ80

OPTIONAL

CHARACTERISTICS

- Side wall reinforcement
- Wear stripes lengthwise and crosswise
- Side parts put on bottom
- Welded tooth system
- Set noses on the back
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]	C [mm]
5	12 to 16	1190	1440	1537
5S	16 to 21	1239	1502	1623
6	21 to 26	1443	1 <i>7</i> 48	1901
6S	26 to 30	1603	1948	2112
7	30 to 36	1790	2172	2341
7S	36 to 45	1935	2343	2534



PROS

- Optimised version especially for use in heavy and hard soils.
- Reinforced and highly wear-resistant bucket body.





FOR WORKING WITH RUBBLE:
SET NOSES ON THE ROCK BACKHOE BUCKET

When working on rocky ground, conditions are usually difficult: you are working on a slope and also have to stop or hold debris that may slide off. To solve this problem, set noses are attached to the rock backhoe bucket. These are welded to the back of the bucket and are used to hold and move boulders.

BUCKET CAPACITIES p. 176 - 178

Transport hook

ROCK BACKHOE BUCKET CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 8mm, side parts HB450 8mm, side cutting edges HB450 20mm, side wall reinforcement HB450 15mm, cutting edge HB500 250x30mm, with wear stripes lengthwise and crosswise, with 2 set noses, welded tooth system Cat J300 or ESCO U25, suitable QC10 or OQ60

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
800	0.466	485	4
1000	0.625	552	4
1100	0. <i>7</i> 06	597	5
1200	0.786	631	5
1300	0.866	676	6

ROCK BACKHOE BUCKET CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 8mm, side parts HB450 8mm, side cutting edges HB450 20mm, side wall reinforcement HB450 15mm, cutting edge HB500 250x30mm, with wear stripes lengthwise and crosswise, with 2 set noses, welded tooth system Cat J300 or ESCO U30, suitable QC10 or OQ65

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
800	0.482	540	4
1000	0.646	608	4
1100	0.728	654	5
1200	0.811	687	5
1300	0.894	733	6

ROCK BACKHOE BUCKET CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 10mm, side parts HB450 10mm, side cutting edges HB450 25mm, side wall reinforcement HB450 20mm, cutting edge HB500 300x40mm, with wear stripes lengthwise and crosswise, with 2 set noses, welded tooth system Cat J350 or ESCO U35, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
800	0.707	833	4
1000	0.955	939	4
1200	1.209	1061	5
1300	1.337	1114	5
1400	1.465	1167	5
1500	1.593	1220	5

ROCK BACKHOE BUCKET CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side parts HB450 12mm, side cutting edges HB450 30mm, side wall reinforcement HB450 25mm, cutting edge HB500 300x40mm, with wear stripes lengthwise and crosswise, with 2 set noses, welded tooth system Cat J400 or ESCO U40, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
800	0.809	1118	4
900	0.953	1180	4
1000	1.099	1242	4
1100	1.248	1327	5
1200	1.399	1389	5
1300	1.550	1450	5
1400	1 <i>.7</i> 02	1512	5
1500	1.854	1574	5
1600	2.007	1659	5





ROCK BACKHOE BUCKET CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom HB450 12mm, side parts HB450 15mm, side cutting edges HB450 35mm, side wall reinforcement HB450 30mm, cutting edge HB500 400x50mm, with wear stripes lengthwise and crosswise, with 2 set noses, welded tooth system Cat J460 or ESCO U45, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
900	1.030	1479	4
1000	1.195	1558	4
1100	1.363	1637	4
1200	1.533	1 <i>7</i> 48	5
1300	1. <i>7</i> 06	1827	5
1400	1.879	1906	5
1500	2.054	1984	5
1600	2.228	2096	5
1700	2.403	2174	6
1750	2.490	2214	6

ROCK BACKHOE BUCKET CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom HB450 15mm, side parts HB450 15mm, side cutting edges HB450 35mm, side wall reinforcement HB450 30mm, cutting edge HB500 400x60mm, with wear stripes lengthwise and crosswise, with 2 set noses, welded tooth system Cat J550 or ESCO U55, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
1200	1.704	1968	4
1400	2.091	2187	5
1500	2.287	2280	5
1600	2.483	2373	5
1700	2.679	2466	5
1750	2.778	2512	5
1800	2.876	2591	6
1900	3.072	2684	6
2000	3.269	2777	6





RIPPING BUCKET

OPERATING WEIGHT 16 TO 45 T

The ripping bucket is a special attachment for use in demolition work. It is not only suitable for lifting boulders, but above all for removing foundations. Thanks to its compact design, it realises a high tearing force and is therefore ideal for demolishing concrete floors, for example. Two stone set noses are attached to the back of the bucket, with which stones can be pushed away or loosened. The welded tooth holders of the ESCO tooth system are deliberately placed in an upright position to prevent the bucket from jamming during work.



LEETS-OLI

APPLICATION AREAS

- Earthmoving
- Demolition and recycling

TECHNICAL DETAILS

Sizes: class 5S to 7S

Operating weight: 16 to 45 t Material: cutting edge made of HB500, bucket body made of

highly wear-resistant HB450

Standard adapter: QC10, QC21/25, QQ65, QQ70,

OQ70/55 and OQ80

CHARACTERISTICS

- · Optimised and robust design
- Wear stripes lengthwise and crosswise
- Centre strut for stability
- ESCO tooth system
- Set noses on the back
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
5S	16 to 21	1244	1545
6	21 to 26	1244	1545
6S	26 to 30	1359	1662
7	30 to 36	1359	1662
7S	36 to 45	1495	1 <i>7</i> 81



PROS

- Optimised and robust version for heavy-duty applications in demolition or earthmoving.
- This version and the tooth system are partciularly suitable for ripping sandstone or solid rock.
- Equipped with a wear package for the best protection against wear.



Product video ripping bucket



RIPPING BUCKET CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 12mm, side parts HB450 12mm, side cutting edges HB450 35mm, side wall reinforcement HB450 25mm, cutting edge HB500 400x50mm, with wear stripes crosswise HB500, welded tooth system ESCO U40, suitable QC10* or OQ65

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
700	0.315	<i>7</i> 39	3

RIPPING BUCKET CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 12mm, side parts HB450 12mm, side cutting edges HB450 35mm, side wall reinforcement HB450 25mm, cutting edge HB500 400x50mm, with wear stripes crosswise HB500, welded tooth system ESCO U45, suitable QC21/25 or OQ70/55*

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
700	0.315	739	3

RIPPING BUCKET CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 15mm, side parts HB450 15mm, side cutting edges HB450 40mm, side wall reinforcement HB450 30mm, cutting edge HB500 400x60mm, with wear stripes crosswiseHB50, welded tooth system ESCO U55, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
750	0.372	998	3

RIPPING BUCKET CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom HB450 15mm, side parts HB450 15mm, side cutting edges HB450 40mm, side wall reinforcement HB450 30mm, cutting edge HB500 400x60mm, with wear stripes crosswise HB500, welded tooth system ESCO U55, suitable QC21/25 or OQ80*

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
750	0.372	998	3

RIPPING BUCKET CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Bottom HB450 15mm, side parts HB450 15mm, side cutting edges HB450 50mm, side wall reinforcement HB450 40mm, cutting edge HB500 400x70mm, with wear stripes crosswise HB500, welded tooth system ESCO U60, suitable QC21/25* or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth	
810	0.450	1357	3	

^{*}The cutting widths may vary slightly for marked or additional adapters to ensure the best possible technical constrcution.



STONE LAYING BUCKET

OPERATING WEIGHT 12 TO 36 T

The stone laying bucket is a special attachment that is used particularly in rock and hard soils as well as in the shaping of terrain topologies. Special attention was paid to the design to ensure that stones can be moved as single as possible. Among other things, this was achieved by the advanced design of the bucket as well as by the two set noses on the back of the bucket. The stone laying bucket is also suitable for digging, transporting and tearing stones.





APPLICATION AREAS

Earthmoving

TECHNICAL DETAILS

Sizes: class 5 to 7

Operating weight: 12 to 36 t

Material: cutting edge made of

HB500, bucket body made of

highly wear-resistant HB450 **Standard adapter:** QC10,

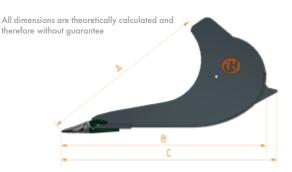
QC21/25, OQ60, OQ65,

OQ70, OQ70/55 and OQ80

CHARACTERISTICS

- Moved forward construction form
- Wear stripes lengthwise and crosswise
- Welded tooth system
- Set noses on the back
- Individual adapter or direct attachment

Class	Operating	Α	В	С
Class	weight [t]	[mm]	[mm]	[mm]
5	12 to 16	1332	1632	1716
5S	16 to 21	1396	1 <i>7</i> 13	1836
6	21 to 26	1564	1935	2088
6S	26 to 30	1658	2049	2210
7	30 to 36	1919	2370	2540



PROS

- The bucket body was designed with an advanced design which makes it possible to easily pick up and move large chunks of stone.
- Due to the set noses on the back of the bucket chunks of stone can be easily held and moved.
- Due to the cut-out side parts ideal for transporting stone slabs.

HENLEAdvice!



SPECIAL ATTACHMENT: STONE LAYING BUCKET

The stone laying bucket is an specialised attachment designed for use in rock and hard soils. With this purpose in mind, the bucket was designed with a bucket body that is clearly pulled forward. This design allows entire boulders to be picked up and laid individualle with the bucket.



Product video stone laying bucket

BUCKET CAPACITIES p. 186 – 187





STONE LAYING BUCKET CLASS 5

OPERATING WEIGHT 12 TO 16 T

Bottom HB450 10mm, side walls HB450 25mm, cutting edge HB500 300x35mm, with wear stripes HB500 lengthwise and crosswise, with 2 set noses, welded tooth system Cat J300 or ESCO U30, suitable QC10 or OQ60

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
1000	0.678	655	4
1100	0.770	694	4
1200	0.862	737	5
1300	0.954	777	5

STONE LAYING BUCKET CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Bottom HB450 10mm, side walls HB450 25mm, cutting edge HB500 300x35mm, with wear stripes HB500 lengthwise and crosswise, with 2 set noses, welded tooth system Cat J300 or ESCO U30, suitable QC10 or OQ65

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
1000	0.820	829	4
1100	0.933	877	4
1200	1.047	931	5
1300	1.161	980	5

STONE LAYING BUCKET CLASS 6

OPERATING WEIGHT 21 TO 26 T

Bottom HB450 12mm, side walls HB450 30mm, cutting edge HB500 300x40mm, with wear stripes HB500 lengthwise and crosswise, with 2 set noses, welded tooth system Cat J350 or ESCO U35, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
1000	0.963	1002	4
1100	1.097	1060	4
1200	1.232	1125	5
1300	1.369	1184	5

STONE LAYING BUCKET CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Bottom HB450 12mm, side walls HB450 40mm, cutting edge HB500 400x40mm, with wear stripes HB500 lengthwise and crosswise, with 2 set noses, welded tooth system Cat J400 or ESCO U40, suitable QC21/25 or OQ70/55

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
1000	1.071	1380	4
1100	1.227	1452	4
1200	1.385	1534	5
1300	1.544	1606	5

STONE LAYING BUCKET CLASS 7

OPERATING WEIGHT 30 TO 36 T

Bottom HB450 12mm, side walls HB450 40mm, cutting edge HB500 400x50mm, with wear stripes HB500 lengthwise and crosswise, with 2 set noses, welded tooth system Cat J460 or ESCO U40, suitable QC21/25 or OQ80

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
1000	1.243	1658	4
1100	1.426	1746	4
1200	1.612	1847	5
1300	1.800	1935	5

RIPPER TOOTH

OPERATING WEIGHT 1 TO 16 T

The ripper tooth is used for loosening and dislodging the hardest types of rock (e.g. limestone, clay slate, nail fluh layers, slag, basalt, granite). The ripper tooth has also proved its worth in gardening and landscaping for loosening roots.





APPLICATION AREAS

- Earthmoving
- Gardening and landscaping

TECHNICAL DETAILS

Operating weight: 1 to 16 t Material: legs made of HB450 Standard adapter: QC01, QC03, QC08 and QC10

OPTIONAL

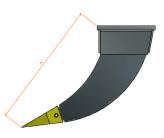
Special tooth für clearing work

CHARACTERISTICS

- Changeable tooth tip
- Individual adapter or direct attachment

Operating weight [t]	A [mm]	Leg [mm]	Tooth tip	Weight [kg]
1 to 2	444	35	J200	40
2 to 6.5	479	50	J250	68
6.5 to 8.5	<i>77</i> 5	60	J250	160
8.5 to 12	869	60	J300	188
12 to 16	1002	<i>7</i> 0	J350	330

All dimensions are theoretically calculated and therefore without guarantee





Product video ripper tooth

PROS

• The ripper tooth concentrates the entire power of the excavator on one tooth tip.

HENLEAdvice!

CHANGE OF TOOTH TIP IN TIME

Replacing the tooth tip in good time is also worthwhile from an economic point of view. If a tooth is pointed and sharp, it slides into the soil easily and with little resistance. If, on the other hand, it becomes blunt, the power required by the machine increases immensely. This increases fuel consumption, which also has an impact on costs. The cost of the new tooth is relativised with increasing wear and the associated fuel consumption. It therefore makes sense to replace the tooth tip in good time.





Product video special tooth für clearing work



SPECIAL TOOTH FOR CLEARING WORK

The ripper tooth can also easily be used for clearing work. We have developed a special tooth with a sharpened blade that is optimised for this application. It is used in a similar way to a root cutter. The best thing is that you can easily convert your existing ripper tooth - the different tooth tips can often be easily exchanged. This is how flexible working works! The special tooth is available in the sizes J200, J250, J300 and J350.



RIPPER TOOTH

OPERATING WEIGHT 16 TO 45 T

The ripper tooth is used for loosening and dislodging the hardest types of rock (e.g. limestone, clay slate, nail fluh layers, slag, basalt, granite).





APPLICATION AREAS

- Earthmoving
- Demolition and recycling

TECHNICAL DETAILS

Operating weight: 16 to 45 t Material: leg made of HB450 Standard adapter: QC10, QC21/25, QQ60, QQ65, QQ70, QQ70/55, QQ80, SW33, SW48 and SW66

CHARACTERISTICS

- Changeable tooth tip CAT 6J8812/9W2451
- With leg protection
- Individual adapter or direct attachment

Operating	Α	Leg	Weight
weight [t]	[mm]	[mm]	[kg]
16 to 26	1047	80	460
26 to 36	1079	80	470
36 to 45	1310	100	<i>7</i> 00

All dimensions are theoretically calculated and therefore without guarantee





PROS

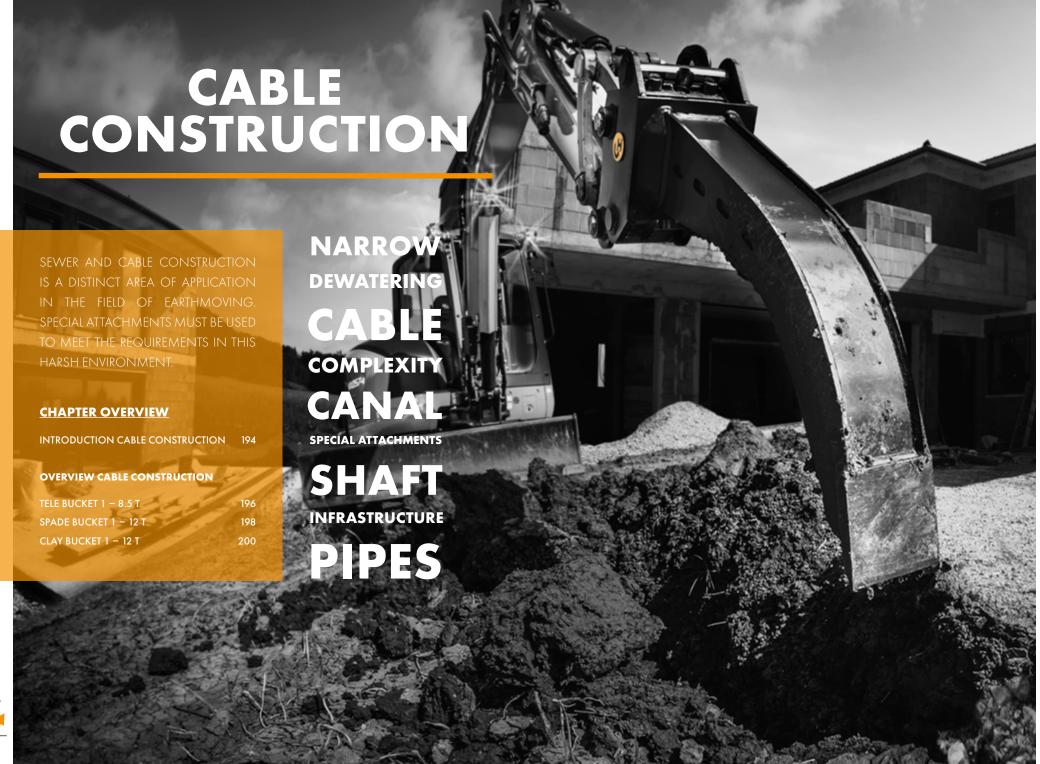
- The ripper tooth concentrates the entire power of the excavator on one tooth tip.
- Can be combined with standard tooth system.

HENLEAdvice!

CHANGE OF TOOTH TIP IN TIME

Replacing the tooth tip in good time is also worthwhile from an economic point of view. If a tooth is pointed and sharp, it slides into the soil easily and with little resistance. If, on the other hand, it becomes blunt, the power required by the machine increases immensely. This increases fuel consumption, which also has an impact on costs. The cost of the new tooth is relativised with increasing wear and the associated fuel consumption. It therefore makes sense to replace the tooth tip in good time.





H



Cable construction includes the expansion of energy and communication networks. It is therefore primarily a topic in cities and municipalities, especially the expansion of the telecommunications and energy supply network in broadband.

A special characteristic of cable construction is the confined space that the expansion takes up. Due to work in existing infrastructure, small machines and attachments are needed, while only a narrow trench with an appropriate depth in the soil must be exposed. These framework conditions indicate that special tools are required in this field, to ensure that all requirements can be met, and the work can be completed efficiently.

A similarly demanding field of work is sewer construction, which covers the areas water delivery and disposal as well as underground drainage. Pipes are laid and manholes are constructed.

It is without a doubt that the renewal of cable and sewer construction will become an increasingly important aspect in the future.





CABLE CONSTRUCTION

TELE BUCKET

OPERATING WEIGHT 1 TO 8.5 T

The Tele bucket is a special backhoe bucket for broadband expansion in an extremely narrow design, but it can realise a large working depth. The development of the tele bucket not only involved knowledge from our in-house design department but also practical experiences – the bucket has been optimised with customers.



APPLICATION AREAS

Cable construction

TECHNICAL DETAILS

Operating weight: 1 to 8.5 t Material: cutting edge made of

HB500

Standard adapter: QC01HT, QC03HT and QC08HT

OPTIONAL

Other heights available

CHARACTERISTICS

- HT-Adapter as standard
- Individual adapter or direct attachment





Adapter	Operating weight [t]	A [mm]	B [mm]	Weight [kg]
QC01HT	1 to 2	600	150	32
QC03HT	2.5 to 6.5	600	150	43
QC03HT	2.5 to 6.5	800	150	46
QC08HT	6.5 to 8.5	800	150	85
QC08HT	6.5 to 8.5	1000	150	110

CABLE CONSTRUCTION

PROS

- Specially developed attachment for cable construction, in particular for broadband extension.
- · Very narrow constrcution with high height.
- HT-Adapter as standard.



Product video tele bucket



CABLE CONSTRUCTION

SPADE BUCKET

OPERATING WEIGHT 1 TO 12 T

The spade bucket is a special tool that is used for complex applications in urban construction. It is used, for example, to lift earth material from hard-to-reach places, such as under a pipe. This is achieved through the specific design version of the bucket.

Equipped with a double adapter as standard, the spade bucket can be used in the same way as a spade.



APPLICATION AREAS

Cable construction

TECHNICAL DETAILS

Operating weight: 1 to 12 t

Material: cutting edge made of

HB500

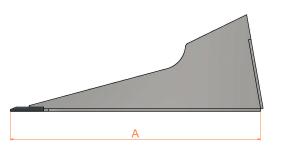
Standard adapter: QC01 with QC01 HT, QC03 with QC03HT and QC08 with QC08HT

OPTIONAL

 Adjustable exchangeable cutting edge

CHARACTERISTICS

- Two adapters (standard and HT-Adapter)
 as standard
- Individual adapter or direct attachment



Adapter	weight [t]	width [mm]	A [mm]	Weight [kg]
QC01 with QC01HT	1 to 2	320	900	55
QC03 with QC03HT	2 to 6.5	320	1000	95
QC08 with QC08HT	6.5 to 12	400	1500	225

CABLE CONSTRUCTION

PROS

- Special attachment for cable construction.
- Equipped with two adapters:
 Standard- and HT-Adapter.



Product video spade bucket

HENLEAdvice!

SPADE BUCKET WITH EXCHANGEABLE BLADE

The spade bucket is perfect for working close to obstacles. Tapping can be carried out vertically directly on the wall. To be even more flexible, both the welded-in cutting edge and the screwed-on reversible cutting edge have holes. The reversible cutting edge can be moved in both directions of the bucket, in order to avoid pipes or tubes and still work precisely.



CABLE CONSTRUCTION

CLAY BUCKET

OPERATING WEIGHT 1 TO 12 T

The special bucket version fullfills the requirements of trench and cable construction. The special construction version ensures that the excavated material does not get stuck in the bucket when working in clayey soils. The clay bucket withunter is therefore also an alternative to the ejector bucket.



APPLICATION AREAS

Cable construction

TECHNICAL DETAILS

Operating weight: 1 to 12 t

Material: cutting edge made of

HB500

 $\textbf{Standard adapter:} \ \text{QCO1}, \ \text{QCO3}$

and QC08

OPTIONAL

- HT-Adapter
- With teeth

CHARACTERISTICS

- Moved forward construction form
- Ideal construction for shoring applications
- With transport hook
- Individual adapter or direct attachment

Operating weight [t]	A [mm]	B [mm]
1 to 2	385	439
2 to 2.5	441	509
2.5 to 3.8	544	614
3.8 to 5	682	802
5 to 6.5	<i>77</i> 8	917
6.5 to 8.5	<i>7</i> 83	939
8.5 to 12	931	1100
	weight [t] 1 to 2 2 to 2.5 2.5 to 3.8 3.8 to 5 5 to 6.5 6.5 to 8.5	weight [t] A [mm] 1 to 2 385 2 to 2.5 441 2.5 to 3.8 544 3.8 to 5 682 5 to 6.5 778 6.5 to 8.5 783

All dimensions are theoretically calculated and therefore without guarantee.



PROS

- Ideal construction for shoring applications.
- The short belly enables optimum lowering through trench formwork and easy emptying of clayey material.
- Thanks to the steeper placed cutting edge, the material in the deep channel can also be picked up completely through the excavator from corners that are difficult to access.

HENLEAdvice!



ECONOMICAL DUE TO OPTIMUM CONSTRCUTION

The clay bucket has cut-out side parts. The cut-out changes the ratio of surface area to volume and thus reduces friction. The bucket enters the soil more easily and with less resistance. As a result, the machine requires less effort and also works more fuel-efficiently.





APPLICATIONS IN DEMOLITION AND RECYCLING REQUIRE SPECIAL ATTACHMENTS. FOR DEMOLITION, PARTICULARLY ROBUST TOOLS ARE REQUIRED. FOR EXAMPLE, DEMOLITION AND SORTING BUCKET ARE ATTACHMENTS PRODUCED FOR ORGANIZING AND REMOVING RUBBLE, CONCRETE, ETC. WHILE RECYCLING IS ALL ABOUT SEPARATING, CONVEYING, AND STORING MATERIALS.

CHAPTER OVERVIEW

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LH-VERSION 12 – 45 T 223

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SORTING RBUCKET CROSS BARS LH-VERSION 12 – 45 T $\,$ 230



SKELETON BARS

TEARING

WEAR-RESISTANT

HB400

CROSS BARS

SORTING

HIGH PERFORMANCE

DEMOLITION

RECYCLING







Demolition and recycling describe two subject areas in the field of construction technology.

Demolition work is now mostly carried out by specialized construction companies. Demolition or dismantling is the term used in the construction industry for work that involves the destruction or disposal of buildings. Work steps include demolition, for example by smashing materials with a wrecking ball. Sometimes demolition work involves controlled blasting. As demolition work usually takes place in existing infrastructure, this work requires a confident hand.

Recycling is the term used to describe the work that follows the demolition of

buildings. This is because the materials previously taken apart, must be sorted after demolition, and then recycled. In Germany, so-called "building materials recycling" is one of the most material-intensive economic sectors. The aim is to reuse building materials to save resources. The steps involved in recycling include crushing, sifting, and sorting through the rubble.





DEMOLITION AND SORTING BUCKET WITH SKELETON BARS

OPERATING WEIGHT 1 TO 3.8 T

The demolition and sorting bucket is a special tool that is ideal for loading and sorting work or demolition work. The demolition and sorting bucket is constructed with skeleton bars and therefore especially designed for such work. The demolition and sorting bucket is primarily used for sifting stone or paving stones and for recycling building rubble. The skeleton bars make it ideal for demolition work.



APPLICATION AREAS

Demolition and recycling

TECHNICAL DETAILS

Sizes: class 1 to 2S

Operating weight: 1 to 3.8 t Material: cutting edge and

side sickles made of HB400

Standard adapter: QC01 and QC03

OPTIONAL

- Version with perforated bottom
- Without teeth
- HT-Adapter
- Bar distance selectable

CHARACTERISTICS

- With skeleton bars
- Screwed or welded tooth system
- Individual adapter or direct attachment
- Up to class 3S with side sickles

Class	Operating weight [t]	A [mm]	B [mm]
1	1 to 2	450	533
2	2 to 2.5	504	603
2S	2.5 to 3.8	597	<i>7</i> 01

All dimensions are theoretically calculated and therefore without guarantee.



PROS

 The version with skeleton bars is ideal for demolition work.

CONS

 Not ideal for sieving and sorting work. In this case the version with cross bars is better suited.

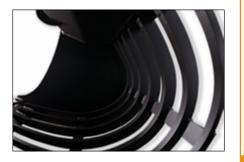
HENLEAdvice!





Depending on the application, it can be helpful to customise the distance between the skeleton bars on the demolition and sorting bucket. Adjusting the bar distance has an influence on the number of bars.

CHOOSING THE RIGHT BAR DISTANCE



The correct bar distance can be individually determined and specified in consultation with the customer. The technical adaptation is realised constructively in order to meet the special requirements of the customer.



BUCKET CAPACITIES p. 208 - 209



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DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 1

OPERATING WEIGHT 1 TO 2 T

Skeleton bars 12mm, bar distance 40mm, side parts 5mm, side sickles HB400 6mm, cutting edge HB400 150x16mm, welded or screwed tooth system, suitable QC01

Cutting width [mm]	Capacity [m³]	Weight* [kg]	Teeth
500	0.051	51	4
600	0.063	57	4
<i>7</i> 00	0.070	63	5
800	0.076	70	5

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 2

OPERATING WEIGHT 2 TO 2.5 T

Skeleton bars 15mm, bar distance 40mm, side parts 6mm, side sickles HB400 6mm, cutting edge HB400 150x16mm, welded or screwed tooth system, suitable QC03

Cutting	g width [mm]	Capacity [m³]	Weight* [kg]	Teeth
	500	0.067	<i>7</i> 8	4
	600	0.083	86	4
	700	0.100	95	5
	800	0.115	106	5

^{*} Depending on the bar distance the weight can vary.

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 2S

OPERATING WEIGHT 2.5 TO 3.8 T

Skeleton bars 15mm, bar distance 40mm, Side parts 8mm, side sickles HB400 6mm, cutting edge HB400 150x20mm, welded or screwed tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight* [kg]	Teeth
600	0.116	120	4
700	0.139	136	5
800	0.162	148	5
900	0.185	160	5
1000	0.208	172	6

^{*} Depending on the bar distance the weight can vary.

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS

OPERATING WEIGHT 3.8 TO 12 T

The demolition and sorting bucket is a special tool that is ideal for loading and sorting work or demolition work. The demolition and sorting bucket is constructed with skeleton bars and therefore especially designed for such work. It is primarily used for sifting stone or paving stones and for recycling building rubble. The skeleton bars make it ideal for demolition work.



APPLICATION AREAS

Demolition and recycling

TECHNICAL DETAILS

Sizes: class 3 to 4S

Operating weight: 3.8 to 12 t

Material: cutting edge and

side sickles made of HB400

Standard adapter:

QC03 and QC08

OPTIONAL

- Version with cross bars
- Version with perforated bottom
- HT-Adapter
- Without teeth
- Bar distance selectable

CHARACTERISTICS

- With skeleton bars
- Screwed or welded tooth system
- Individual adapter or direct attachment
- Up to class 3S with side sickles

	Class	Operating weight [t]	A [mm]	B [mm]
Ξ	3	3.8 to 5	683	806
	3S	5 to 6.5	<i>7</i> 52	881
	4	6.5 to 8.5	<i>7</i> 92	954
Π	4S	8.5 to 12	937	1113

All dimensions are theoretically calculated and therefore without guarantee.





K3 and 3S

K4 and 4S

DEMOLITION AND RECYCLING

PROS

The version with skeleton bars is ideal for demolition work.

CONS

Not ideal for sieving and sorting work.
 In this case the version with cross bars is better suited.

HENLEAdvice!



BUCKET CAPACITIES p. 212 - 213

CHOOSING THE RIGHT BAR DISTANCE

Depending on the application, it can be helpful to customise the distance between the skeleton bars on the demolition and sorting bucket. Adjusting the bar distance has an influence on the number of bars.

The correct bar distance can be individually determined and specified in consultation with the customer. The technical adaptation is realised constructively in order to meet the special requirements of the customer.



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DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 3

OPERATING WEIGHT 3.8 TO 5 T

Skeleton bars 15mm, bar distance 40mm, side parts 10mm, side sickles HB400 6mm, cutting edge HB400 150x20mm, welded or screwed tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight* [kg]	Teeth
600	0.150	146	4
800	0.211	172	5
900	0.242	182	5
1000	0.273	198	5

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 3S

OPERATING WEIGHT 5 TO 6.5 T

Skeleton bars 15mm, bar distance 40mm, side parts 10mm, side sickles HB400 6mm, cutting edge HB400 150x20mm, welded or screwed tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight* [kg]	Teeth
600	0.182	172	4
800	0.258	210	5
900	0.296	230	5
1000	0.334	249	6

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 4

OPERATING WEIGHT 6.5 TO 8.5 T

Skeleton bars 20mm, bar distance 50mm, side parts 15mm, cutting edge HB400 200x20mm, welded tooth system, suitable QC08 $\,$

Cutting width [mm]	Capacity [m³]	Weight* [kg]	Teeth
600	0.190	214	4
800	0.280	265	5
900	0.259	274	5
1000	0.360	283	5

^{*} Depending on the bar distance the weight can vary.

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 4S

OPERATING WEIGHT 8.5 TO 12 T

Skeleton bars 20mm, bar distance 50mm, side parts 15mm, cutting edge HB400 200x25mm, welded tooth system, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight* [kg]	Teeth
800	0.380	265	4
900	0.430	300	5
1000	0.480	390	5
1200	0.570	445	6

^{*} Depending on the bar distance the weight can vary.

DEMOLITION AND SORTING BUCKET WITH CROSS BARS

OPERATING WEIGHT 2.5 TO 12 T

The demolition and sorting bucket is a specialised tool that is ideal for loading and sorting work. The demolition and sorting bucket is designed with cross bars, which make it particularly suitable for sieving work. It is therefore mainly used for sorting and recycling rock material as well as demolition rubble.



APPLICATION AREAS

Demolition and recycling

TECHNICAL DETAILS

Sizes: class 2S to 4S

Operating weight: 2.5 to 12 t

Material: cutting edge made of

HB400 and cross bars made of

HB500

Standard adapter: QC08

OPTIONAL

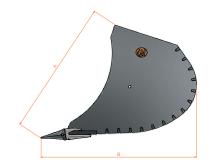
- HT-Adapter
- Without teeth
- Direct attachment
- Bar distance selectable

CHARACTERISTICS

- With cross bars
- · Welded tooth system
- Individual adapter or direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
2S	2.5 to 3.8	579	<i>7</i> 17
3	3.8 to 5	660	803
3S	5 to 6.5	719	8 7 6
4	6.5 to 8.5	<i>7</i> 43	878
4S	8.5 to 12	867	1050

All dimensions are theoretically calculated and therefore without guarantee.



DEMOLITION AND RECYCLING

PROS

 The version with cross bars is ideal for sieving and sorting work.

CONS

 Not ideal for demolition work. In this case the version with skeleton bars is better suited.

HENLEAdvice!



Product video demolition and sorting bucket with cross bars

DEMOLITION AND SORTING BUCKET WITH CROSS BARS

The crosswise mounted bars are ideal for screening and sorting operations. It is designed for sorting and recycling rock material and demolition rubble. However, heavy demolition work should not be carried out with this bucket, as the bars could become unstable and bend.

BUCKET CAPACITIES p. 216 - 217

HIGH WEAR RESISTANCE WHEN WORKING IN MEDIUM-HEAVY SOILS DUE TO A WELDED TOOTH SYSTEM

When working in very light soils a welded tooth system is a good choice. The tooth holder is firmly welded to the cutting edge of the bucket which makes the cutting edge not only better protected, the tooth system as such also holds better under higher loads on the bucket.

We recommend a welded tooth system for buckets on excavators with an operating weight of two tonnes upwards (from HENLE class 2S).







DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 25

OPERATING WEIGHT 2.5 TO 3.8 T

Cross bar HB500, bar distance 40mm, side parts 10mm, cutting edge HB400 150x20mm, welded or screwed tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.130	105	4
700	0.156	116	5
800	0.182	127	5
900	0.208	138	5

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 3

OPERATING WEIGHT 3.8 TO 5 T

Cross bar HB500, bar distance 40mm, side parts 12mm, cutting edge HB400 150x20mm, welded or screwed tooth system, suitable QC03

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.164	134	4
800	0.232	157	5
900	0.266	169	5
1000	0.300	181	5

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 3S

OPERATING WEIGHT 5 TO 6.5 T

Cross bar HB500, bar distance 40mm, side parts 12mm, cutting edge HB400 200x20mm, welded or screwed tooth system, suitable QC03

	Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
	600	0.193	151	4
	800	0.274	177	5
	900	0.315	190	5
ľ	1000	0.356	203	6

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 4

OPERATING WEIGHT 6.5 TO 8.5 T

Cross bar HB500, bar distance 50mm, side parts 15mm, cutting edge HB400 200x20mm, welded tooth system, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
600	0.208	188	4
800	0.296	214	5
900	0.340	227	5
1000	0.384	240	5

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 4S

OPERATING WEIGHT 8.5 TO 12 T

Cross bar HB500, bar distance 50mm, side parts 15mm, cutting edge HB400 200x25mm, welded tooth system, suitable QC08

Cutting width [mm]	Capacity [m³]	Weight [kg]	Teeth
800	0.365	248	4
900	0.421	264	5
1000	0.477	280	5
1200	0.590	311	6



DEMOLITION AND SORTING BUCKET WITH SKELETON BARS SW-VERSION

OPERATING WEIGHT 12 TO 45 T

The demolition and sorting bucket is a specialised tool that is ideal for loading and sorting work. The demolition and sorting bucket is constructed with skeleton bars, which are specially designed for demolition work. The SW-backhoe bucket version is ideally suited for Lehnhoff or OilQuick adapters.



LEED-STEEL

APPLICATION AREAS

Demolition and recycling

TECHNICAL DETAILS

 $\textbf{Sizes:} \ \mathsf{class} \ 5 \ \mathsf{to} \ 7 \mathsf{S}$

Operating weight: 12 to 45 t

Material: cutting edge made of HB500, skeleton bars and side parts made of highly wear-

resistant HB450

Standard adapter: QC 10, QC21 /25, QQ60, QQ65, QQ70, QQ70 /55 and QQ80

OPTIONAL

- Without teeth
- Bar distance selectable

CHARACTERISTICS

- With skeleton bars
- Welded tooth system
- Version "SW" ideal for Lehnhoff or OilQuick adapters

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	1101	1303
5S	16 to 21	1171	1399
6	21 to 26	1279	1526
6S	26 to 30	1341	1600
7	30 to 36	1470	1 <i>7</i> 58
7S	36 to 45	1571	1832

All dimensions are theoretically calculated and therefore without guarantee.



DEMOLITION AND RECYCLING

PROS

- The "SW-Version" is ideal for Lehnhoff or OilQuick adapters.
- The version with skeleton bars is ideal for demolition work.

CONS

The version "SW" is not suitable for Verachtert or Liebherr adapters and also not for direct attachment to the excavator. In these cases the "LH-Version" is more suitable.

HENLEAdvice!



EQUIPPED WITH ESCO-ULTRALOK-TOOTH SYSTEM

The ESCO-Ultralok-Tooth system is a patented system with included safety device. Its high-quality workmanship and the optimised version lead to a longer service life as well as a firm and tight fit. The teeth are single change, hammerless and can be handled without special tools. Made from an economic and sustainable point of view, it is worth investing in a durable and stable product.

BUCKET CAPACITIES p. 220 - 221



H

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 5

OPERATING WEIGHT 12 TO 16 T

Skeleton bars HB450 20mm, bar distance 60mm, side parts HB450 20mm, cutting edge HB500 250x30mm, welded tooth system Cat J300 or ESCO U25, suitable QC10 or OQ60

Cutting width [mm]	SW Capacity [m³]	SW Weight* [kg]	Teeth
800	0.490	<i>57</i> 0	4
1000	0.610	650	4
1200	0.690	740	5

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Skeleton bars HB450 20mm, bar distance 60mm, side parts HB450 20mm, cutting edge HB500 250x30mm, welded tooth system Cat J300 or ESCO U30, suitable QC10 or OQ65

Cutting width [mm]	SW Capacity [m³]	SW Weight* [kg]	Teeth
800	0.540	660	4
1000	0.720	<i>7</i> 40	4
1200	0.900	880	5
1400	1.075	950	6

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 6

OPERATING WEIGHT 21 TO 26 T

Skeleton bars HB450 30mm, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x40mm, welded tooth system Cat J350 or ESCO U35, suitable QC21/25 or OQ70/55

Cutting width [mm]	SW Capacity [m³]	SW Weight* [kg]	Teeth
1200	0.990	1150	5
1400	1.195	1310	5
1500	1.295	1375	5
1600	1.395	1440	6

^{*} Je nach Bar distance kann das Weight variieren.

DEMOLITION AND RECYCLING

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Skeleton bars HB450 30mm, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x40mm, welded tooth system Cat J350 or ESCO U35, suitable QC21/25 or OQ70/55

Cutting width [mm]	SW Capacity [m³]	SW Weight* [kg]	Teeth
1400	1.365	1520	5
1500	1.480	1610	5
1600	1.595	1700	6
1800	1.830	1940	6

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 7

OPERATING WEIGHT 30 TO 36 T

Skeleton bars HB450 30mm, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x50mm, welded tooth system Cat J460 or ESCO U40, suitable QC21/25 or OQ80

Cutting width [mm]	SW Capacity [m³]	SW Weight* [kg]	Teeth
1400	1.545	1810	5
1600	1.805	2000	6
1800	2.065	2210	6
2000	2.325	2410	6

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Skeleton bars HB450 40mm, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x50mm, welded tooth system Cat J460 or ESCO U45, suitable QC21/25 or OQ80

Cutting width [mm]	SW Capacity [m³]	SW Weight* [kg]	Teeth
1500	2.015	1835	5
1600	2.175	1940	5
1800	2.495	2230	6
2000	2.815	2440	6

^{*} Je nach Bar distance kann das Weight variieren.



DEMOLITION AND SORTING BUCKET WITH SKELETON BARS LH-VERSION

OPERATING WEIGHT 12 TO 45 T

The demolition and sorting bucket is a specialised tool that is ideal for loading and sorting work and demolition work. The demolition and sorting bucket is designed with skeleton bars that are specially made for demolition work, among other things. The LH version is ideal for Verachtert and Liebherr adapters or a direct attachment.





APPLICATION AREAS

Demolition and recycling

TECHNICAL DETAILS

 $\textbf{Sizes:} \ \mathsf{class} \ 5 \ \mathsf{to} \ 7 \mathsf{S}$

Operating weight: 12 to 45 t Material: cutting edge made

of HB500, skeleton bars and side parts made of highly wear-

resistant HB450

Standard adapter:

SW33, SW48, SW66 and CW20/30/40/45

OPTIONAL

- Without teeth
- Bar distance selectable

CHARACTERISTICS

- With skeleton bars
- Welded tooth system
- Version "LH" ideal for Verachtert or Liebherr adapters and for direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	1132	1334
5S	16 to 21	1213	1422
6	21 to 26	1294	1519
6S	26 to 30	1349	1589
7	30 to 36	1441	1710
7S	36 to 45	1601	1837

All dimensions are theoretically calculated and therefore without guarantee.



DEMOLITION AND RECYCLING

PROS

- The "LH-Version" is ideal for Liebherr or Verachtert adapter and for direct attachment.
- The version with skeleton bars is ideal for demolition work.

CONS

 The version "LH" is not suitable for Lehnhoff or OilQuick adapters. In these cases the "SW-Version" is more suitable.

HENLEAdvice!

SKELETON BARS OR CROSS BAR - THE RIGHT DECISION

The upright skeleton bars are made of HB material and their stability makes them ideal for demolition work. However, if screening work is to be carried out, the use of a demolition and sorting bucket with cross bars is recommended.



DEMOLITION AND RECYCLING

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 5

OPERATING WEIGHT 12 TO 16 T

Skeleton bars HB450 20mm, bar distance 60mm, side parts HB450 20mm, cutting edge HB500 250x30mm, welded tooth system Cat J300 or ESCO U25, suitable SW33 or CW20

Cutting width [mm]	LH Capacity [m³]	LH Weight* [kg]	Teeth
800	0.485	590	4
1000	0.640	660	4
1200	0.795	<i>7</i> 40	5

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Skeleton bars HB450 20mm, bar distance 60mm, side parts HB450 20mm, cutting edge HB500 250x30mm, welded tooth system Cat J300 or ESCO U30, suitable SW48 or CW30

Cutting width [mm]	LH Capacity [m³]	LH Weight* [kg]	Teeth
800	0.560	650	4
1000	0.740	730	4
1200	0.925	820	5
1400	1.105	910	6

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 6

OPERATING WEIGHT 21 TO 26 T

Skeleton bars HB450 30mm, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x40mm, welded tooth system Cat J350 or ESCO U35, suitable SW48 or CW40

Cutting width [mm]	LH Capacity [m³]	LH Weight* [kg]	Teeth
1200	1.030	1190	5
1400	1.235	1300	5
1500	1.337	1370	5
1600	1.440	1440	6

^{*}Depending on the bar distance the weight can vary.

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Skeleton bars HB450 30mm, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x40mm, welded tooth system Cat J350 or ESCO U35, suitable SW48 or CW40

Cutting width [mm]	LH Capacity [m³]	LH Weight* [kg]	Teeth
1400	1.360	1490	5
1500	1.475	1510	5
1600	1.590	1530	6
1800	1.815	1600	6

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 7

OPERATING WEIGHT 30 TO 36 T

Skeleton bars HB450 30mm, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x50mm, welded tooth system Cat J460 or ESCO U40, suitable SW66 or CW45

Cutting width [mm]	LH Capacity [m³]	LH Weight* [kg]	Teeth
1400	1.490	1710	5
1600	1 <i>.7</i> 40	1910	6
1800	1.990	2200	6
2000	2.240	2400	6

DEMOLITION AND SORTING BUCKET WITH SKELETON BARS CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Skeleton bars HB450 40mm, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x50mm, welded tooth system Cat J460 or ESCO U45, suitable SW66 or CW45

Cutting width [mm]	LH Capacity [m³]	LH Weight* [kg]	Teeth
1500	1.897	1810	5
1600	2.050	1910	5
1800	2.355	2200	6
2000	2.660	2400	6

^{*}Depending on the bar distance the weight can vary.



DEMOLITION AND SORTING BUCKET WITH CROSS BARS SW-VERSION

OPERATING WEIGHT 12 TO 45 T

The demolition and sorting bucket is a specialised tool that is ideal for loading and sorting work. The demolition and sorting bucket is designed with cross bars, which make it particularly suitable for sieving work. It is therefore mainly used for sorting and recycling rock material as well as demolition rubble. The SW-backhoe bucket version is ideally suited for Lehnhoff or OilQuick adapters.





APPLICATION AREAS

Demolition and recycling

TECHNICAL DETAILS

Sizes: class 5 to $7\mathrm{S}$

Operating weight: 12 to 45 t

Material: cutting edge and cross bar made of HB500, side parts made of highly wear-resistant

HB4.50

Standard adapter: QC 10, QC 21 / 25, QQ60, QQ65, QQ70, QQ70 / 55 and QQ80

OPTIONAL

- Without teeth
- Bar distance selectable

CHARACTERISTICS

- With cross bars
- Welded tooth system
- Version "SW" ideal for Lehnhoff or OilQuick adapters

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	1101	1303
5S	16 to 21	1171	1399
6	21 to 26	1279	1526
6S	26 to 30	1341	1600
7	30 to 36	1470	1 <i>7</i> 58
7S	36 to 45	1571	1832

All dimensions are theoretically calculated and therefore without guarantee.



DEMOLITION AND RECYCLING

PROS

- The "SW-Version" is ideal for Lehnhoff or OilQuick adapters.
- The version with cross bars is ideal for sieving and loading work.

CONS

 The version "SW" is not suitable for Verachtert or Liebherr adapters and also not for direct attachment to the excavator.
 In these cases the "LH-Version" is more suitable.

HENLEAdvice!

DEMOLITION AND SORTING BUCKET WITH CROSS BARS

The crosswise mounted bars are ideal for screening and sorting operations. It is designed for sorting and recycling rock material and demolition rubble. However, heavy demolition work should not be carried out with this bucket, as the bars could become unstable and bend.



DEMOLITION AND RECYCLING

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 5

OPERATING WEIGHT 12 TO 16 T

Cross bar HB500, bar distance 60mm, side parts HB450 20mm, cutting edge HB500 250x30mm, welded tooth system Cat J300 or ESCO U25, suitable QC10 or OQ60

Cutting width [mm]	SW Capacity [m³]	SW Weight [kg]	Teeth
800	0.490	460	4
1000	0.610	510	4
1200	0.690	575	5

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 55

OPERATING WEIGHT 16 TO 21 T

Cross bar HB500, bar distance 60mm, side parts HB450 20mm, cutting edge HB500 250x30mm, welded tooth system Cat J300 or ESCO U30, suitable QC10 or OQ65

Cutting width [mm]	SW Capacity [m³]	SW Weight [kg]	Teeth
800	0.540	565	4
1000	0.720	620	4
1200	0.900	685	5
1400	1.075	<i>7</i> 50	6

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 6

OPERATING WEIGHT 21 TO 26 T

Cross bar HB500, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x40mm, welded tooth system Cat J350 or ESCO U35, suitable QC21/25 or OQ70/55

Cutting width [mm]	SW Capacity [m³]	SW Weight [kg]	Teeth
1200	0.990	985	5
1400	1.195	1065	5
1500	1.295	1110	5
1600	1.395	115.5	5

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Cross bar HB500, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x40mm, welded tooth system Cat J350 or ESCO U35, suitable QC21/25 or OQ70/55

Cutting width [mm]	SW Capacity [m³]	SW Weight [kg]	Teeth
1400	1.365	1150	5
1500	1.480	1205	5
1600	1.595	1255	5
1800	1.830	1360	6

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 7

OPERATING WEIGHT 30 TO 36 T

Cross bar HB500, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x50mm, welded tooth system Cat J460 or ESCO U40, suitable QC21/25 or OQ80

Cutting width [mm]	SW Capacity [m³]	SW Weight [kg]	Teeth
1400	1.545	1480	5
1600	1.805	1610	5
1800	2.065	1735	6
2000	2.325	1860	6

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Cross bar HB500, bar distance 60mm, side parts HB450 40mm, cutting edge HB500 300x50mm, welded tooth system Cat J460 or ESCO U45, suitable QC21/25 or OQ80

Cutting width [mm]	SW Capacity [m³]	SW Weight [kg]	Teeth
1500	2.015	1560	5
1600	2.175	1625	5
1800	2.495	1795	6
2000	2.815	1925	6





DEMOLITION AND SORTING BUCKET WITH CROSS BARS LH-VERSION

OPERATING WEIGHT 12 TO 45 T

The demolition and sorting bucket is a specialised tool that is ideal for loading and sorting work. The demolition and sorting bucket is designed with cross bars, which make it particularly suitable for sieving work. It is therefore mainly used for sorting and recycling rock material as well as demolition rubble. The LH version is ideal for Verachtert and Liebherr adapters or a direct attachment.





APPLICATION AREAS

Demolition and recycling

TECHNICAL DETAILS

Sizes: class 5 to $7\mathrm{S}$

Operating weight: 12 to 45 t

Material: cutting edge and Cross bar made of HB500, Side parts made of highly wear-resistant

HB450

Standard adapter:

SW33, SW48, SW66 and CW20/30/40/45

OPTIONAL

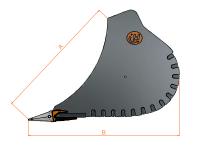
- Without teeth
- Bar distance selectable

CHARACTERISTICS

- With cross bars
- Welded tooth system
- Version "LH" ideal for Verachtert or Liebherr adapters and for direct attachment

Class	Operating weight [t]	A [mm]	B [mm]
5	12 to 16	1132	1334
5S	16 to 21	1213	1422
6	21 to 26	1294	1519
6S	26 to 30	1349	1589
7	30 to 36	1441	1710
7S	36 to 45	1601	1837

All dimensions are theoretically calculated and therefore without guarantee.



DEMOLITION AND RECYCLING

PROS

- The "LH-Version" is ideal for Liebherr or Verachtert adapter and for direct attachment.
- The version with cross bars is ideal for sieving and loading work.

CONS

 The version "LH" is not suitable for Lehnhoff or OilQuick adapters. In these cases the "SW-Version" is more suitable.

HENLEAdvice!

DEMOLITION AND SORTING BUCKET WITH CROSS BARS

The crosswise mounted bars are ideal for screening and sorting operations. It is designed for sorting and recycling rock material and demolition rubble. However, heavy demolition work should not be carried out with this bucket, as the bars could become unstable and bend.



DEMOLITION AND RECYCLING

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 5

OPERATING WEIGHT 12 TO 16 T

Cross bar HB500, bar distance 60mm, side parts HB450 20mm, cutting edge HB500 250x30mm, welded tooth system Cat J300 or ESCO U25, suitable SW33 or CW20

Cutting width [mm]	LH Capacity [m³]	LH Weight [kg]	Teeth
800	0.485	535	4
1000	0.640	585	4
1200	0. <i>7</i> 95	650	5

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 5S

OPERATING WEIGHT 16 TO 21 T

Cross bar HB500, bar distance 60mm, side parts HB450 20mm, cutting edge HB500 250x30mm, welded tooth system Cat J300 or ESCO U30, suitable SW48 or CW30

Cu	tting width [mm]	LH Capacity [m³]	LH Weight [kg]	Teeth
	800	0.560	640	4
	1000	0.740	695	4
	1200	0.925	760	5
	1400	1.105	825	6

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 6

OPERATING WEIGHT 21 TO 26 T

Cross bar HB500, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x40mm, welded tooth system Cat J350 or ESCO U35, suitable SW48 or CW40

Cutting width [mm]	LH Capacity [m³]	LH Weight [kg]	Teeth
1200	1.280	975	5
1400	1.235	1055	5
1500	1.337	1100	5
1600	1 440	114.5	5

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 6S

OPERATING WEIGHT 26 TO 30 T

Cross bar HB500, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x40mm, welded tooth system Cat J350 or ESCO U35, suitable SW48 or CW40

Cutting width [mm]	LH Capacity [m³]	LH Weight [kg]	Teeth	
1400	1.360	1145	5	
1500	1.475	1200	5	
1600	1.590	1250	5	
1800	1.815	1355	6	

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 7

OPERATING WEIGHT 30 TO 36 T

Cross bar HB500, bar distance 60mm, side parts HB450 25mm, cutting edge HB500 300x50mm, welded tooth system Cat J460 or ESCO U40, suitable SW66 or CW45

Cutting width [mm]	LH Capacity [m³]	LH Weight [kg]	Teeth
1400	1.490	1460	5
1600	1 <i>.7</i> 40	1590	5
1800	1.990	1715	6
2000	2.240	1840	6

DEMOLITION AND SORTING BUCKET WITH CROSS BARS CLASS 7S

OPERATING WEIGHT 36 TO 45 T

Cross bar HB500, bar distance 60mm, side parts HB450 40mm, cutting edge HB500 300x50mm, welded tooth system Cat J460 or ESCO U45, suitable SW66 or CW45

Cutting width [mm]	LH Capacity [m³]	LH Weight [kg]	Teeth
1500	1.897	1545	5
1600	2.050	1615	5
1800	2.355	1780	6
2000	2.660	1915	6







GARDENING AND LANDSCAPING SOMETIMES REQUIRE MORE SPECIALIZED ATTACHMENTS. HERE YOU DO NOT ONLY WORK WITH BUCKETS, BUT ALSO WITH RIPPER TEETH, GRAPPLES, AND RAKES. THESE PRODUCTS CAN ALSO BE FOUND IN THE HENLE PORTFOLIO.

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HOLD-DOWN CLAMP 248
EXCAVATOR RAKE 1 – 12 T 250

FLEXIBILITY

UNDERGROWTH

TERRAIN

VERSATILITY

CULTIVATION

PLANT

GARDENING

RAKING

RECULTIVATION

FELLING WORK

AREA ORGANISATION

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Gardening and landscaping include all work that is done on green spaces – both in public and private sectors. Many sub-areas exist in the gardening and landscaping world, including tree care, the design of parking areas, interior and roof greening and/or the creation of gardens, cemeteries, and leisure facilities.

A large sub-area is the construction and maintenance of parking spaces. Appropriate machines must be used, with which the areas can be maintained and cleaned quickly and easily.

Garden design or the design of leisure facilities is an equally broad field in gardening and landscaping. Individuality plays an essential role in the private sector.

This is why gardeners and landscapers are generally geared towards individual customer wishes. Very special attachments are designed for garden and landscape construction purposes. This means a special attachment can become an essential part of a contractor's permanent repertoire, while another contractor has no need for the same tool.

In conclusion, it can be said that basically all the work involved in creating green spaces are areas of application in gardening and landscaping.

However, digging and clearing are also mentionable. Clearing work is an important activity in the maintenance of existing plants and structures. This involves the loosening and cultivation of soils. A typical attachment used for this occupation is the digging rake.





GRIPPER BACKHOE BUCKET

OPERATING WEIGHT 1.7 TO 10 T

The gripper backhoe bucket is an attachment that is ideal for use in gardening and landscaping. It combines the advantages of a classic backhoe bucket version with a hydraulic hold-down device. It can be used to pick up and move undergrowth or stones. It is manufactured as standard with the HT-Adapter.



APPLICATION AREAS

Gardening and landscaping

TECHNICAL DETAILS

Sizes: Mini, Midi and Maxi
Operating weight: 1.7 to 10 t
Material: cutting edge made of

HB500

Standard adapter: QC03HT and

QC08HT

CHARACTERISTICS

- HT-Adapter
- Hydraulic hold-down clamp
- Individual adapter or direct attachment

Sizes	Operating weight [t]	A [mm]	B [mm]
Mini	1.7 to 3.5	<i>7</i> 60	597
Midi	3.5 to 6	<i>7</i> 81	<i>7</i> 20
Maxi	6 to 10	1224	1102

All dimensions are theoretically calculated and therefore without guarantee.







GARDENING AND LANDSCAPING

PROS

- Combination of the gripper and backhoe bucket.
- Equipped with a HT-Adapter als standard.





Product video gripper backhoe bucket



GRIPPER BACKHOE BUCKET MINI

OPERATING WEIGHT 1.7 TO 3.5 T

Bottom 6mm, side parts 8mm, cutting edge HB500 150x16mm, with hydraulic hold-down clamp, suitable QC03HT

Cutting width [mm]	Capacity [m³]	Weight [kg]
300	0.022	59
500	0.040	<i>7</i> 6

GRIPPER BACKHOE BUCKET MIDI

OPERATING WEIGHT 3.5 TO 6 T

Bottom 8mm, side parts 12mm, cutting edge HB500 150x20mm, with hydraulic hold-down clamp, suitable QC03HT

Cutting width [mm]	Capacity [m³]	Weight [kg]
400	0.047	122
600	0.076	149

GRIPPER BACKHOE BUCKET MAXI

OPERATING WEIGHT 6 TO 10 T

Bottom 12mm, side parts 15mm, cutting edge HB500 200x20mm, with hydraulic hold-down clamp, suitable QC08HT

Cutting width [mm]	Capacity [m³]	Weight [kg]
400	0.100	310
600	0.162	370

GRAB RAKE

OPERATING WEIGHT 1 TO 12 T

The grab rake is suitable for clearing, sorting and loading roots and undergrowth.





APPLICATION AREAS

- Gardening and landscaping
- Clearing work

TECHNICAL DETAILS

Operating weight: 1 to 12 t Material: legs made of HB450 Standard adapter: QC01, QC03

and QC08

OPTIONAL

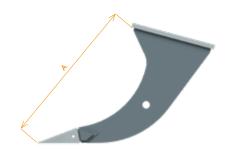
- Number of legs selectable
- Distance between legs selectable

CHARACTERISTICS

- Changeable tooth tips
- Individual adapter or direct attachment

Operating weight [t]	A [mm]
1 to 2	472
2 to 3.8	602
3.8 to 6.5	<i>7</i> 01
6.5 to 8.5	750
8.5 to 12	827

All dimensions are theoretically calculated and therefore without guarantee.



GARDENING AND LANDSCAPING

PROS

- Different number of legs selectable to fit individual requirements.
- Changeable tooth tips.

HENLEAdvice!

INDIVIDUALITY WITH THE GRAB RAKE

The grab rake can be manufactured with a different number of legs. Depending on the purpose and area of application, it may be necessary to equip the grab rake with a different number of legs. The customer can choose this individually.

FURTHER DIMENSIONS p. 246

GRAB RAKE

OPERATING WEIGHT 1 TO 2 T

Legs made of HB450 with changeable tooth tips, leg thickness 25mm, tooth tip J200, suitable QC01

Legs	Width [mm]	Weight [kg]
3	500	45
4	600	55



GRAB RAKE

OPERATING WEIGHT 12 TO 45 T

The grab rake is suitable for clearing, sorting and loading roots and undergrowth.





APPLICATION AREAS

Clearing work

TECHNICAL DETAILS

Operating weight: 12 to 45 t Material: legs made of HB450 Standard adapter: QC10

or QC21/25

OPTIONAL

- Number of legs selectable
- Distance between legs selectable

CHARACTERISTICS

- Changeable tooth tips
- Prongs made of HB450
- Individual adapter or direct attachment

Operating weight [t]	A [mm]
12 to 16	917
16 to 26	994
26 to 36	1083
36 to 45	on demond

All dimensions are theoretically calculated and therefore without guarantee.



GARDENING AND LANDSCAPING

PROS

- Different number of legs selectable to fit individual requirements.
- Changeable tooth tips.
- Cross bar for stability.

HENLEAdvice!

INDIVIDUALITY WITH THE GRAB RAKE

The grab rake can be manufactured with a different number of legs. Depending on the purpose and area of application, it may be necessary to equip the grab rake with a different number of legs. The customer can choose this individually.



GRAB RAKE

OPERATING WEIGHT 2 TO 3.8 T

Legs made of HB450 with changeable tooth tips, Leg thickness 30mm, tooth tip J200, suitable QC03

Legs	Width [mm]	Weight [kg]
3	600	84
4	800	107

GRAB RAKE

OPERATING WEIGHT 3.8 TO 6.5 T

Legs made of HB450 with changeable tooth tips, leg thickness 35mm, tooth tip J200, suitable QC03

Legs	Width [mm]	Weight [kg]
3	<i>7</i> 00	109
4	900	139

GRAB RAKE

OPERATING WEIGHT 6.5 TO 8.5 T

Legs made of HB450 with changeable tooth tips, leg thickness 35mm, tooth tip J200, suitable QC08

Legs	Width [mm]	Weight [kg]
3	700	109
4	900	139

GRAB RAKE

OPERATING WEIGHT 8.5 TO 12 T

Legs made of HB450 with changeable tooth tips, leg thickness 40mm, tooth tip J250, suitable QC08

Legs	Width [mm]	Weight [kg]
3	800	204
4	1100	263

GARDENING AND LANDSCAPING

GRAB RAKE

OPERATING WEIGHT 12 TO 16 T

Legs made of HB450 with changeable tooth tips, leg thickness 40mm, tooth tip J300, suitable QC08

Legsanzahl	Width [mm]	Weight [kg]
3	1000	320
1	1200	460

GRAB RAKE

OPERATING WEIGHT 16 TO 26 T

Legs made of HB450 with changeable tooth tips, leg thickness 50mm, tooth tip J300, suitable QC10 or OQ65

Leg	Width [mm]	Weight [kg]
3	1200	430
4	1500	690

GRAB RAKE

OPERATING WEIGHT 26 TO 36 T

Legs made of HB450 with changeable tooth tips, leg thickness 50mm, tooth tip J350, suitable QC21/25 or OQ70/55

Legs	Width [mm]	Weight [kg]
3	1500	670
4	1800	950
5	2000	1020

GRAB RAKE

OPERATING WEIGHT 36 TO 45 T

Legs made of HB450 with changeable tooth tips, leg thickness 50mm, tooth tip J350, suitable QC21/25 or OQ80

Legs	Width [mm]	Weight [kg]
4	1800	900
5	2000	1250



GRAB RAKE WITH HYDRAULIC HOLD-DOWN CLAMP

OPERATING WEIGHT 1.7 TO 10 T

The grab rake with hydraulic hold-down clamp is used in gardening and landscaping. It is suitable for clearing work, for grabbing and moving stones, for sorting, collecting and turning over brushwood and for loosening soils.





APPLICATION AREAS

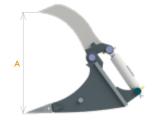
- Gardening and landscaping
- Clearing work

TECHNICAL DETAILS

Sizes: Mini, Midi and Maxi
Operating weight: 1.7 to 10 t
Material: legs made of HB450
Standard adapter: QC01HT,
QC03HT and QC08HT

CHARACTERISTICS

- Changeable tooth tips
- HT-Adapter as standard
- Two hydraulic hold-down clamps with seperate control
- Individual adapter or direct attachment





	Class	Operating weight [t]	Adapter	A [mm]	B [mm]	Leg thickness [mm]	Weight [kg]
	Mini	1.7 to 3.5	QC01HT/ QC03HT	<i>57</i> 0	600	25	116
	Midi	3.5 to 6	QC03HT	855	<i>7</i> 50	30	212
. '	Maxi	6 to 10	QC08HT	970	820	35	301

GARDENING AND LANDSCAPING

PROS

- Ideal gripping of stone, roots or undergrowth through the hydraulic hold-down clamp.
- Legs made of highly wear-resistant HB450 steel offer the advantages of a classic grab rake.





EXCAVATOR RAKE

OPERATING WEIGHT 1 TO 12 T

The excavator rake is a specialised attachment for gardening, landscaping and clearing work. Due to its specific design, it is used for bottom aeration and bottom loosening. It is also used in recultivation and surface restoration.



APPLICATION AREAS

- Gardening and landscaping
- Clearing work

TECHNICAL DETAILS

Operating weight: 1 to 12 t Material: legs made of HB450 Standard adapter: QC01, QC03

and QC08

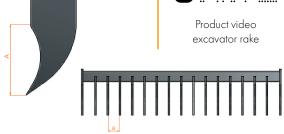
OPTIONAL

HT-Adapter

CHARACTERISTICS

 Individual adapter or direct attachment





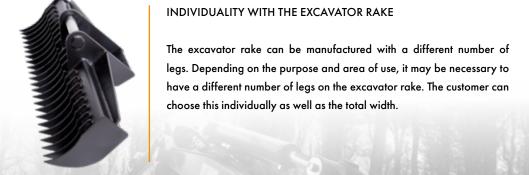
Operating weight [t]	Adapter	A [mm]	B [1	C [mm]	Legs thick- ness [mm]	Number of leas	Weight
weigni [i]		[mm]	[mm]	լուույ	ness [mm]	or regs	[kg]
1 to 2	QC01	160	40	1000	6	23	47
2 to 6.5	QC03	250	80	1500	12	17	95
2 to 6.5	QC03	250	80	2000	12	23	125
6.5 to 12	QC08	350	120	2500	15	20	235

CLEARING WORK

PROS

- Customisation of the width and number of legs according to edge requirements and technical feasibility.
- Narrow leg spacing.
- Clean raking work.

HENLEAdvice!





CLEARING WORK

ROOT CUTTER

OPERATING WEIGHT 1 TO 21 T

The root cutter is an attachment that is ideal for use in gardening and landscaping. Roots and trees can be optimally shredded with the cutter.





APPLICATION AREAS

- Gardening and landscaping
- Clearing work

TECHNICAL DETAILS

Operating weight: 1 to 21 t Material: cutting edge made of

HB500

Standard adapter: QC01, QC03, QC08 and QC10

CHARACTERISTICS

- Cutting edge made of HB500
- Symmetrical cutting edge
- Vertical cutting edge
- Individual adapter or direct attachment





QC08 and QC10 Product vide root cutter

Operating weight [t]	Adapter	Cutting edge	A [mm]	B [mm]	Weight [kg]
1 to 2	QC01/QC03	HB500 12mm	215	115	21
2 to 6.5	QC03	HB500 15mm	290	125	38
6.5 to 12	QC08	HB500 20mm	315	175	<i>7</i> 3
12 to 21	QC10	HB500 25mm	480	225	130

PROS

• Perfect attachment for clearing tree trunks.

 Very sharp cutting edge, which can lead to injuries if not handeled with caution.

CONS



ADAPTER AND PLATES

TO REALIZE THE CONNECTION OF DIFFERENT ATTACHMENTS TO THE EXCAVATOR, DIVERSE COMPONENTS OFTEN PLAY A MAJOR ROLE: ADAPTERS, MOUNTINGS, AND HAMMER PLATES. THESE LITTLE HELPERS SERVE AS CONNECTING ELEMENTS BETWEEN THE ATTACHMENT AND THE EQUIPPED EXCAVATOR ARM. THEY ARE USED WITH SPECIAL TOOLS SUCH AS HYDRAULIC HAMMERS. TO ENABLE SUCCESSFUL FASTENING, A HOLE PATTERN IS DRILLED INTO THE PLATE, WHEREBY THE ATTACHMENT CAN BE MOUNTED.

CHAPTER OVERVIEW

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AND PLATES

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OVERVIEW ADAPTER AND PLATES

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WELDING ADAPTER QC 259

GRIPPER ADAPTER

WITHOUT UNIVERSAL JOINT 260

GRIPPER ADAPTER

WITH UNIVERSAL JOINT

SCREW ADAPTER PLATE 26

LIFTING HOOK ADAPTER

REMODELLING CONNECTION **ASSEMBLY** SOLUTION CONNECTING **DRILLING PATTERN FLEXIBILITY INDIVIDUAL ADAPTER EFFICIENT**



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ments with the excavator and a quick coupler without any problems. These are only connecting elements. This chapter encompasses our welding adapters, welding plates, gripper adapters, hammer plates or mounting plates and lifting hook adapters. All of them fulfill a specific purpose and are defined for a range of attachments.

principle, adapters and hammer plates are available for all common quick coupler systems and can be ordered from HENLE.

Adapters can also be used for the conversion of attachments. This means that if the customer has the appropriate workshop in-house, he/she can purchase a welding frame or a weld-on plate and carry out the conversion of an attachment him/her/themselve

The intermediate adapters are a special feature. An intermediate adapter makes it possible to combine different quick coupler systems.

This means that a machine side system, e.g., MS10, can be used in combination with a system that is available on the attachment side, e.g., MS08. The advantage of

using an intermediate adapter is that it is not necessary to make any major changes to the existing attachments on the machine side. This saves you considerable amounts of money.





ADAPTER AND PLATES

WELDING ADAPTER QUICKCHANGE

A welding adapter is an adapter with a quick change adapter for converting existing attachments. Available for a wide range of quick coupler types and quick coupler sizes. HENLE welding adapters include the sizes QC01, QC03 and QC08.



WELDING ADAPTER QUICKCHANGE

A welding adapter is an adapter with a quick change adapter for converting existing attachments. Available for a wide range of quick coupler types and quick coupler sizes.

HENLE welding adapters include the sizes QC10 and QC21/25.



TECHNICAL DETAILS

Sizes: QC01, QC01 HT, QC03, QC03HT, QC08 and QC08HT Operating weight: 1 to 12 t

OPTIONAL

 Welding adapters for other systems are also available.

CHARACTERISTICS

- Compatible with Lehnhoff system
- Welding adapter for excavator attachments with an operating weight up to 12 t

Operating weight [t]	Weight [kg]
1 to 2	9
1 to 2	9
2 to 6.5	15
2 to 6.5	17
6.5 to 12	30
6.5 to 12	30
	weight [t] 1 to 2 1 to 2 2 to 6.5 2 to 6.5 6.5 to 12

All dimensions are theoretically calculated and therefore without guarantee.



TECHNICAL DETAILS

Sizes: QC 10 and QC21/25 Operating weight: 12 to 45 t

OPTIONAL

 Welding adapters for other systems are also available.



CHARACTERISTICS

- Compatible with Lehnhoff system
- Welding adapter for excavator attachments with an operating weight up to 45 t

Туре	Operating weight [t]	Weight [kg]	
QC 10	12 to 21	95	
QC21/25	21 to 45	140	

All dimensions are theoretically calculated and therefore without guarantee.





ADAPTER AND PLATES

GRIPPER ADAPTER WITHOUT UNIVERSAL JOINT

A gripper adapter without universal joint or cardan joint is the connection between the quick coupler and the pendulum gripper. The version without universal joint is required if the a universal joint or grapple mount is already fitted to the pendular grapple. The gripper adapter is adapted to the existing universal joint or gripper mount. The universal joint is required so that the pendulum gripper can swing freely.



GRIPPER ADAPTER WITH UNIVERSAL JOINT

A gripper adapter without universal joint or cardan joint is the connection between the quick coupler and the pendulum gripper. The version with universal joint is required if there is no universal joint or gripper adapter on the pendulum gripper. The universal joint is adapted to the rotary motor of the gripper. The universal joint is required so that the pendulum gripper can swing freely.



TECHNICAL DETAILS

Sizes: QC01, QC03, QC08, QC10 and QC21/25

Operating weight: 1 to 45 t

OPTIONAL

 Gripper adapters for other systems are also available.

CHARACTERISTICS

- Compatible with Lehnhoff system
- Gripper adapter for excavator attachments with an operating weight up to 45 t
- Designed to hold a gripper

Туре	Operating weight [t]	Weight [kg]
QC01	1 to 2	15
QC03	2 to 6.5	23
QC08	6.5 to 12	45
QC10	12 to 21	150
QC21/25	21 to 45	220

All dimensions are theoretically calculated and therefore without guarantee.

TECHNICAL DETAILS

Sizes: QC01, QC03, QC08, QC10 and QC21/25

Operating weight: 1 to 45 t

OPTIONAL

 Gripper adapters for other systems are also available.

CHARACTERISTICS

- Compatible with Lehnhoff system
- Gripper adapter for excavator attachments with an operating weight up to 45 t
- Designed to hold a gripper
- Equipped with universal joint

Туре	Operating weight [t]	Weight [kg]	
QC01	1 to 2	23	
QC03	2 to 6.5	32	
QC08	6.5 to 12	57	
QC 10	12 to 21	1 <i>7</i> 4	
QC21/25	21 to 45	290	

All dimensions are theoretically calculated and therefore without guarantee.



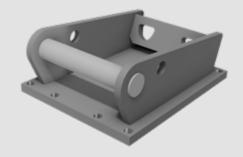


ADAPTER AND PLATES

SCREW ADAPTER PLATE

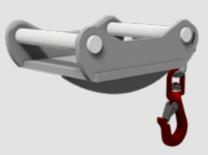
FOR HAMMERS, SHEARS AND SORTING GRIPPERS

Screw adapter plates are used as connecting parts between the dipper stick or quick-change device and various attachments such as buckets, demolition and attachments such as buckets, demolition and sorting grabs, hydraulic hammers, etc. and can be welded or bolted on.



LIFTING HOOK ADAPTER

A lifting hook adapter is an adapter with an endlessly rotating swivel hook for use with the quick coupler and for lifting suitable loads.



TECHNICAL DETAILS

Sizes: QC01, QC03, QC08, QC10 and QC21/25

Operating weight: 1 to 45 t

OPTIONAL

 Screw adapter plates for other systems are also available.

CHARACTERISTICS

- Drilling of the drilling pattern according to customer requirements.
- For excavator attachments with an operating weight up to 45 t

Туре	Operating weight [t]
QC01	1 to 2
QC03	2 to 6.5
QC08	6.5 to 12
QC10	12 to 21
QC21/25	21 to 45

All dimensions are theoretically calculated and therefore without guarantee.

TECHNICAL DETAILS

Sizes: QC01, QC03, QC08, QC10 and QC21/25

Operating weight: 1 to 45 t

OPTIONAL

 Lifting hook adapter for other systems are also available.

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СΠ	ΑK	AL	TER	131	ILJ

- · Equipped with swivel hook
- For excavator attachments with an operating weight up to 45 t

Туре	Operating weight [t]	Load capacity Swivel hook [t]	Weight [kg]
QC01	1 to 2	to 2	19
QC03	2 to 6.5	2 to 3.15	30
QC08	6.5 to 12	3.15 to 5,3	54
QC10	12 to 21	5,3 to 12.5	120
QC21/25	21 to 45	12.5 to 16	170

All dimensions are theoretically calculated and therefore without guarantee.





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CUSTOMISED SOLUTIONS

SOLUTIONS INCREASINGLY REQUIRED MORE DEVELOPMENT UNDERSTANDABLE SINCE CONDITIONS BETWEEN CONSTRUCTION SITES COULD BE MORE DIFFERENT. THROUGH OUR DESIGN AND DEVELOPMENT TEAM WE CAN REALIZE INDIVIDUAL AND SPECIAL CUSTOMER REQUIREMENTS. BE IT A MODIFIED DESIGN OF A BUCKET OR A COMPLETELY NEW DESIGN THAT IS INTENDED FOR VERY SPECIAL USE: WE CHECK THE FEASIBILITY OF THE PROJECT AND SUBMIT YOU AN OFFER. JUST GIVE US A CALL!

CHAPTER OVERVIEW

CUSTOMISED SOLUTIONS |
STEELCONSTRCUTION
MACHINED AND TURNED PARTS |
SPECIAL CONSTRUCTION

OVERVIEW CUSTOMISED SOLUTIONS

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TRIGGER BAR 269
TILTROTATOR BUCKET 270
STACKING SYSTEM 271
TRAPEZOIDAL BUCKET 272
TUNNEL BUCKET 273



INDIVIDUAL

REQUIREMENTS

CUSTOM-MADE UNIQUE DESIGN



SPECIAL SOLUTIONS FOR ATTACHMENTS

In addition to our typical attachments, we also manufacture special tools that can only be used for very restricted applications. We are not only limited to the construction industry but can also produce equipment for the forestry and agriculture sectors.



STEEL CONSTRUCTION

It is not always easy to source small series of machined or turned parts from a supplier designed for this purpose. Our machinery makes it possible through the production of components for our small and even larger series of machined parts.



MACHINED AND TURNED PARTS

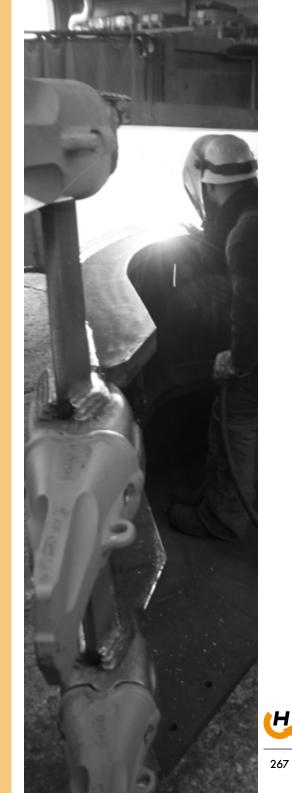
It is not always easy to source small series of machined or turned parts from a supplier designed for this purpose. Our machinery makes it possible through the production of components for our small and even larger series of machined parts.



SPECIAL CONSTRUCTION

What else can we do... With the help of our production machinery in Rammingen we can also create elements for private garden designs. From raised beds to garden decorations and steel components for municipal technology.

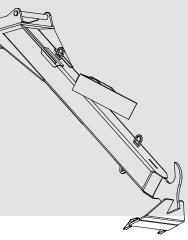




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DEMOLITION ARM

A demolition arm is a special design that – as the name suggests – is used in demolition in particular. The reach of the excavator arm can be extended with the demolition arm. Demolition arms can be used to tear down building structures and move rubble.



APPLICATION AREAS

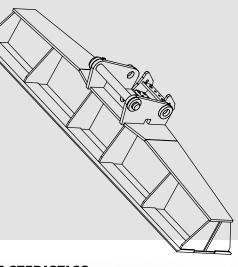
Demolition and recycling

CHARACTERISTICS

- Equipped with teeth
- Deflector plate
- Load eye according to customer requirements
- Adapter according to customer requirements

TRIGGER BAR

The trigger bar is a special design for the application area of classic earthmoving. Thanks to its special box-like design, the trigger bar is ideal for removing excess material and levelling the surface at the same time.

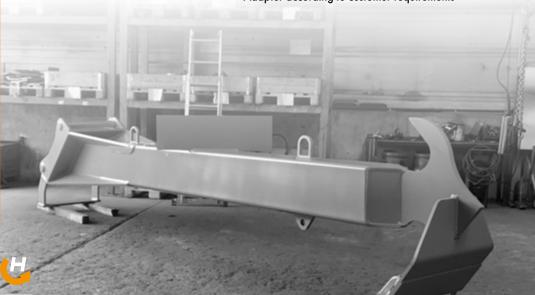


APPLICATION AREAS

Earthmoving

CHARACTERISTICS

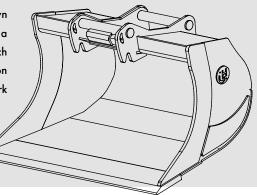
- Box-like design for removing material and creating flat surfaces
- Sickles for stability
- Adapter according to customer requirements





TILTROTATOR BUCKET

The tiltrotator bucket really comes into its own when used in combination with a tiltrotator or a tilt coupler – it was specially designed with such applications in mind. The extremely tapered version of the tiltrotator bucket makes it possible to work flexibly and efficiently even in confined spaces.



CHARACTERISTICS

- Earthmoving
- Gardening and landscaping

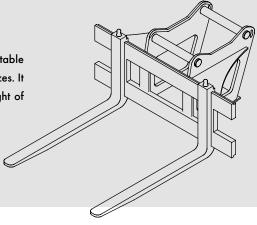
APPLICATION AREAS

- Extremely conical construction
- Individual adapter or direct attachment



STACKING SYSTEM

The stacking system is available with adjustable legs to adapt pallets in the most common sizes. It is suitable for machines with a carrier weight of 0 to 4 tonnes.



APPLICATION AREAS

Earthmoving

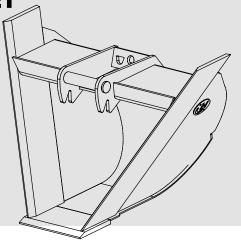
CHARACTERISTICS

- Adjustable legs
- Adapter according to customer requirements



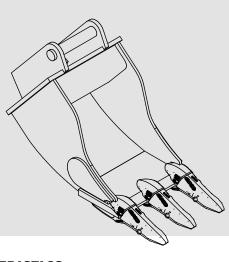
TRAPEZOIDAL BUCKET

The trapezoidal bucket, or profile bucket, is suitable for regenerating verges as well as for forest maintenance or for cleaning overgrown and muddy ditches on roads and forest tracks. By using a trapezoidal bucket, a higher efficiency can be achieved than with conventional ditch-cleaning buckets.



TUNNEL BUCKET

The tunnel bucket is a special design for working in mines or tunnels. It is used for breaking up or tearing off material in very confined spaces. As the tunnel bucket is usually used in harder soils or rocks, it is made of HD steel.



APPLICATION AREAS

Earthmoving

CHARACTERISTICS

- Special design with specific construction
- Dimensions can be designed according to customer requirements
- Adapter according to customer requirements

APPLICATION AREAS

Earthmoving

CHARACTERISTICS

- Bucket body made of highly wear-resistant HD steel
- Individual adapter or direct attachment



HENLE SERVICES

WE NOT ONLY SELL PRODUCTS, BUT ALSO OFFER VARIOUS ADDITIONAL SERVICES. OUR AIM IS TO OFFER OUR CUSTOMERS AN ALL-ENCOMPASSING SERVICE: FROM ADVICE CONCERNING OUR PRODUCTS TO THE DELIVERY OF THE PRODUCT AND FURTHER SUPERVISION THROUGH AFTER SALES.

CHAPTER OVERVIEW

DELIVERY SERVICE | CONSULTING SERVICE
CONVERSION SERVICE | REPAIRS 27

OUR REPAIRS DEPARTMENT 277

WHEN DOES AN ATTACHMENT NEED TO BE REPAIRED?

CONVERSION

REPAIR DURABLE

DELIVERY SERVICE

REUSABLE

SERVICE



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DELIVERY SERVICE

You can find our truck driver on the road all week. We have our own pick-up and delivery service in the region. Thereby we can also collect, process, and return repairs faster and more individually.



CONSULTING SERVICE

If you have any questions or need information, please do not hesitate to contact our sales team. We will be happy to send you all the information you need or help you in finding the best possible solution. We are available throughout the week by email or telephone.



CONVERSION SERVICE

It often becomes necessary to make changes to existing equipment due to changing requirements or developments on the market, for instance, to be able to use it with a different quick coupler system. With our conversion service, we can convert the existing attachment according to your specifications and needs.



REPAIRS

Attachments should also be sustainable - and in no way disposable products. We therefore use highly wear-resistant and high-quality materials. However, every attachment is usually ready for a general overhaul after a few years. This service is not limited to our own products. We support sustainability and together with our expert and experienced team, we can repair worn-out appliances regardless of the manufacturer.



OUR REPAIRS DEPARTMENT

Our repair department ensures the professional overhaul of worn or damaged equipment/attachments. Thanks to years of practical experience, our repair team can reliably fix a wide range of products.

Our approach is thorough and structured. First, we inspect the damage, possibly directly on site, to determine an appropriate analysis. Subsequently a schedule is drawn up that is tailored to the customer and the product.

After the reparation work is completed, return shipment is organized by our shipping department.

Do you have any questions about our repair service, our series products or do you need a customized solution? Please do not hesitate to contact our team.

We look forward to your call!



WHEN DOES AN ATTACHMENT NEED TO BE REPAIRED?

It is possible to convert your attachment to a different quick coupler system.

We also offer conversions in addition to our standard products. This involves attachments that are modified or adapted to fit a suitable mount. Do you want to use your existing attachment with a new mount? Do not hesitate to ask our qualified team. We would be happy to assist you.



If damage or excessive wear occurs on the attachments, it should be discontinued as a precaution. Qualified personnel should take a closer look and assess whether it is still fit for use. Not all damage immediately impairs the functionality of the attachment.

Installed wear parts often have the exact purpose of protecting the actual

attachment and are therefore "allowed" to wear down. Through expert assessment of the damage, a decision can be made whether the attachment is too badly damaged and needs to be replaced, complete restoration is an option or only a few parts need to be replaced. The choices are endless.

WHAT IS THE PROCEDURE?

Damaged attachments are delivered, restored, and returned to the customer. To make the process as efficient as possible for the customer, the worn or damaged part(s) is assessed, and an individual analysis is created.

This means that each repair process can be tailored to the customer's wishes and the product can be saved. WHEN IS A REPAIR WORTHWHILE?

Whether a repair is worthwhile can only be assessed if all aspects are considered. The central element is certainly the cost estimate for the repair. Nevertheless, other aspects also play a role, such availability of nearby workshops, etc. Transportation to the workshop can also play a considerable role in the price and should not be disregarded.

TOPIC AND SIGNIFICANCE OF THE REGENERATION OF ATTACHMENTS

Attachments are often used in daily construction. This means that they wear down or become damaged over time. However, to continue working, the attachment must be functional. Nevertheless, it is not always necessary to purchase a new attachment. Many damaged or worndown wear parts can be regenerated.

Especially now, it is important to have the possibility of an overhaul. Attachments can thus be reused, and their life cycle is significantly extended by replacing individual small parts. This also helps to use resources sustainably and for a longer period.





HENLE SAFETY

THEREIS A SIGNIFICANTLY HIGHER RISK OF ACCIDENTS HAPPENING ON A CONSTRUCTION SITE THAN IN OTHER SECTORS THE ECONOMY. THE MOVEMENT OF SOIL IS ONE THE MAIN ACTIVITIES. WHICH IS ASSOCIATED WITH CONSTRUCTION MACHINES OR TOOLS THAT ARE INVOLVED, POSE CONSIDERABLE RISK OF INFLICTING WHY ALL ATTACHMENTS THE COMPANY HENLE BUILT ACCORDING TO THE RECOGNIZED RULES OF TECHNOLOGY AND DESIGNED IN SUCH A WAY THAT THEY CAN BE OPERATED SAFELY.

CHAPTER OVERVIEW

SAFETY IN CONSTRUCTION MACHINERY TECHNOLOGY AND IN EXCAVATOR USE 282 INTENDED USE 4 IMPORTANT OPERATOR OBLIGATIONS 284 SAFE LOCKING 286 **BACKPRESSURE TEST** 287 288 LOCKING TOLERANCES LOCKING QC08M/QC10M/25M 289 QCPROTECT™ IN SIZE QC08HP SPECIALTY: LIFTING HOOK 294 SPECIALTY HYDRAULIC AND PRESSURE SETTING **GENERAL SAFETY INSTRUCTIONS** 296 SAFETY INSTRUCTIONS ON THE PRODUCT SPECIALTY: ENVIRONMENTAL 298 **PROTECTION**



SAFETY IN MACHINERY CONSTRUCTION AND IN EXCAVATOR USE

Working in the construction sector holds many potential dangers. Every member of staff must work responsibly and mindful with the machinery and heavy attachments on the construction sites. This must be minded especially when working with different carrier machines and tools, since damage to property and personal injury can occur very easily. In addition to the hazards that may arise with the use of an excavator, the following chapter focuses on the attachments and which circumstances must be considered, to minimize the potential risks.

There are several criteria to consider when purchasing and using a construction machine, including the appropriate equipment. One major and important topic is the quick coupler system. New requirements concerning safety measures for the hydraulic quick coupler were placed into effect by the Swiss insurance company SUVA and German company

BG. These stipulate that a hydraulic quick coupler system must be secured in such a way that the attachment device cannot be unintentionally removed in the event of it falling off or when incorrectly locked. It was therefore vital to develop a safety mechanism that prevents the attachment from falling off inadvertently and causing injury.

The machine directive, which defines the state of technology, is being updated regarding quick couplers.

Philosophy of HENLE Customer Service

Reliable customer service is part of our philosophy. We are aware that the simple delivery of an order is not enough. Therefore, we attach great importance to being available, accessible, and approachable to all our customers. The operational readiness of your machine including the equipment is our top priority - time pressure is a well-known factor for construction projects, and we are accustomed to it. It is thus essential to react quickly, should any problems arise. Our aim is to get your machine back into service as quickly as possible. It does not matter if a heavily used part needs to be repaired, a speedy conversion is necessary, or a complaint arises. Our sales team is trained and knows what steps need to be taken to help you out.

In addition, we have the most important spare parts in stock at our warehouse in Rammingen, meaning that we can also send them to you at short notice. Repairs can be carried out directly at the customer's location.





INTENDED USE

HENLE attachments are to be used for commercial work exclusively. Each device is designed and constructed wholly for a specific and clearly defined purpose, which is described in the respective operating instructions. Any usage beyond the intended use can lead to serious problems.

Therefore: only apply the devices as intended and follow the instructions in the respective manner. Any structural or constructive modifications are prohibited and will undo all warranty claims. Furthermore, the validity of the declaration of conformity will expire.



IMPORTANT...

The operator must be aware of the applicable health and safety regulations and must carry out a risk assessment to identify any additional hazards that may arise due to specific working conditions. These must be implemented in the form of operating instructions for the device.

The operator must define the responsibilities for installation, operation, maintenance, and cleaning as well as ensure that the persons commissioned by him have the necessary qualifications.

The operator must ensure that all employees who handle the device have read and understood the operating instructions. The operating instructions must always be available at the place of use. Furthermore, he must train the personnel at regular intervals and inform them about the dangers involved.

OPERATOR OBLIGATIONS

The appliances should only be used in the commercial sector. The operator of the appliance is therefore subject to the statutory occupational safety regulations.

In addition, to the relevant operating instructions, the safety, accident prevention, and environmental protection regulations are always applicable and must be observed. In particular:

Furthermore, the operator is responsible for ensuring that the appliance is always in perfect technical condition.

The following applies:

The operator must ensure that the maintenance intervals described in the operating instructions are observed.

 The operator must regularly check all safety equipment for functionality and completeness or have checked them.

Quick coupler systems and attachments must be compatible and matched to the excavator type. It is essential to observe the manufacturer's information.

M WARNING!

Risk of injury due to insufficient qualifications! Improper handling can lead to considerable personal injury and damage to property.

Therefore:

 All activities may only be carried out by qualified personnel.

Unauthorized persons who do not comply with the requirements described here are not aware of the dangers.

Therefore:

- Keep unauthorized persons away from the work area.
- If in doubt, approach people and remove them from the work area.
- Interrupt work immediately if unauthorized persons are present in the work area.







Correctly picking up and locking the attachment is an essential safety aspect in the operation of a quick coupler system. The safety instructions in the operating manuals must be followed.

To ensure the full functionality of the quick coupler, all contact surfaces on the quick coupler and the attachment must be free of dirt and other contaminants. With mechanical quick couplers the operator locks the quick coupler mechanism manually. The bolts are secured with the aid of a socket wrench (QC01 – QC03) or an operating lever (QC08 – QC25) until the plate fits snugly.



With hydraulic systems, the locking system can be controlled from the driver's cab. The indicator pins allow the driver to see whether the locking bolts are in the retracted or extended positions. In addition, secure locking must be confirmed with a counter-pressure test.

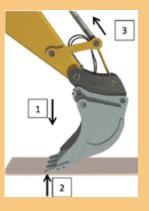


BACKPRESSURE TEST

For hydraulic quick couplers, the checking of a proper locking mechanism is mandatory. After locking the quick coupler with the attachment, a test must be carried out to check that it is properly locked.

For hydraulic quick couplers the following procedure applies: the bucket teeth/cutting edge are/is pressed against the ground in a tilted position, after which the bucket cylinder must then be retracted (see illustration).

If the locking mechanism is not locked properly the quick coupler would subsequently slip out of position. In such a case, an investigation into the causes of improper locking must be carried out.







LOCKING TOLERANCES

High-Low-Adapter (HT)

Valid for quick coupler QC01, QC03 and QC08. The quick coupler QC01 and QC03 are secured with a tightening torque of 65Nm.

QC01

Nominal size: A=15.5mm; B=15.5mm Tolerance +/- 4mm

QC03

Nominal size: A=17.5mm; B=17.5mm Tolerance +/- 5mm

QC08

Nominal size: A=26.5mm; B=26.5mm

Tolerance +/-5mm

QuickChange Adapter Standard-Lehnhoff Adapter

Valid for quick coupler QC01, QC03 and QC08. The quick couplers QC01 and QC03 are secured with a tigtehening torque of 65Nm.

Position of locking bolt minimum (5mm within the locking plate)

Position of locking bolt minimum (5mm protruding the locking plate)



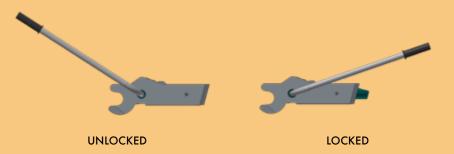


LOCKING QC08, QC10 AND QC25

These quick couplers are secured via dead centre locking.

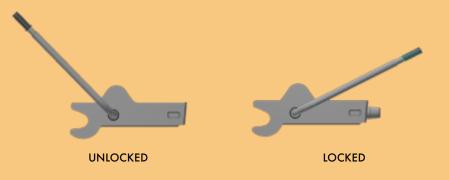
QC08

The lever must be turned at least 120° so that the locking mechanism is secure.



QC10

The lever must be turned at least 119° so that the locking mechanism is secure.



QC25

The lever must be turned at least 133° so that the locking mechanism is secure.







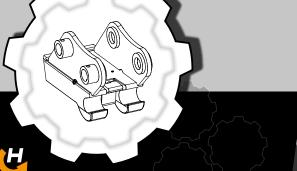
Quite simple - for your safety.

When working on a construction site, you are exposed to a wide variety of risks every day. We not only want to make your work easier with our products, it is also very important to us to to contribute to your safety. That is why we have developed the quick coupler **Q**Cprotect[™]

SETTING THE PRESSURE OF THE QCprotectTM

Locking pressure: minimum 150 bar

Unlocking pressure: 20% more than the pressure which is set for locking. Maximum pressure: 250 bar







THE NEW DROP PROTECTION

All quick coupler in the CorotectTM series have an additional drop protection. This reliably

ADVANTAGES AT A GLANCE



- Mechanical drop protection due to the HENLEprotect Technology
- QC03Hp: indicator wire for visual control
- QC08Hp: two Indicator pens for visual control
- Surpasses safety standards ISO 13031 and EN474



- No limitation on attachment options
- No additional effort in daily work



- Prevents serious accidents on the construction site
- Eligable for funding by the BG Bau









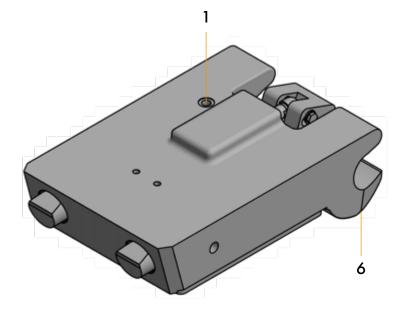


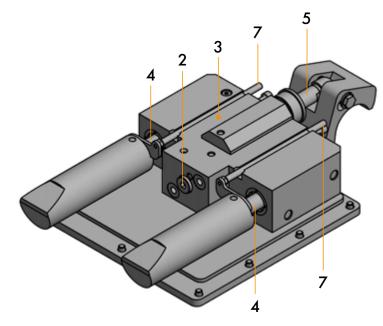
QCprotect[™] IN SIZE QC08HP

Following the launch of the QCprotectTM in size QC03Hp in 2022, the size QC08Hp has also been available since 2023. Compared to the predecessor model, the QC08Hp has reinforced claws to transfer the ever-increasing forces of the excavators and to reduce wear caused by excessive surface pressure. The cover has also been reinforced so that it can absorb more forces without damage. The indicator pins are directly connected to the locking bolt. This means that the position of the locking bolts can be recognized directly from the driver's cab.

The quick coupler also has a closed hydraulic unit. This reduces the effort required for replacement and there are fewer problems with leaks at the connection points, as these are not present. The QC08Hp has three independently operating cylinders. Two individual cylinders drive the locking bolts and a third cylinder is used to drive the HENLE protect safety catch.

Position	Designation
1	Easily acessible emergency release
2	Unlockable non-return valve as pipe burst protection
3	Closed hydraulic unit for fewer leaks
4	Two independent cylinder
5	Third cylinder to drive the HENLEprotect drop protection
6	Reinforced claws for optimum transmission of excavator force and reduction of wear
7	Two indicator pen for visual conrol



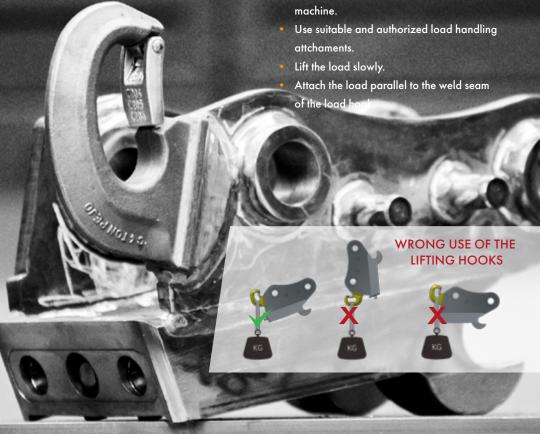






The lifting hook may only be used if the following safety devices are installed on the excavator:

- Lifting load table at the driver's seat
- Overload warning device
- Pipe burst protection on the attachment arm cylinder
- Pipe burst protection on the support cylinder



SPECIALTY: LIFTING HOOK

Please note:

- The maximum load capacity of the lifting hook (see hook or type plate of the quick coupler).
- The maximum lifting capacity of the earthmoving machine.
- The weight of the quick coupler must be deducted from the lifting load of the earthmoving machine.
- Use only without working equipment (i. e. Bucket)
- Observe the operating instructions of the

SPECIALTY: HYDRAULIC AND PRESSURE SETTINGS



M WARNING!

Danger to life from hydraulic energy! Hydraulic energy can cause serious or even fatal injuries. Hydraulically driven parts can move unexpectedly. If individual components are damaged, hydraulic fluid can escape under high pressure.

Therefore:

- Daily visual control of the hydraulic lines and cylinders for damage and leaks.
- Only allow work on the hydraulics to be carried out by qualified personnel.
- Before starting work on the hydraulic system, first switch it off and depressurise it. Depressurise the accumulator completely.
- Check that it is depressurised.

 Do not change the pressure settings beyond the maximum values.

Danger to life due to liquid jet! In the event of defective pipes or machine parts a jet of liquid can escape under high pressure. The jet of liquid can sever body parts and lead to serious injuries or death.

Therefore:

- Never touch the liquid jet.
- Switch off the carrier device immediately! If necessary, initiate further measures to reduce the pressure and stop the liquid jet.
- · Collect and dispose escaping liquids properly.
- Have the defective parts repaired.

Туре	Locking	Unlocking	Max. pressure
QC01SHF/QC03SHF	-	180 bar	250 bar
QC01 HF	60 bar	150 bar	250 bar
QC03Hp/QC08Hp	150 bar	180 bar	250 bar
QC10HF	30 to 50 bar	180 to 350 bar	350 bar
QC21/25HF	30 to 50 bar	180 to 350 bar	350 bar

WHEN USING QUICK COUPLERS OR ATTACHMENTS IN OR UNDER WATER

the maintenance intervals may have to be shortened (see relevant operating instructions). Local environmental regulations must also be observed.



GENERAL SAFETY INSTRUCTIONS



♠ DANGER due to suspended

Danger to life from suspended loads! Falling loads can lead to serious injuries or even death.

Therefore:

- Never step under suspended loads.
- Only move loads under supervision.
- · Set the load down when leaving the workplace.
- · Only use suitable work equipment (chains, round slings, etc.) for lifting loads; these are subject to periodic inspections (UVV).
- The following must be taken into account of the load (e.g. weight, centre of gravity, fixing and attachment points)

WARNING!

Danger from falling loads. The locking mechanism of the quick coupler with the attachment must be checked after each change and before use.



⚠ DANGER due to servicing work!

- Park the carrier device safely, ensure there is sufficient space for personnel.
- De-energise and depressurise all systems.
- Secure the carrier device against unauthorised or unintentional restarting.
- Repairs and maintenance work may only be carried out by trained and instructed persons.
- Before switching on again, ensure that no persons are in the danger zone.



A CAUTION -

Danger from moving machine parts or

Prevent injuries and damage to machinery!

Refer to the operating instructions for the prescribed installation, maintenance and repair procedures.

Ensure that the attachment does not come into contact with the boom, the boom cylinder and/or the operator's working area, especially when fully tilted.

Ensure that no persons are within the range of movement of the attachment.

Danger of crushing! Moving parts can cause serious injuries. Keep hands away from the machine during operation.

STICKERS SAFETY INSTRCUTIONS









QC08/QC10/QC21/25









A CAUTION!

Environmental risk due to incorrect handling!

Incorrect handling of environmentally hazardous substances, in particular incorrect disposal, can cause considerable damage to the environment.

Therefore:

- Check all hydraulic components daily
- Use a suitable container to collect any hydraulic oil that escapes during maintenance work.

- If environmentally hazardous substances are accidentally released into the environment, take appropriate measures immediately.
- If in doubt, inform the responsible local authority of the damage.

Old lubricants or hydraulic oils must be disposed of in accordance with official regulations.

The following relevant environ mentally hazardous substances are used in our devices:

- Hydraulic oil HLP 46 according to DIN 51524 T2: ISO VG 46
- Lubricating grease: commercially available resin- and acid-free machine grease

To ensure the full functionality of the quick coupler all contact surfaces on the quick coupler and the adapter of the attachments must be free of dirt and other impurities.

- Further specific safety instructions for installation/uninstallation, operation and maintenance are listed in the respective operating instructions for the products. General standards and directives
- Machinery directive 2006/42/EG.
- Ordinance on industrial safety and health.
- DGUV rulel 100-500 chapter 2.12 earthmoving machinery.
- EN474-1 earth moving machinery safety.
- EN474-5 requirements for hydraulic excavators.

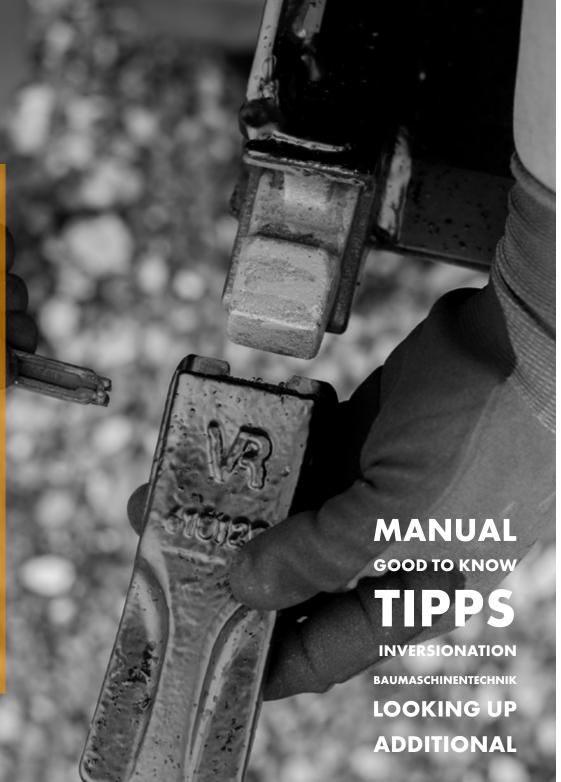




THE FIELD OF CONSTRUCTION MACHINERY TECHNOLOGY IS COMPLEX AND DIFFICULT. TO ALWAYS HAVE THE RIGHT EQUIPMENT FOR EVERY CONSTRUCTION SITE, EVERY APPLICATION, EVERY CHALLENGE, YOU MUST TAKE A WIDE VARIETY OF CIRCUMSTANCES INTO ACCOUNT. A REFERENCE BOOK ON TYPICAL TOPICS CONCERNING CONSTRUCTION MACHINERY TECHNOLOGY IS THEREFORE ALWAYS WELCOME. ON THE FOLLOWING PAGES GENERAL STANDARDS, DEFINITIONS AND APPROACHES ARE SUMMARIZED TO PROVIDE YOU WITH QUICK AND EASY INFORMATION

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QUESTIONS ON **HOW TO CHOOSE** THE **RIGHT DEVICE**

For which area of application do you need the attachment?

When choosing the right attachment, the first thing you need to do is determine in which area of application it is to be used. For instance, if you are working in demolition, different attachments are required than in gardening or landscaping. The application should therefore be defined initially to then select an attachment.

👝 | Which soil do you work in?

It is also helpful to assess the ground conditions in which the work will be carried out. Soils can be classified into seven different classes and depending on which soil is present, the equipment of the attachment can be different. For example, a normal Backhoe Bucket can be used in light soils, while an HD Backhoe Bucket may be used for rock.

Do you need a quick coupler?

To determine which equipment is needed for the carrier machine, it is also necessary to clarify whether a quick coupler should be used. In most cases the answer is yes. It must also be clarified whether a quick coupler or perhaps a tilt coupler would be more suitable. In addition, if the quick coupler should be mechanically or hydraulically lockable.

Which mount should the attachment be equipped with?

The next step is to determine which mount the attachment should be equipped with. The attachment in turn depends on the quick coupler on the carrier machine. If no quick coupler is needed, then this is referred to as a "direct attachment". If the carrier machine has a quick coupler, it is vital to know that the attachment must be equipped with a mount suitable for the coupler.

What width should the attachment have?

The cutting width of the attachment should also be established. Most buckets are available in a variety of cutting widths, so this can be selected according to the customer's exact wishes. The optimal cutting width helps in working more economically and faster. For example, for work on trenches of a standardized width, an attachment with the appropriate cutting width should be selected.

Which size do you need?

The size of the attachment depends first and foremost on the carrier machine. Strictly speaking, it is about the "operating weight" of the carrier machine. The operating weight of the carrier machine can be used to determine the size of the attachment to determine that it is not too small, not too big, or too heavy for the excavator. Attachments are also generally categorized depending on the operating weight.

Which tooth system should the attachment be equipped with?

Finally, the question arises as to which tooth system the attachment should be equipped with. Bolted tooth system, welded tooth system or just a smooth cutting edge without teeth? The decisive factor is once again the application in which the attachment is to be used. If you are working in very light soil with a mini excavator, a bolted tooth system may be perfectly sufficient. If, on the other hand, you are working in heavy soils or rock, a welded tooth system is unavoidable.

There is a wide range of different tooth designs. You can find out more on pages 314 and 315 of this manual.







Excavator operating weight [t]	HENLE backhoe bucket class	HENLE ditch-cleaning bucket class	QuickChange Quick coupler sizes
0.5 to 1	Class 0	Class 0	QC01
1 to 2	Class 1	Class 1	QC01
2 to 2.5	Class 2	Class 1S	QC03
2.5 to 3.8	Class 2S	Class 2	QC03
3.8 to 5	Class 3	Class 3	QC03
5 to 6.5	Class 3S	Class 3	QC03
6.5 to 8.5	Class 4	Class 3S	QC08
8.5 to 12	Class 4S	Class 3S	QC08
12 to 16	Class 5	Class 4/4S	QC10
16 to 21	Class 5S	Class 5	QC10
21 to 26	Class 6	Class 6	QC21/25
26 to 30	Class 6S	Class 6S	QC21/25
30 to 36	Class 7	Class 7	QC21/25
36 to 45	Class 7S	-	QC21/25

Material	(kg/m³)
Andesite	1610
Basalt	1710
Diabase	1790
Diorite	1790
Dolomite	1500
Iron ore	2600
Gabbro	1790
Platter	1420
Mica slate	1750
Gneiss	1750
Granite	1610
Granodiorite	1610
Greywacke	1650
Wood chips	450
Lime stone	1560
Gravel, naturally grown	1790
Gravel, dry	1420
Gravel, wet	1870

Bulk weights

Material	(kg/m³)
Coal	900
Marble	1640
Topsoil	960
Paper	500
Quarzite	1640
Rhyolite	1520
Sand, dry	1430
Slag furnace	1800
Sand, wet	1830
Sand-gravel, wet	1880
Sand-gravel,dry	1700
Sand-clay, wet	1600
Sandstone	1600
Slag broken	1760
Clay, naturally grown	1600
Clay, dry	1440
Clay slate	1660
Trachyte	1625

Bulk weights





H

SOIL CLASSES

To select the right attachment, it is essential to consider the soil in which the work is to be carried out. There is a general definition for the classification of soils. According to DIN of different soils and rocks.

There are seven such classes: Class 1 the topsoil, Class 2 - flowing soil types, Class 3 - easily soluble soil types, Class 18300 a soil class describes the properties 4 – moderately soluble soil types, Class 5 - difficult to loosen soil types, Class 6 - easy to loosen rock and comparable soil types, and Class 7 - rock that is difficult to loosen.

The uppermost soil layer mainly consists of a mixture of inorganic substances with gravel, sand, silt, humus, clay and living organisms.

Soils that are liquid to pulpy in nature and which give off water only with great difficulty.

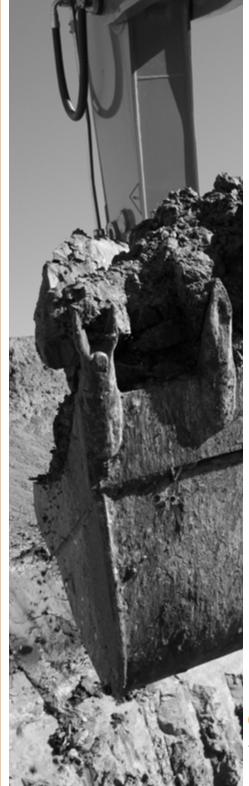
Non-cohesive to weakly cohesive sand, gravel, and sand-gravel mixtures. Consists of up to 15 percent silt and clay plus 30 percent stones with a grain size of 63 mm and about 0.01 m³ density.

Mixtures of sand, gravel, silt, and clay with more than 15 weight percentage of grain size smaller than 0.06 mm. cohesive soil types of low to moderate plasticity, not exceeding 30 weight percent stones with a grain size of over 63 mm and up to 0.01 m³ density included.

Soil types according to classes 3 and 4, but with more than 30 weight percentage of stones with a grain size of over 63 mm up to 0.01 m³ density. Non-cohesive and cohesive soil types with a maximum of 30 percent by weight of stones from 0.01 m³ of density. Pronounced plastic clays and are soft to semi-solid depending on the water content.

Rock types that have an inner mineralbound cohesion, but are strongly fissured, brittle, crumbly and slatey. Some may be soft or weathered, while comparable solid/solidified cohesive or non-cohesive soil types can be found. Contains non-binding and cohesive soil types with more than 30 weight percent stones from 0.01 m3 to 0.1 m3 density.

Rock types that have an inner, minerally bound cohesion and have high structural strength. Only a few are fissured or weathered. Fixed, unweathered slate, layers of nagelfluh, slag heaps from the steelworks can be found in this layer. Contains stones with a density of over $0.1 \, \text{m}^3$.



EXCAVATOR OPERATING WEIGHTS

Each individual excavator model has a specific operating weight. The operating weight indicates the weight that the excavator applies during operation – i.e. including driver and equipment. The operating weight of a carrier machine is used to determine which attachment size is suitable for the excavator.

OPERATING WEIGHTS: JCB

OPER/	Δ TING	WFIC	:HTS+	ΓΔΚΕΙΙ	CH
OILK	711140	YY LIC	71110.	IAKEU	CIT

Excavator model	Suitable bucket class	Suitable QC-SW	Excavator model	Suitablee bucket class	Suitable QC-SW
8008 CTS			TB 210 R		
8010 CTS			TB 210 RH		
16C-1		0.001	TB 215 R	KL1	QC01
18Z-1	- KL1	QC01	TB 216		
19C-1	_		TB 216 SH	-	
19C-IE			TB 225	KLO	
8026 CTS			TB 325 R	KL2	
35Z-1	KL2S		TB 230		
36C-1	_	0000	TB 235-2	KL2S	
50Z-2	KL3	QC03	TB 335 R		0.000
56Z-2	KLOC		TB 240	KI 2	QC03
60C-2	- KL3S		TB 350 R	- KL3	
85Z-2	KL4		TB 250-2		
86C-2		0.000	TB 257 FR	KL3S	
90Z-2	KL4S	QC08	TB 260	_	
100C-2	_		TB 370 CM/CV		
JS 145W	KL5		TB 290-2 CM/CV	KL4	0.000
JS 175W	IVI E C	QC10	TB 280 FR	-	QC08
JS20MH	- KL5S		TB 395 W	KL4S	
			TB 2150 C	IZI E	0.010
			TD 2150 D CM /D CV	KL5	QC 10

TB 2150 R CM/R CV

OPERATING WEIGHTS: VOLVO

Excavator model	Suitable bucket class	Suitable QC-SW
EC 15E		
EC 18 E	171.7	0.001
ECR 18E	KL1	QC01
EC20E		
ECR25D		
EC27D	KL2S	
ECR35D	KL25	
EC35D		
ECR40D	KL3	QC03
ECR50	KL3	
ECR58		
EC60E	KL3S	
EW60E		
ECR88D	KL4S	QC08
EVVR 130E	KL5	
EWR 150E	KLJ	
EW 160E		
EWR 170E		QC10
EW 180E		
EC 140E	KL5S	
ECR 145E		
EC 160E		
EC 180E		
EW220E		
EW240E MH		
EC200E	KL6	
EC220E		
ECR235E		QC21/25
EC250E	KL6S	
EC300E	KL7 KL7S	
EC350E		
ECR355E		
EC380E		

OPERATING WEIGHTS: BOBCAT

Excavator model	Suitable bucket class	Suitable QC-SW
E 10Z		
E 17		
E 17Z	KL1	QC01
E 19		
E20Z		
E26		
E27Z	KL2	
E27		
E34	KIOC	QC03
E35Z	- KL2S	QC03
E45	KI 2	
E50	— KL3	
E55	KL3S	
E85	KL4	QC08

OPERATING WEIGHTS: KUBOTA

Excavator model	Suitable bucket class	Suitable QC-SW
K008-5		
U 10-5		
KX016-4	- KI 1	QC01
U17-3 α	NL I	QCUI
KX018-4		
KX019-4		
U20-3 α		
KX027-4/	KL2	
U27-4		
KX030-4	_	
KX037-4	KL2S	
U36-4		QC03
KX042-4	_	
U48-4	KL3	
U50-5		
U56-5	- KL3S	
KX060-5	VESS	
KX080-4 α 2	KL4	QC08



OPERATING WEIGHTS: HITACHI

Excavator model	Suitable bucket class	Suitable QC-SW
ZX 10U-6		
ZX 17U-6/		
ZX 19U-6	KL1	QC01
ZX 19-6	•	
ZX26U-6		
ZX33U-6	KL2S	
ZX38U-6	-	0.000
ZX48U-6		QC03
ZX55U-6	KL3	
ZX65USB-6	KL3S	
ZX85US-6	171.4	0.000
ZX85USB-6	KL4	QC08
ZX 130-5G		
ZX 130-7	•	
ZX 135W-7	KL5	
ZX 140W-6	•	
ZX 145W-6		
ZX 150W-7		QC10
ZX 155W-7		
ZX 160LC-5G	•	
ZX 170W-5A	•	
ZX 175W-7	•	
ZX 170W-6	KL5S	
ZX180W-7	•	
ZX 180LC-5G/		
ZX 180LCN-5G		
ZX 190W-5A		
ZX 190W-6		
ZX200LC-5G		
ZX210W-5A	•	
ZX220W-7	•	
ZX220W-5	•	
ZX210-6/	•	
ZX210LC-6/	KL6	QC21/25
ZX210LCN-6		
ZX220LC-GI		
ZX225USRLC-6		
ZX240LC-5G		
	_	

OPERATING WEIGHTS: YANMAR

CX20D

CX22D CX26C CX25D CX30C CX33C

CX28D CX35D CX37C

CX42D CX45D

CX50D CX55D CX57C CX58D

CX60D CX60C CX65D CX85D SR

CX90D MSR

CX 130E CX 130E

CX145DSR CX 160E

CX 160D

CX 180E CX180D CX210E CX210D CX240D

CX250D CX250E

CX245DSR CX300E

> CX300D CX350D

CX370D

KL2

KL2S

KL3

KL3S

KL4

KL4S

KL5

KL5S

KL6

KL6S

KL7 KL7S QC03

QC08

QC10

QC21/25

Excavator model	Suitable bucket class	Suitable QC-SW
SV08-1C		
Vio 10-2A	_	
Vio 12-2A	_	
SV 15 VT	KL1	QC01
SV 17 VT	_	
Vio 17		
SV 19 VT	_	
SV22	1/10	
Vio23-6	- KL2	
Vio26-6		
SV26	_	
Vio27-6	KL2S	0000
Vio33-6	_	QC03
Vio38-6		
Vio50-6B	KL3	
Vio57-6B	- KL3S	
SV60-6B	- KL35	
B75W	_	
Vio80-1	- - KI4	
Vio82	KL4	
B7-6		
Vio80-2PB		0000
B95W	_	QC08
SV 100-2		
SV100-2PB	- KL4S	
B110W		
SV 120	_	

OPERATING WEIGHTS: CASE

Excavator model	Suitable bucket class	Suitable QC-SW
CX 12D	_	
CX14D		
CX 15EV		
CX 17C		0001
CX17D	- KL1	QC01
CX 19C		
CX18D	_	
CX 19D		

OPERATING WEIGHTS: LIEBHERR

Excavator model	Suitable bucket class	Suitable QC-SW
A 910 Compact		
Litronic		
A 912 Compact		
Litronic		
A 913 Compact	•	
Litronic	KL5	
A 914 Litronic		
R 914 Compact		
Litronic		
A 914 Compact		
Litronic		
A 916 Compact		QC10
Litronic		QCIU
A 916 Litronic		
A 918 Compact		
Litronic		
A 918 Litronic	KL5S	
A 920 Litronic		
R 920 Compact		
Litronic		
R 918 Litronic		
A 922 Rail Litronic		
A 924 Rail Litronic		
A 924 Litronic		
R 922 Litronic	KI6	
R 924 Litronic	NLO	
R 926 Compact		
Litronic		
A 924 Heavy Lift	KL6S	
Litronic	. KLOS	
R 926 Litronic	-	QC21/25
R 928 Litronic		QC21/23
R 930 Litronic	- K17	
R 936 Compact		
Litronic	NL7	
R 934 Litronic		
R 938 Litronic	KL7S	
R 945 Litronic	INL/ J	

ZX240N-6

H

OPERATING WEIGHTS: KOBELCO

Excavator model	Suitable bucket class	Suitable QC-SW
SKO8-1EV		
SK10SR-2E		
SK17SR-3E	· KL1	QC01
SK 19	•	
SK25SR-6E		
SK26-1E		
SK26SR-7	•	
SK28SR-7	141.06	
SK28SR-6E	KL2S	
SK3OSR		QC03
SK35SR-6E	•	
SK34SR-7		
SK39SR-7	141.0	
SK50SRX-7	KL3	
SK58SRX-7	KL3S	
SK75SR-7		
SK75SR-7 Side	KL4	0000
Drain		QC08
SK85MSR-7	KL4S	'
SK 130LC-11	KL5	
SK 140SRL-7		
SK 140SRLC-7		
SK 140SRLC-7		
Side Drain		
ED 160-7 Blade		QC10
Runner	KL5S	QC 10
SK180(N)		
LC-11		
SK 180(N)		
LC-11E		
SK 140SRD-7		
SK210(SN)		
LC-11		
SK210(SN)	7	
LC-11E		QC21/25
SK230SRLC-7		
SK24SN-11		
SK240SN-11E		

SK260(N)	KI6S	
LC-11		
SK210D-11		
SK210D-11E		
SK260(N)	KLOS	
LC-11E		
SK270SR(N)		
LC-7		_
SK300(N)		
LC-11	KL7 (QC21/25
SK300(N)		QC21/23
LC-11E		_
SK350(N)		
LC-11		
SK350(N)		
LC-11E	KI7S	
SK380SRLC	NL/ 3	
SK380SRLC-7		
SK350DLC-11E		
SK350DLC-11		

OPERATING WEIGHTS: LIUGONG

Excavator model	Suitable bucket class	Suitable QC-SW
9018F	KL1	QC01
9027F	KL2S	QC03
9035E	KL3	QCUS
909ECR	KL4S	QC08
913FCR	- KI.5	QC10
915FCR	- KLS	QC10
922F	IZ1 4	
924F	- KL6	OC01 /05
926F	KL6S	QC21/25
950E	KL7S	

OPERATING WEIGHTS: KOMATSU

Suitable

Suitable

Excavator

	Conabic	Juliuble
model	bucket class	QC-SW
PC09-1	KLO	
PC 16R-3	KL1 QCC	
PC 17R-5		QC01
PC18MR-5		
PC20R-5		
PC24MR-5	KL2	
PC26MR-5		
PC30MR-5	KL2S	
PC33E-6	NL23	0003
PC35MR-5		QC03
PC45MR-5	KL3	
PC55MR-5	KL3S	
PC58MR-5	NL33	
PC80MR-5	KL4	
PC88MR-11	KI 4C	QC08
PW98MR-11	KL4S	
PW138MR-11		
PW 148-11	IZI F	
PC 138US-11	KL5	
PW 158-11		
PW 160-11	QC1	QC10
PW 168-11		
PW 180-11	KL5S	
PW 198-11		
PC 170LC-11		
PC210/LC/		
NLC-11		
PC210LCi-11		
PC290LCi/		
NLCi-11	KL6 QC21/: 	
PC230NHD-11		QC21/25
PC228USLC-11		
PC240LC/		
NLC-11		
PC290LC/	KL6S	-
NLC-11		

PC360LC/		
NLC-11	KI7	
PC360LCi/	NL/	
NLCi-11		- QC21/25
HB365LC/		— QC21/23
NLC-3 Hybrid	KI7S	
Excavator	NL/ 3	
Range SLF/LR		

OPERATING WEIGHTS: SANY

Excavator model	Suitable bucket class	Suitable QC-SW
SY 16C		
SY 18C	. KI 1	0.001
SY 18U	KLI	QC01
SY 19E		
SY26U	KI2S	
SY35U	NL23	QC03
SY50U	KL3S	
SY75C	KL4	QC08
SY80U	KL4S	QC06
SY 135C		
SY 155W	KL5	QC10
SY 155U		
SY215C	KL6	
SY265C	KL6S	
SY305C	KL7	QC21/25
SY365H	KI7S	
SY390H	VI/ 3	



TOOTH SYSTEMS AND TOOTHVERSIONS

There are a large number of suppliers of tooth systems for attachments on the market - and just as many different tooth versions. An attachment can be fully customised right up to the tooth system. Manufacturers of such systems have designed different tooth versions, which in turn are suitable for different applications.

COMMON TOOTH SYSTEMS

MINI-Z-TOOTH SYSTEM
Screwed tooth system consisting of tooth tip, 2 screws and nuts





COMBIPARTS-TOOTH SYSTEM

Welded tooth system consisting of tooth tip, holder and locking





S ESCO-SUPER-V-TOOTH SYSTEM

Welded tooth system consisting of tooth tip, holder and locking





ESCO-ULTRALOK-TOOTH SYSTEM
Welded tooth system consisting of tooth tip, holder and integrated locking.



CAT-TOOTH SYSTEM

Welded tooth system consisting of tooth tip, holder, retaining ring and retaining bolt.





TOOTH VERSIONS

SINGLE-LEG WELD-ON HOLDER



DOUBLE-LEG WELD-ON HOLDER







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CHOOSING THE RIGHT SIZE OF BUCKETS, QUICK COUPLERS AND MOTORS

When selecting an attachment, a tilt coupler or a quick coupler, it is essential to determine the most suitable size. Every excavator has a specific operating weight. Therefore the device that is attached to the excavator arm must also be suitable for this.

In addition, excavator manufacturers have specifications regarding the general dimensions and filling volume of the attachment. If attachments are too large and, above all, too heavy for an excavator, the load at the front of the excavator arm can become too much. In the worst case the excavator can even tip over.

Similarly, certain sizes of quick couplers and tilt couplers are assigned to certain bucket sizes. Other combinations are normally possible, but are not technically optimised for use.

BUCKET SIZES

Excavator- operating weight [t]	HENLE backhoe bucket class	HENLE ditch-cleaning bucket class	QuickChange quick coupler sizes
0.5 to 1	Class 0	Class 0	QC01
1 to 2	Class 1	Class 1	QC01
2 to 2.5	Class 2	Class 1S	QC03
2.5 to 3.8	Class 2S	Class 2	QC03
3.8 to 5	Class 3	Class 3	QC03
5 to 6.5	Class 3S	Class 3	QC03
6.5 to 8.5	Class 4	Class 3S	QC08
8.5 to 12	Class 4S	Class 3S	QC08
12 to 16	Class 5	Class 4/4S	QC10
16 to 21	Class 5S	Class 5	QC10
21 to 26	Class 6	Class 6	QC21/25
26 to 30	Class 6S	Class 6S	QC21/25
30 to 36	Class 7	Class 7	QC21/25
36 to 45	Class 7S	-	QC21/25

SIZES OF QUICK COUPLERS AND TILT MOTORS

Excavator operating weight [t]	QuickChange quick coupler sizes	PowerTilt motors	HKS motors
1 to 2	QC01	PT4.5 to 1.8 t	BV85 to 1.8 t BV100 to 2 t
2 to 2.5	QC03	PTO30	BV 100
2.5 to 3.8	QC03	PTO50	BV 115
3.8 to 5	QC03	PTO50	BV 125
5 to 6.5	QC03	PT070	BV 125 to 6.2 t BV 130 to 6.5 t
6.5 to 8.5	QC08	PT 100	BV 130 to 7.5 t BV 160 to 10 t
8.5 to 12	QC08	PT 100 to 10 t	BV 160 to 10 t BV 200 to 12 t
12 to 16	QC10	PT 180	BV240
16 to 21	QC10	PT 180 to 18 t	BV250
21 to 26	QC21/25	-	BV260
26 to 30	QC21/25	-	BV270 to 29 t
30 to 36	QC21/25	-	BV290 to 34 t BV300 to 38 t
36 to 45	QC21/25	-	BV300 to 38 t BV350 to 50 t

SIZES OF OILQUICK ADAPTER

Excavator- operating weight [t]	Adapter OilQuick
1 to 5	OQ40
1 to 6	OQ40-5
5 to 12	OQ45-5
8 to 15	OQ60-5
14 to 22	OQ65
15 to 28	OQ70
18 to 32	OQ70/55
25 to 43	OQ80
40 to 70	OQ90

SIZES OF LIEBHERR ADAPTER

Excavator- operating weight [t]	Adapter Liebherr
8 to 18	SW33
14 to 30	SW48
28 to 45	SW66
45 to 60	SW77



DIGGING FORCES ON BACKHOE BUCKET EXCAVATORS

In earthmoving, we speak of different digging forces. When soil is loosened and loaded these forces come into play. They determine the performance of the machine, depending on the engine power and the deflection mechanism, which is located between the digging vessel and the machine itself. It is essential to always calculate using the same method to ensure comparability.



HENLE BACKHOE BUCKET VERSIONS

We have developed two versions for our backhoe bucket in the 12-to-45-ton range: the LH and the SW version. A bucket should always harmonize with the respective attachment. Therefore, our bucket shapes are specifically adapted for different mountings.

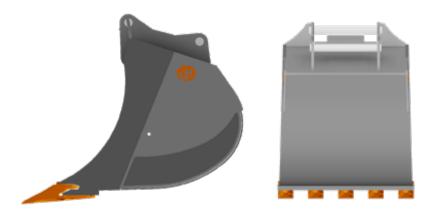
The LH version is particularly well-suited for Verachtert mountings, Liebherr mountings as well as mountings that are suitable for direct attachment.

The SW version is ideal for attachments with quick coupler systems such as OilQuick or Lehnhoff. It enables a different angle, which is perfect for these attachments. The mini excavator buckets have their own shape. It ranges from 0.5 to 12 tons and is tailored to the requirements in this area.

It is important that the interplay between the mounting and bucket functions smoothly. This way HENLE can guarantee the promised quality.



SW-VERSION AND LH-VERSION IN COMPARISON

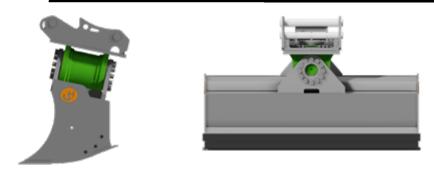


Backhoe buckets in the so-called "SW-Version" are specially designed for Lehnhoff or OilQuick adapters.



Backhoe buckets in the so-called "LH-Version" specially designed for Liebherr or Verachtert adapters as well as direct attachment.

DITCH-CLEANING BUCKET AND SLOPE BUCKET IN COMPARISON



DITCH-CLEANING BUCKET

Ditch-cleaning buckets have a lower volume than slope buckets and are intended for use in easy or medium-hard soils. They tend to weigh slightly less than slope buckets.





SLOPE BUCKET

Slope buckets are a combination of ditch-cleaning and tilt backhoe buckets. They have a higher volume than a ditch-cleaning bucket and are intended for use in harder rock.



DEMOLITION AND SORTING BUCKET WITH PERFORATED BOTTOM

SINGLE-ACTING VS. DOUBLE-ACTING CYLINDER

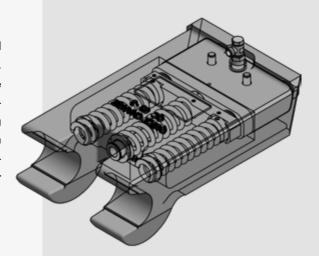
Demolition and sorting bucket with a perforated base are also available on the market. However, this version is not as stable and has a poorer sifting effect than a bucket with skeleton bars.

For these reasons, our portfolio only includes the standard demolition and sorting bucket with skeleton bars.



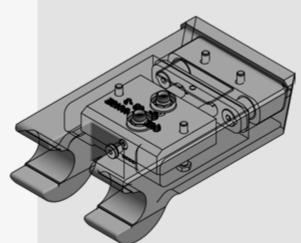
SINGLE-ACTING

The quick coupler is equipped with a single-acting cylinder. This has only one active side can therefore only open hydraulically, while the locking mechanism occurs through a spring assembly. Only one extra hydraulic line is required for the installation.



DOUBLE-ACTING

The quick coupler is equipped with a double-acting cylinder. This has two active sides and can therefore open and close the quick coupler hydraulically. Two extra hydraulic lines are required.





BREAK FREE POWER

TEARING FORCE

The force generated by the cylinder at the tip of the tooth is referred to as the breakaway force. It is therefore the force required to move the load from a static to a dynamic state. It is measured tangentially to the circular arc with the radius (X). It is important to position the bucket so that the momentum generated by the bucket cylinder and deflection mechanism is at its greatest. In the case of rotary movements, one speaks of a breakaway moment.

The tearing force of the excavator arm is the force exerted by the arm cylinder at the tip of the tooth. It is measured tangentially to the circular arc with the radius (X). To obtain the maximum value, the axis of the working direction of the handle cylinder is set at right angles to the imaginary connecting line between the excavator arm cylinder pin and the attachment pins of the arm. The bucket is aligned in such a way that the torque is triggered by the bucket cylinder and the deflection mechanism is at its greatest.



HOW IS STEEL MADE?

WEAR

Several steps are necessary to produce ready-to-use steel. The process begins in the coking plant. There, hard coal is processed into coke. This porous fuel with a high carbon content is used as a reducing agent for steel production. In combination with ore in the form of pellets and lime as a slag-forming agent, liquid iron is produced at a temperature of around 1,400 degrees Celsius.

The molten raw iron is then transported to the steelworks in so-called torpedo wagons and simultaneously cleaned of sulfur. On average, the wagons can hold between 160 and 320 liters of molten iron and usually come in a train of four to six wagons.

The large LD blowing converter refines the raw iron into steel. This is done by oxidation so that the carbon content is reduced from around 4 to 0.1 percent. Appropriate alloying agents are also added to ensure the desired quality and composition. 1,700 degrees Celsius – that is the temperature of the molten steel during casting. Post-treatment serves to further optimize the properties and occurs in a ladle furnace by vacuum degassing.

Modern machines then cast the steel into heavy plates and thin sheet slabs, which in turn are processed into sheet metal in a rolling mill. The rolling mill consists of a quarto and edge rolling mill. In the quarto mill, the sheet metal is rolled to the desired thickness. The edge rolling mill is responsible for the width of the sheet. The sheets are then trimmed to the correct length. High strength and wear resistance combined with better welding and processing properties are achieved, which are heat-treated and/or hardened after rolling.

Wherever work is carried out in soil and rock, the tools will show signs of wear over time. This wear on the product can never be completely prevented, no matter how robustly an attachment is built. It is a natural part of the life cycle of a product. However, various measures can be taken to delay this "stage of life". These generally include the use of high-quality and wear-resistant materials. Another way to avoid wear and tear is to equip the product with wear parts – you can find out more about this on the next page.

Wear usually occurs on the points that are subjected to the most stress during daily work: on the cutting edge, the teeth, or the bottom.





PROFILE CUTTING EDGE



FRONT-INSERT BLADE



SCREW ON AND REVERSIBLE BLADE



WEAR STRIPES



WEAR PARTS GUIDE

A variety of so-called wear parts can be used to equip attachments. Wear parts are individual components that are installed on or in the attachment in order to improve the wear resistance of the respective product.

Wear parts are there to wear out: they protect the actual product and can often be replaced. This means that an attachment can continue to be used after these elements have worn out by only replacing the wear parts. This makes the entire product more durable.

TOOTH SYSTEM



SIDE SHROUDS



/ HEEL SHROUDS



LIP SHROUDS







RETROFITTING AN ADDITIONAL HYDRAULIC CIRCUIT ON THE EXCAVATOR WITH THE INSTALLATION KIT

The legislator sets the standards for earth moving machines, which also includes the rule that all hydraulic quick couplers must have a wedge-shaped locking system that is permanently subjected to force. This means, a separate hydraulic circle is used for the function quick coupler open/close. If not already installed, an excavator must be retrofitted. The installation kit that is sold by HENLE Baumaschinentechnik GmbH gives you a basic kit consisting of several parts which must be used: 4/2-way solenoid valve, distribution block, electric switch with buzzer.

QCprotect™

NEW HENLEprotect **TECHNOLOGY**

When working on a construction site, you are exposed to a wide variety of risks every day. Your safety is important to us – that is why we have developed the QCprotectTM.

This hydraulic quick coupler system is equipped with the new HENLEprotect technology: its opening is narrower because of the additionally added claw. This prevents the coupler from falling from the attachment. If a load is lifted despite a locking error, the QCprotectTM keeps it in place even in the most critical position: when the excavator arm is fully extended.

HT-ADAPTER

Our HT-Adapter (high-low mount) is made up to two identical shafts with a recess. This allows the attachments to be rotated by 180 degrees. It is therefore possible to move it in both directions – both towards the machine and away from the machine. This enables more flexible use in day-to-day work. The HT-Adapter is available as optional equipment.

FLEXIBLE USE WITH SCREWED TOOTH SYSTEM

It is advisable to use a bolted tooth system when working in very light soil. Thereby the teeth can be easily unscrewed, and the bucket can be used with a bare cutting edge. In addition, worn teeth can be replaced very quickly.

LONGER SERVICE LIFE WHEN USED IN A RENTAL FLEET

The HD backhoe bucket is more suitable for a rental fleet than a standard backhoe bucket. Due to how its equipped, the HD backhoe bucket can be used for a longer period in a rental fleet, whereby the purchase costs are comparatively low.

The protruding base and the self-sharpening tooth system of the HD backhoe bucket significantly reduces wear, which means its overall lifespan is prolonged.

HIGHLY WEAR-RESISTANT HD-STEEL

Our HD buckets are made of highly wear-resistant steel (HB450/HB500). The higher the integer, the harder the material. Although the product appears more expensive at first glance, an investment in wear-resistant side cutting edges and bases quickly pays off. The bucket is more robust, wears less and can therefore be used for a longer period of time. Also, in terms of sustainability, you should consider our heavy-duty line, since it encompasses economic advantages, especially for rental parks. Satisfied customers included.

USE OF A FRONT-INSERT BLADE

A blade can be retrofitted to an existing bucket with teeth. As a rule, it is welded to the existing teeth under the tooth caps. The main advantage of this is that the blade can be changed quickly. The blade can be removed via the tooth locks. With the blade, the buckets have a smooth edge, which is ideal for working in cable construction where cables should not be damaged. It also has a larger volume thanks to the attachment blade – practical for light earthwork.

HIGH WEAR RESISTANCE WHEN WORKING IN MEDIUM-HEAVY SOILS DUE TO A WELDED TOOTH SYSTEM

A welded tooth system is advantageous when working in heavy soil. The fact that the tooth holder is firmly welded to the blade of the bucket, means the cutting edge is not only protected, but the tooth system as such also

holds better overall under higher loads.

We recommend a welded tooth system for buckets on excavators with an operating weight from 2 tons upwards (HENLE class 2).

SINGLE TOOTH HOLDER VS. DOUBLE TOOTH HOLDER

Our buckets can be equipped with both a single and double tooth holder, according to customer requirements.

A single tooth holder is also referred to as an internal tooth system. It is situated on the cutting edge and thus enables a smooth underside of the blade.

A double holder is welded to the top and bottom of the cutting edge. It encloses the blade and therefore has more contact surface to the bucket.

EQUIPPED WITH ESCO ULTRALOK TOOTH SYSTEM

The ESCO UltraLok tooth system is a patented system with an included safety device. Its high-quality workmanship and optimized shape leads to a longer service life as well as a firm and tight fit. The teeth are easy to change and can be handled without special tools. From an economic and sustainable perspective, it is definitely worth investing in a durable and stable product.





WEAR PACKAGE ADVANTAGES AND USE

The Backhoe Bucket can be equipped with an additional wear package. This includes two longitudinal strips in the digging direction and several transverse strips of HB500. These wear strips are significantly thicker than the bucket bottom, so that their wear lasts longer. The wear package is worthwhile when working in harsh conditions because the bucket is not only durable, but also perfectly suited to this area of application.

Our VHD bucket is always equipped with a wear package. This includes two longitudinal strips in the digging direction and several transverse strips made of HB material, which protect the actual body. This has the advantage that the worn material can be easily removed after wear and new wear strips can be attached. Alternatively, the entire floor would have to be replaced. In addition, the strips are significantly thicker than on the bottom of the bucket, which means the wear down takes longer.

FOR WORKING WITH RUBBLE: STONE SETTING NOSE ON THE STONELAYING BUCKET OR RIPPER TOOTH

Working in the mountains usually involves difficult conditions: you are working on a slope, and you also have to stop or hold debris in place. This problem can be solved by using "stone setting noses" on the stone-laying bucket or ripper tooth. These are welded onto

the back of the bucket and serve the purpose of holding and moving boulders.

DITCH-CLEANING BUCKET NOT SUITABLE FOR HEAVY WORK

The ditch-cleaning bucket is perfect for loose soil material as well as for surface grading and modeling. However, heavy work should not be carried out with it. Its wide design means that a lot of weight is reached very quickly. If heavy work needs to be caried out, our universal bucket is the better choice. It combines the features of a ditch-cleaning bucket and a backhoe bucket and can therefore be used flexibly.

Rear cutting edge

The rear cutting edge is an additional welding cutting edge, that is attached to the back of the bucket.

As the ditch-cleaning bucket is often used for surface straightening surface, a rear cutting edge is standard for this type of bucket from a certain size up. This allows you to create a level surface quickly and easily. However, it should be noted that this additional component always means more weight. For small sizes, it may therefore be disadvantageous.

REINFORCEMENT OF THE SECOND FLOOR FOR THE LOADING BUCKET

To increase the wear resistance of the universal bucket, a second bottom can be attached to

the bucket. A double underside has several advantages. In particular, the actual bucket bottom is optimally protected from wear and tear and the bucket itself remains intact for a long time. The second base can be replaced when worn down. While this is happening, you can still continue working with the existing bucket.

HEAVY USE: THE LOADING BUCKET AS AN ALTERNATIVE

Due to its design, a ditch-cleaning bucket is not ideal for heavy-duty applications. Instead, in this particular case, the universal bucket is the ideal alternative to the rigid ditch-cleaning bucket.

The loading bucket was developed for use in heavier soils and is therefore less susceptible to wear or breakage.

HEAVY USE: THE TILT BACKHOE BUCKET AS AN ALTERNATIVE

Due to its design, a ditch-cleaning bucket is not ideal for heavy-duty applications. Instead in this case, the swivel bucket is the ideal alternative to the ditch-cleaning bucket. The tiltrotator bucket was developed with a view for use in heavier applications and is therefore less susceptible to wear or breakage.

SCREW ON AND REVERSIBLE CUTTING EDGE

The screw-on reversible cutting edge is crewed under the main cutting edge and thus protects it from wear. The holes are located in the center. This has the advantage that if one side wears one side, as the name suggests, can be turned, and used again. Only after both sides are blunt the blade needs to be replaced. As it is drilled and not welded, the replacement is less time-consuming than it would be with a welded main blade.

TIGHTENING OF SCREW CONNECTIONS REGULARLY

The motor is bolted to both the flanges and the mounting plate. These screws should be checked and tightened regularly otherwise you may run the risk of losing them. Plus, it is important to pay attention to the motor manufacturers instructions. They stipulate how much torque the screws must be tightened to, so that they are tight enough.

REGULAR BEARING

It is important to replace the bolts and bearings before the equipment is worn out. Otherwise, the head could be possibly damaged. Replacing this is much more costly than maintaining the wear parts. These parts are specially designed for wear and are therefore very easy to replace. They are also fitted with a spiral, which makes it easier to lubricate the head and thus ensures a smooth workflow. Overall, care should be taken to check bolts and bearings regularly and replace them in good time.





WORKING ON TIGHT CONSTRUCTION SITES WITH A TILT BACKHOE BUCKET

Due to the tapered shape of the Tiltrotator Bucket, this attachment is ideal for working on confined construction sites, e.g. in city centers or when building residential structures. Furthermore, the tapered design makes it possible to work efficiently on existing house walls or buildings without damaging them.

PROFILE STEEL

Profiled steel serves as additional wear protection. It is mounted as a sort of buffer in front of the cutting edge and can protect the undamaged edge as well as prevents further wear from happening. It is easy to replace and usually extends the life of a cutting edge.

WORKING WITH GPS-SUPPORT

The use of a motorized bucket is particularly useful when the excavator is supported by GPS. In contrast to a tiltable bucket with cylinders, the tilt motor can hold positions more accurately. The fact that it is also significantly less maintenance than a cylinder and develops very little play, means the application works perfectly with a GPS. Thanks to the combination of GPS and motorized bucket, the attachment itself can be held in the exact position to create complex formations or carry out precise work.

THE SPECIAL ATTACHMENT FOR THE MOUNTAINS: STONE-LAYING BUCKET

The stone-laying bucket is an extremely unusual attachment that is intended for use in the mountains. With regard for this area of application, the bucket has a clearly pulled forward shape. This design means that entire boulders can be easily picked up and laid into place with the bucket.

CHANGING THE TOOTH TIP IN TIME

Replacing the tooth tips in good time, is also worthwhile from an economic point of view. If a tooth is sharp and pointed, it slides with little resistance into the soil. If, on the other hand, it becomes blunt, the effort of the machine increases immensely. This increases fuel consumption, which also has an impact on costs. The costs for the new teeth are put into perspective with increasing wear and the associated fuel consumption. It therefore makes sense to replace the tooth tip sooner rather than later.

SPECIAL TOOTH FOR CLEARING WORK

The ripper tooth can be used for clearing work. We have developed a special tooth with a sharpened blade that is optimally tailored for this application. It is used in a similar way to a root cutter. You can also easily convert your existing ripper tooth since the actual tooth tips are interchangeable. That is what flexible work is all about!

MORE ECONOMICAL DUE TO OPTIMAL DESIGN

The clay bucket has cut-out sides. The cut-outs change the ratio of surface area to volume and thus reduces friction. The bucket penetrates the soil and with less resistance. This means that the machine requires less effort and therefore works more fuel-efficiently. In addition, the surface generated by the cut-out parts is ideal to safely transport long stone slabs.

SPADE BUCKET WITH EXCHANGEABLE CUTTING EDGE

The spade bucket is perfect for working close to obstacles. The tapping can be carried out vertically directly against the wall. To be even more flexible, both the welded-in and the screwed-on reversible blades have holes. These blades can be pushed out of the bucket in both directions, to bypass cables or pipes and still work precisely.

CHOOSING THE RIGHT BAR DISTANCE

Depending on the application, it may be helpful to space the bars on the demolition and sorting bucket individually. Adjusting the bar spacing has an influence on the number of bars needed. In consultation with the customer, the correct bar spacing can be individually determined and specified. The technical adaptation is implemented constructively in order to meet the customer's requirements.

SKELETON BARS OR CROSS BARS - MAKING THE CORRECT DESCISION

Skeleton bars are made of HB material and their stability makes them ideal for demolition work. However, if sifting work is to be carried out, we recommend the use of a Demolition and Sorting Bucket with cross bars.

DEMOLITION AND SORTING BUCKET WITH CROSS BARS

The cross bars are ideal for sifting and sorting processes. It is designed for sorting and recycling rock material and demolition waste. However, heavy demolition work should not be carried out with them, as the bars could become unstable and bend.

UNIVERSAL AND STANDARD SHELLS - MAKING THE CORRECT DECISION

The demolition and sorting gripper can be produced with the universal or standard shells. You should choose the version that best suits your application.

Universal shells are closed. They are therefore suitable for typical gripper work, for example in gardening and landscaping.

Standard shells, on the other hand, are shells with a so-called perforated base. This means that the shells are not closed but allow sifting and sorting. They are also suitable for demolition work.





INDIVIDUALITY WITH THE GRAB RAKE

The grab rake can be manufactured with a different number of legs. Depending on the purpose and area of application, it may be necessary to have a different number of legs on the rake. The customer can choose individually.

joint is required if there is no universal joint or mount available. The universal joint is adapted to the rotator of the gripper.

The universal joint is required so that the gripper can swing freely.

INDIVIDUALITY WITH EXCAVATOR RAKE

The grab rake can be manufactured with a different number of legs. Depending on the purpose and area of application, it may be necessary to have a different number of legs on the rake. The customer can choose individually.

GRIPPER ADAPTER WITHOUT UNIVERSAL JOINT

A gripper adapter without the Universal Joint is the term given to the connecting piece of equipment located between the quick coupler and the gripper adapter. The version without the universal joint is required if a joint or gripper mount is already present on the gripper. The gripper adapter is adjusted to the existing joint or mount.

GRIPPER ADAPTER WITH UNIVERSAL JOINT

A gripper adapter with universal joint is the term given to the connecting piece of equipment located between the quick coupler and the gripper adapter. The version with the universal

OIL CONNECTION

An oil feed-through on a tilt motor with an integrated oil line and does therefore not need any hydraulic hoses. This means that working with the tilt coupler becomes easier. This is achieved by the integrated oil line, for there is a higher risk that any installed hydraulic hoses could potentially move with the motor and initiate damage. The integrated oil line is best used with a hydraulic quick coupler.

LIGHT VERSION OF THE TILT BACKHOE BUCKET

Various sizes of the tilt backhoe bucket are also available as a lightweight version. Meaning the bucket is made from lighter materials and still has the same dimensions as the standard size. A lightweight version is mainly used when the bucket weight needs to be kept as low as possible.



ADJUSTABLE THROTTLE

A throttle valve is used in hydraulics to regulate the speed of a piston. With the incompressible hydraulic oil, the inflow and flow is regulated in such a way that both the retraction and extension of the cylinder can be regulated separately.

BAR DISTANCE

(DEMOLITION AND SORTING BUCKET)

Bars that are used instead of a continous base on a bucket. The distance between the individul bars determines the bar spacing. The bar spacing depends on the material to be sorted and can be selected individually.

BREAK FREE POWER

The force that is exerted by the bucket cylinder at the tip of the bucket tooth.

BULK WEIGHT

Average weight per unit volume of a loose, noncompacted material.

CAPACITY (WITH BUCKETS)

Capacity clustered according to SAE standard. The accumulation is determined by calculating a heap above the knife and the upper edge of the bucket by calculating a heap at 45°.

Over the connecting line between the knife and the upper edge of the spoon is also calculated at an angle of 45°, so that the accumulation on all four sides is bevelled at 45°. Teeth are not taken into account.

This does not necessarily mean that this amount of water can be filled into the spoon. can be filled into the spoon. Depending on the shape of the sides parts of the bucket, significantly less water can can be filled.

CLAY BUCKET

Usually a bucket with narrow width. Through the elongated and laterally cut out version, clay is definitely easier to remove from the vessel.

CUTTING EDGE

Also cutting blade. With and without welded/ screwed tooth system available.

DIRECT ATTACHMENT

Designation for the adapters on machines that do not have a quick coupler fitted. Also known as the bolted version.

DOUBLE-ACTING HYDRAULIC CYLINDER

In double-acting cylinders, there are two opposing piston surfaces that are pressurised with hydraulic fluid. The cylinder therefore has two active directions of movement. The two active sides allow the quick coupler to be opened and closed hydraulically. Two extra hydraulic lines are required for installation.

DOUBLE BOTTOM OR SECOND BOTTOM

Is used to reinforce the bucket bottom and replaces wear stripes. The advantage of a double bottom is a smooth undersurface.

DOUBLE TOOTH SYSTEM

A welded or bolted tooth system, that rests against the top and bottom of the cutting edge.

EJECTOR

Available as a mechanical or hydraulic version.

An ejector is generally used for narrow cutting widths.

FEM

FEM is an internationally standardised dimension for the definition of forks. The FEM classes (I — IV) refer to the load-bearing capacity of the forks. In addition, the height of the suspension of the forks can be indicated by A (lower) or B (higher).

FORK TOOTH

Two-legged screw-on tooth that encloses the cutting edge.

FRONT CUTTING EDGE

Generally used for excavator buckets without teeth. The bottom of the bucket is extended to the front.

FRONT-INSERT BLADE (CLOSED)

Cutting edge, that is welded to an existing tooth system. With a closed design, there is no gap between the weld-in cutting edge and the attachment blade.



GRIPPER ADAPTER

Adapter that is required for attaching a pendular grapple to the excavator with a quick coupler.

HB400 STEEL

Wear-resistant sheet metal with Brinell hardness of 360 to 440.

HD-BUCKET

"HD" stands for "Heavy Duty". A HD-bucket is an additionally reinforced bucket.

HIGHLY WEAR-RESISTANT STEEL

Trademark for wear plates. Available in HB400/HB450/HB500/HB600.

HQ QUICK COUPLER

HENLE quick coupling system compatible with OilQuick. Mechanical or hydraulic version available.

HT-ADAPTER (QUICKCHANGE)

"HT" stand for high/low adapter. This means that the attachment can also be mounted rotated by 180°.







LEG PROTECTION

A replaceable leg protection is with the ripper tooth on our larger ripper teeth. A leg protection is an additional reinforcement and protects the ripper tooth leg from wear and damage.

LIFTING HOOK ADAPTER

Adapter with eyelet, shackle and tilt hook for lifting loads.

LIMITED DIGGING DEPTH

The mounting bracket is wider than the cutting width of the attachment. This limits the digging depth of the attachment.

LH-VERSION

Bucket design, ideally suited for attachments with Verachtert and Liebherr adapters or for direct attachment.

LOCKING VALVE WITH OVERPRESSURE FUNCTION

It blocks both lines up to a certain pressure. If there is increased pressure in the lines due to external influences, e.g. pressure on one side of the bucket edge, the pressure relief valve releases the pressure.

MANIFOLD

Designation of PowerTilt, which refers to an arrangement of oil lines. This makes it possible to attach the oil connections for the rotary movement of the motor and for a hydraulic quick coupler on one connection block. The connection block is attached to the engine in such a way that the hydraulic hoses can simply be routed to the excavator connection.

MINI-Z 1 & 2

Single-sided scre-on tooth. Internal contact.

OIL CONNECTION

Also known as a rotary unit or oil feedthrough.

An oil connection is an oil line that is integrated into a component and the oil is passed axially through a rotating part. The oil connection can be equipped with one or more oil lines.

With the help of an oil connection, it is avoided that hydraulic hoses move with the rotary movement and therefore can prevent damage.

OPERATING WEIGHT

Total excavator weight including all lubricants, fuel and driber.

PERFORATED BOTTOM (DEMOLITION AND SORTING BUCKET)

Bottom with burnt-out grid. As with the bar version, the hole size depends on the corresponding application.

PISTON ROD PROTECTION

Protective tube over the piston rod of a cylinder to prevent damage.

QUICKCHANGE (QC) QUICK COUPLER

Quick coupler series from HENLE Baumaschinentechnik GmbH. Compatible with Lehnhoff system.

QUICK COUPLER

Quick coupler series from HENLE Baumaschinentechnik GmbH. Compatible with Lehnhoff system.

REAR CUTTING EDGE

Welded blade on the loading shovel in extension to the ground surface. The back cutting edge is used for levelling and cleaning of asphalt surfaces.

The back cutting edge is also known as a levelling knife, slope cutting edge or levelling blade.

ROTARY MOTOR

Hydraulically driven gearbox that can tilt various excavator attachments horizontally. The deflection of the rotary motor is called the tilting range, which can range from 100 to 180 degrees. The tilt movement is represented as left/right deflection and is half of the tilting range.

SANDWICH PANEL

Also known as a duplex panel. An add-on panel with superstructure is used when it is not possible to drill holes in a single panel.

SCREW ON BLADE

Cutting edge, which is screwed onto the weldin blade. Possible to use as an reversible blade (two cutting edges) or blade (one cutting edge).

SCREW ON AND REVERSIBLE BLADE

Blade steel with two cutting edges. It is usually drilled in the centre. The reversible blade can be rotated, which increases the amount of wear.



SINGLE-ACTING HYDRAULIC CYLINDER

Single-acting hydraulic cylinders have only one inlet opening for hydraulic oil. The oil flows into the cylinder chamber which pressurises the cylinder piston on one side. The force is transmitted to the outside via the piston rod. The piston is usually reset by external force or spring force. As the single-acting cylinder only has one active side, the quick coupler can only be opened by a spring assembly. Only an extra hydraulic line is required for installation.

SINGLE TOOTH SYSTEM

Also known as an internal tooth system, which can be welded or screwed and is attached to the cutting blade.

It enables a smooth underside of the blade.

SHACKLE

U-shaped bracket for connecting two parts, lockable with screw and socket pins. Part of the lifting hook adapter.

STIFFENING SICKLE

Usually fitted to ditch-cleaning buckets. As ditch-cleaning buckets have a significantly larger cutting width than backhoe buckets stiffening sickles are inserted in the body to increase torsional rigidity.

SWIVEL HOOK

Hooks for picking up loads via appropriate lifting gear. Part of the load hook adapter.



SW-VERSION

Bucket design, ideally suited for attachments with OilQuick or Lehnhoff adapters.

TEARING FORCE

It is the force exerted by the arm cylinder on the tooth tip of the bucket.

TILT COUPLER

In contrast to a tilt motor, which is installed in an existing bucket vessel the so-called "sandwich construction" of the tilting device consists of a tilt motor, a quick coupler and a tilt adapter. It is adapted to the excavator. With this design the tilt drive is the central component, under which a quick coupler system is installed. Above the drive is the stick connection to the carrier. With this design a tilt range from 140° to 180° is realised.

TILT MOTOR

A tilt motor allows each attachment to be tilted to the left and right.

TILT RANGE

Our ditch cleaning buckets and tilt backhoe buckets with hydraulic cylinders have a tilt range of 45° on both sides. Ditch-cleaning buckets or tilt backhoe buckets with a motor have a tilt range of 50° on both sides. A motor in combination with a quick coupler has up to 90° on both sides. From the QC10 only 70°.

TILTROTATOR

Combination of a rotating device and tilt coupler. The tilt coupler can be either a motor or cylinder.

TRANSPORT HOOKS

A transport hook is a device on the excavator bucket. It allows the bucket to be picked up and transported by a second bucket attached to the excavator.



UNDERWELD BLADE

Cutting edge, which is welded to the underside of the blade.



UNIVERSAL JOINT

A universal joint is required for mounting a pendulum to the excavator. This ensures that the gripper can move in all four directions.

WEAR PACKAGE

Includes wear stripes in addition to the bucket or a double bottom made of wear-resistant material.

WEAR STRIPES

Used to reinforce the bucket bottom. They can be attached lengthwise or crosswise.



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