

**RADLINGER**



mechanical  
engineering

# PRODUCT RANGE



Unique Construction Work Efficiency

# Company profile



The success story of the Rädlinger group began in 1963 when the truck driver Josef Rädlinger bought himself a truck and set up his own business as a haulage contractor to deliver gravel.

Today, a good 45 years later, Josef Rädlinger is at the head of a group of companies employing over 1000 people and embracing one of Germany's major civil engineering companies with numerous branches in southern Germany. The other main pillars of the Rädlinger group include the concrete plant, the asphalt plant and the mechanical engineering company which in terms of quality ranks among the leading manufacturers of equipment for construction machinery in the German-speaking region.

Rädlinger Maschinen- und Anlagenbau GmbH applies the highest quality standards to develop and manufacture backhoe buckets, quick coupler systems, tilt motors and a variety of other innovative products designed to help the full potential of construction machinery to be realized. Benefiting from field experience gained by the Rädlinger building contractors company, patented construction machinery equipment of all kinds is being supplied all over Europe today.



In the course of its history of close on 20 years, Rädlinger Maschinen- und Anlagenbau GmbH has accumulated a wealth of experience in the fields of design and development, material selection, and manufacture.

In addition to providing tried and proven standard solutions the company also designs and manufactures products on a made-to-order basis. Rounding out the wide spectrum of Rädlinger services are regeneration of manifestations of wear, repair of break damage, and procurement of spare parts.

## **Our strong points – to your advantage:**

- Innovation
- Competent advisory service and customer support
- Practice-oriented order handling
- Customized engineering
- State-of-the-art production process focused on quality
- Efficient logistics





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## Backhoe Bucket ("Standard")



You are looking for a bucket which is favourably priced yet features all the advantages and the proverbial ruggedness typical of all our products? - We have the answer to your needs!

### **Versatility**

The "Standard" backhoe bucket is ideally suited for application as an all-round work tool

### **High strength**

The "Standard" backhoe bucket performs well even in severe applications

### **Economic efficiency**

The bucket is remarkable for its excellent price / performance ratio in particular



Optional features: 5-tonne, 10-tonne, 18-tonne load hooks, nesting cutting edge

# Technical Data

Cutting width [mm]	Capacity SAE [L]	No. of teeth	Weight approx. [kg]
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## Size class 0,1 (-1,5 tonnes operating weight)

300	35	3	50
400	40	3	55
500	58	4	60

## Size class 0,3 (2,0 to 3,0 tonnes operating weight)

300	45	3	57
400	60	3	65
450	70	3	70
500	80	4	75
600	100	4	80

## Size class 0,5 (3,5 to 5,0 tonnes operating weight)

300	80	2	85
400	110	3	100
450	125	3	105
500	140	4	115
600	170	4	125
800	200	5	150

## Size class 0,7 (5,5 to 7,0 tonnes operating weight)

300	155	2	160
400	160	3	190
500	205	3	210
600	250	4	230
700	300	4	260
800	350	5	280
900	400	5	310
1000	450	5	330

## Size class 0,9 (7,5 to 10 tonnes operating weight)

300	150	2	210
400	210	3	245
500	270	3	270
600	330	4	300
700	380	4	330
800	440	4	355
900	490	5	390
1000	550	5	415
1200	610	5	470

Cutting width [mm]	Capacity SAE [L]	No. of teeth	Weight approx. [kg]
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## Size class I (11 to 16 tonnes operating weight)

400	270	2	340
500	350	3	390
600	430	3	420
700	520	4	470
800	600	4	510
1000	770	5	600
1200	940	5	670
1400	1100	5	750

## Size class II (17 to 22 tonnes operating weight)

400	340	2	520
500	450	3	580
600	600	3	635
800	800	4	755
1000	1000	4	875
1200	1200	5	985
1400	1400	5	1030
1600	1600	6	1130

## Size class III (23 to 30 tonnes operating weight)

500	520	3	690
600	650	3	755
800	910	4	905
1000	1160	4	1035
1200	1420	5	1185
1400	1680	5	1315
1600	1940	6	1465

## Size class IV (31 to 45 tonnes operating weight)

800	950	4	1140
1000	1180	4	1300
1200	1420	5	1490
1400	1660	5	1650
1600	1950	6	1885



# Backhoe Bucket ("Custom")



The "Custom" backhoe bucket is a premium product made by Rädlinger. The work tool owes its world-leading position to the combination of high-quality materials and many years of know-how.

## Maximum productivity

The shape of the bucket is the result of years of development and testing. It is of overriding importance for the loadability of the bucket. The result: Higher productivity of your excavator

## Customization

The "Custom" backhoe bucket can be tailored to suit special requirements and accepts a variety of tooth systems and cutting edges

## Scope of application

Exacting jobs in the quarrying industry as well as in demolition which involve high break-out forces and heavy wear

## Design features

- Extremely robust construction using high-quality materials
- Cutting edge and side cutters made of special steel
- Cutting edge with hard facing at the front
- Side cutters with hard facing at the bottom
- Side protectors as well as transverse wear strips of H-400/500
- Heavy-duty and deep side cutters for transmission of forces from bowl to cutting edge
- Corner tooth adapters angling slightly outward and bucket body tapering to the rear for optimum free cutting performance of the bucket



\* Version: l = light-duty, s = standard-duty, h = heavy-duty  
Optional features: 100% 400 HB steel; drain slots; 5-tonne, 10-tonne, 18-tonne load hooks; 400 HB floor plate; ball track; various grades of hard facing  
Tooth system: Choice of cutting edge, tooth-type edge, CAT, Bofors or Esco systems  
Intermediate sizes and special designs are available on request.

# Technical Data

Cutting width [mm]	Capacity SAE [L]	No. of teeth	Weight *Version (l/s/h)
<b>Size class I</b> (11 to 16 tonnes operating weight)			
400	270	3	270 / 290 / 300
500	350	3	290 / 320 / 350
600	430	3	310 / 350 / 400
700	520	4	330 / 380 / 450
800	600	4	350 / 410 / 500
1000	770	5	390 / 470 / 600
1200	940	5	430 / 530 / 700

<b>Size class II</b> (17 to 22 tonnes operating weight)			
400	340	2	350 / 385 / 470
500	450	3	375 / 420 / 510
600	560	3	410 / 455 / 550
800	770	4	480 / 525 / 630
1000	990	4	550 / 595 / 710
1200	1210	5	620 / 665 / 790
1400	1430	6	690 / 735 / 870
1600	1640	6	760 / 805 / 950

<b>Size class III</b> (23 to 30 tonnes operating weight)			
600	830	3	970 / 950
800	110	4	1030 / 1100
1000	1380	4	1200 / 1250
1200	1650	5	1340 / 1400
1400	1930	5	1450 / 1550
1600	2200	6	1570 / 1700
1800	2480	6	1680 / 1850

<b>Size class IV</b> (31 to 45 tonnes operating weight)			
1000	1790	3	1530
1200	2150	4	1700
1400	2510	4	1870
1600	2870	4	2020
1800	3230	5	2200
2000	3590	5	2350

Cutting width [mm]	Capacity SAE [L]	No. of teeth
<b>Size class V</b> (46 to 70 tonnes operating weight)		
1400	3190	4
1600	3640	4
1800	4100	4
2000	4550	5
2200	5000	5
2400	5460	6

<b>Size class VI</b> (70 to 100 tonnes operating weight)		
1400	4010	3
1600	4590	4
1800	5170	4
2000	5730	4
2200	6300	5
2400	6870	5
2600	7450	6

**Size class VII** on request



# Backhoe Bucket with Tilt Motor



## Hydraulically tiltable

The tilt function permits additional operations on slopes to be performed irrespective of the relative position of the excavator.

## Tilt motor advantages:

- unproblematic
  - safe
  - maintenance-free
  - wear-free
  - versatile
- because of the tilting capability of the backhoe bucket for use in
- Excavations
  - Hydraulic engineering
  - Landscape work
- Transverse wear strips as standard



Optional features: 100% HB 400; load hook; hose kit; bolt-on reversible cutting edge



# Ejector Bucket



Narrow backhoe buckets of less than 400 mm cutting width are often designed as ejector buckets. In cable-laying or drainage applications, sticky materials such as loam, clay, humus, etc. are ejected by means of a hydraulically actuated ejector flap.

## Hydraulics

Hydraulic actuation through grab rotation system

## Optional features

Can be fitted with straight cutting edges or attachment edge system

## Versatility

Available with all commercial quick coupler systems and direct mounting arrangements

Cutting Width [mm]	Capacity SAE [L]	Height w/o suspension	Weight approx.
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### Size class 03/05

300	55	680	120
400	80	680	135

### Size class I

300	190	1200	380
400	260	1200	420

Cutting Width [mm]	Capacity SAE [L]	Height w/o suspension	Weight approx.
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### Size class 07/09

300	90	890	180
400	120	890	220

### Size class II

300	280	1480	460
400	385	1480	490



Optional features: 100% HB 400; slope cutter; drain slots; load hook; hose kit; bolt-on reversible cutting edge

# Ripping Bucket



## Scope of application

- Extremely severe ripping and extraction jobs involving exceptional breakout forces.
- For direct extraction and quarrying which, given increasing restrictions on the use of explosives, is a possible alternative to traditional drilling and blasting methods

## Design features

- Same as HD rock bucket though featuring walls of next highest machine class and a heavier tooth system
- Central reinforcement rib
- Projecting centre tooth serves as ripper tooth

Class	Capacity (litres)
IV - 45 t	1800
V - 70 t	2500
VI - 100 t	3500
VIS - 130 t	4500
VII - 185 t	6500
VIIS - 260 t	9000

HB 500 hard facing on the inside on request



# Skeleton Bucket



These purpose-built buckets are ideally suited for loading and sorting operations. Skeleton buckets or skeleton rock buckets are used primarily for sieving out stone, rock and sett and for recycling of construction and demolition debris.

## Versatility

The skeleton bucket is ideally suited for application as an all-round work tool

## High strength

The skeleton bucket performs well even in severe applications

## Economic efficiency

The bucket is remarkable for its excellent price / performance ratio in particular

The bucket is available with either 60 mm or 80 mm bar spacing in all size classes



Optional features: 100% HB 400; slope cutter; drain slots; load hook; hose kit; bolt-on reversible cutting edge

# Ditch Cleaning Bucket

with tilt motor, tilting 45 degrees either side



The ditch cleaning bucket with tilt motor opens up a new dimension of excavator bucket configuration. In addition to providing a great number of benefits for the user, this high-performance bucket combines maximum stability and resistance to abrasion.

## Compact design

The tilt motor takes the place of the swivel head and is thus responsible both for power transmission between excavator and bucket and for the tilting motion

## Ruggedness

The use of high-strength alloys serves to ensure outstanding resistance of the tilt motor

## Safety

The hydraulic hoses are routed directly to the tilt motor. So there is virtually no risk of the hoses getting damaged

## Plainness

The high-performance work tool dispenses with pins, cylinders and cylinder covers

## Zero maintenance

Being lubricated by the hydraulic oil of the grab rotation mechanism, the motor does not require any maintenance

## Variability

The suspension is bolt-mounted and can be replaced to suit various carrier machines

All the benefits are transferable by mounting the tilt motor to various other work tools such as backhoe buckets, demolition hammers, ripper teeth, etc.



Optional features: 100% HB 400; slope cutter; drain slots; load hook; hose kit; bolt-on reversible cutting edge

# Technical Data



Cutting Width [mm]	Capacity [L]
<b>Size class 0,1</b> (ca. -1,5 t)	
800	65
1000	70
1200	85
1400	100

Cutting Width [mm]	Capacity [L]
<b>Size class 0,7</b> (ca. 5,5 - 7 t)	
1400	234
1600	267
1800	300

Cutting Width [mm]	Capacity [L]
<b>Size class 0,3</b> (ca. 2 - 3 t)	
800	75
1000	95
1200	115
1400	135

Cutting Width [mm]	Capacity [L]
<b>Size class 0,9</b> (ca. 7,5 - 10 t)	
1400	280
1600	320
1800	360

Cutting Width [mm]	Capacity [L]
<b>Size class 0,5</b> (ca. 3,5 - 5 t)	
1000	130
1200	157
1400	184
1600	211
1800	238

Cutting Width [mm]	Capacity SAE/[L]	Weight approx.
<b>Size class I</b> (ca. 11 - 17 t)		
1800	440 / 600	640 / 700
2000	495 / 650	660 / 730
2200	550 / 700	680 / 760
2400	605 / 750	700 / 790

Cutting Width [mm]	Capacity SAE/[L]	Weight approx.
<b>Size class II</b> (ca. 17 - 22 t)		
1800	800	820
2000	900	930
2200	1000	980
2400	1100	1010

Cutting Width [mm]	Capacity SAE/[L]	Weight approx.
<b>Size class III L</b>		
2000	1000	1367
2200	1125	1428
2400	1250	1489
2600	1375	1550

Cutting Width [mm]	Capacity SAE/[L]	Weight approx.
<b>Size class III</b> (ca. 27 - 30 t)		
2000	1100	1525
2200	1260	1590
2400	1430	1655
2600	1600	1720

Cutting Width [mm]	Capacity SAE/[L]	Weight approx.
<b>Size class IV</b> (ca. 38 t)		
2000	1330	2090
2200	1515	2170
2400	1700	2250
2600	1885	2330
2800	2070	2410

DCB -50 t on request



# Ditch Cleaning Bucket

## "Rigid Type"



Cutting Width [mm]	Capacity SAE/[L]	Weight approx.
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Size class 0,1 (approx. - 1,5 t)		
800	55	57
1000	70	72
1200	85	112

Size class 0,3 (approx. 2 - 3 t)		
800	75	68
1000	95	80
1200	115	89

Size class 0,5 (ca. 3,5 - 5 t)		
1000	130	90
1200	157	120

Size class 0,7 (approx. 5,5 - 7 t)		
1200	200	190
1500	250	220
1800	300	250

Size class 0,9 (approx. 7,5 - 10 t)		
1400	280	208
1600	320	227
1800	360	246

Cutting Width [mm]	Capacity SAE/[L]	Weight approx.
--------------------	------------------	----------------

Size class I (approx. 11 - 17 t)		
1800	600	440
2000	650	470
2200	700	500
2400	750	530

Size class II (approx. 18 - 22 t)		
1800	800	535
2000	900	580
2200	1000	625
2400	1100	670

Size class III (approx. 23 - 30 t)		
2000	1100	---
2200	1260	---
2400	1430	---
2600	1600	---

DCB -50 t on request

Our "value for money" model! If you attach great value to a ditch cleaning bucket which ranges among the leaders in terms of price/performance ratio and offers eminent benefits in its price class, this attachment will serve you very well.

### Ruggedness

The shape of the bucket reflects field experience and years of development and testing, and a rugged frame serves to ensure the bucket's above-average stability

### Flexibility

An optional slope cutter has proved to be very worthwhile in numerous applications

### Durability

Primary wear parts such as cutting edges are manufactured from extremely hard high-tech steels as standard materials. A floor plate of abrasion-resistant material is available as an option; it results in a marked reduction in weight and an enormous extension of service life

### Versatility

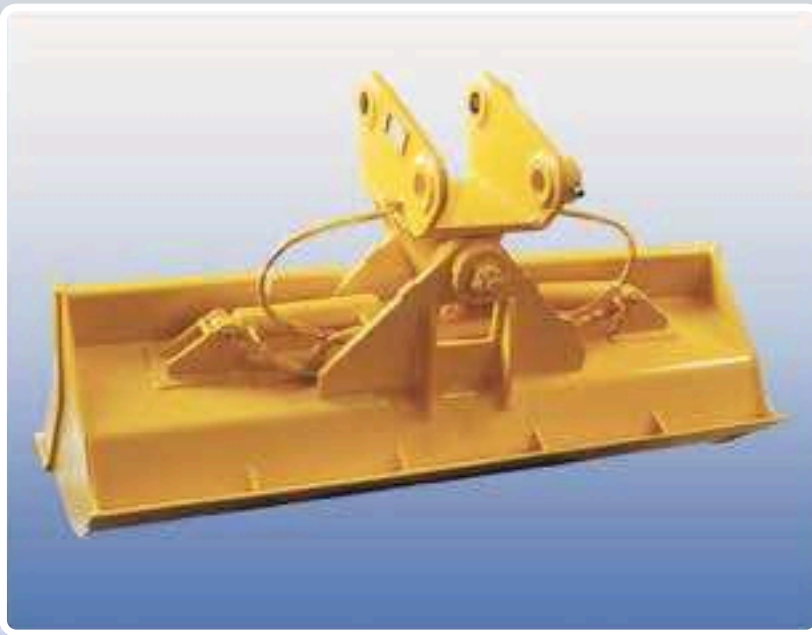
The bucket is ideally suited for slope construction and finishing, for trenching, ditching and benching work as well as for shaping of complex ground contours



Optional features: 100% HB 400; slope cutter; drain slots; load hook; hose kit; bolt-on reversible cutting edge

# Ditch Cleaning Bucket

## "Open Design"



Cutting Width [mm]	Capacity SAE/[L]	Weight approx.
<b>Size class 0,1</b> (approx. -1,5 t)		
1000	70	140
<b>Size class 0,3</b> (approx. 2 - 3 t)		
1000	95	135
1200	115	170
<b>Size class 0,5</b> (approx. 3,5 - 5 t)		
1000	130	180
1200	157	195
<b>Size class 0,7</b> (approx. 5,5 - 7 t)		
1000	200	285
1200	234	305
1600	267	320
1800	300	335
2000	335	350
<b>Size class 0,9</b> (approx. 7,5 - 10 t)		
1400	280	300
1600	320	320
1800	360	335

Cutting Width [mm]	Capacity SAE/[L]	Weight approx.
<b>Size class I</b> (approx. 11 - 17 t)		
1800	440/600	540/580
2000	495/650	570/650
2200	550/700	550/660
<b>Size class II</b> (approx. 18 - 22 t)		
1800	600/800	710/830
2000	650/900	810/870
2200	700/1000	850/910
2400	750/1100	890/950
<b>Size class III</b> (approx. 23 - 30 t)		
2100	950/1180	1470/1530
2200	1000/1260	1500/1560
2400	1100/1430	1560/1620
2600	1200/1600	1620/1680
<b>Size class IV</b> (approx. 31 - 45 t)		
2100	1420	---
2200	1515	---
2400	1700	---
2600	1885	---
2800	2070	---

Our "value for money" model! If you attach great value to a ditch cleaning bucket which ranges among the leaders in terms of price/performance ratio and offers eminent benefits in its price class, this attachment will serve you very well.

### Ruggedness

The shape of the bucket reflects field experience and years of development and testing. A rugged frame lends above-average stability to the bucket and protects the hydraulic system

### Flexibility

Two hydraulic cylinders are used to effect the angling movement of 45 degrees to either side. An optional slope cutter has proved to be very worthwhile in numerous applications

### Durability

Primary wear parts such as cutting edges are manufactured from extremely hard high-tech steels as standard materials. A floor plate of abrasion-resistant material is available as an option; it results in a marked reduction in weight and an enormous extension of service life

### Versatility

The bucket is ideally suited for slope construction and finishing, for trenching, ditching and benching work as well as for shaping of complex ground contours



Optional features: 100% HB 400; slope cutter; drain slots; load hook; hose kit; bolt-on reversible cutting edge

# Ditch Cleaning Bucket

## "Closed Design"



If you attach great value to a ditch cleaning bucket featuring covered cylinders, this Rädlinger attachment will serve you very well.

### Safety

With the hydraulic hoses for the two cylinders routed in the swivel head, the hoses are no longer susceptible to damage (caused by brush, shrubs, stones or by getting caught in the swivel head, for example)

### Ruggedness

The shape of the bucket reflects field experience and years of development and testing. A rugged frame lends above-average stability to the bucket and protects the hydraulic system

### Flexibility

Two hydraulic cylinders are used to effect the angling movement of 45 degrees to either side. An optional slope cutter has proved to be very worthwhile in numerous applications

### Durability

Primary wear parts such as cutting edges are manufactured from extremely hard high-tech steels as standard materials. A floor plate of abrasion-resistant material is available as an option; it results in a marked reduction in weight and an enormous extension of service life

### Versatility

The bucket is ideally suited for slope construction and finishing, for trenching, ditching and benching work as well as for shaping of complex ground contours

Cutting Width [mm]	Capacity SAE/[L]
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#### Size class I (approx. 11 - 16 t)

1800	440 / 600
2000	495 / 650
2200	550 / 700
2400	750

#### Size class II (approx. 17 - 22 t)

1800	600 / 800
2000	650 / 900
2200	700 / 1000
2400	750 / 1100

#### Size class III (approx. 23 - 30 t)

2100	950 / 1180
2200	1000 / 1260
2400	1100 / 1430
2600	1200 / 1600

Cutting Width [mm]	Capacity SAE/[L]
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#### Size class IV (approx. 31 - 38 t)

2100	1420
2200	1515
2100	1700
2600	1885
2800	2070

DCB -50 t on request



Optional features: floor plate HB 400 steel, central lubrication, hydraulic packet, 5-tonne, 10-tonne load hooks, slope cutter, drain slots, bolt-on reversible cutting edge



# Multi Grab Bucket

(for Digging & Gripping)



The patented multi grab bucket is a bucket which combines the two functions of

## Digging and Gripping

A cylinder fitted in a protected location is used to open and close the bucket halves. The bucket is thus turned into a grab, which makes it suitable for a wide spectrum of applications in civil engineering but also for special jobs such as in demolition. Multi grab buckets have been in use for 10 years.

(Made of abrasion-resistant material throughout.)

## MGB Technical Data

Excavator weight (tonnes)	-3	-5	-7	-10	-18	-18	-23	-23	-23	-30
Bucket class	03	05	07	09	I	I	II	II	II	III
Cutting width (mm)	400	500	800	800	800	1000	800	1000	1200	1200
SAE capacity (litres)	40	100	300	400	500	625	600	750	900	1250
Opening angle (degrees)	90	90	90	90	90	90	90	90	90	90



Operating pressure required: 100-200 bar  
 Force specifications in kN: 10 kN = 1 tonne (metric ton)  
 Pump flow rate: Class 03/07 > 10 l/min I and up: > 50 l/min

# Trapezoidal Ditching Bucket

universally adjustable



## Your advantage

Compared with conventional ditch cleaning buckets, use of the trapezoidal ditching bucket enables an increase in efficiency to be realized so that a higher machine hour rate can be achieved. The bucket allows 360 degree rotation and tilting. This all-purpose tool can be used to produce slopes with angles of 30 to 55 degrees, the slopes being formed independently in a single operation, which gives it a competitive edge on rigid trapezoidal buckets. Applications of the bucket include forest road building and maintenance of forest roads. Needless to say, use is made of the bucket also for cleaning of road ditches and for grading of berms and verges. Unrestricted operation is ensured by the option of adjusting the wings independent of each other and thus getting out of the way of any obstacles.

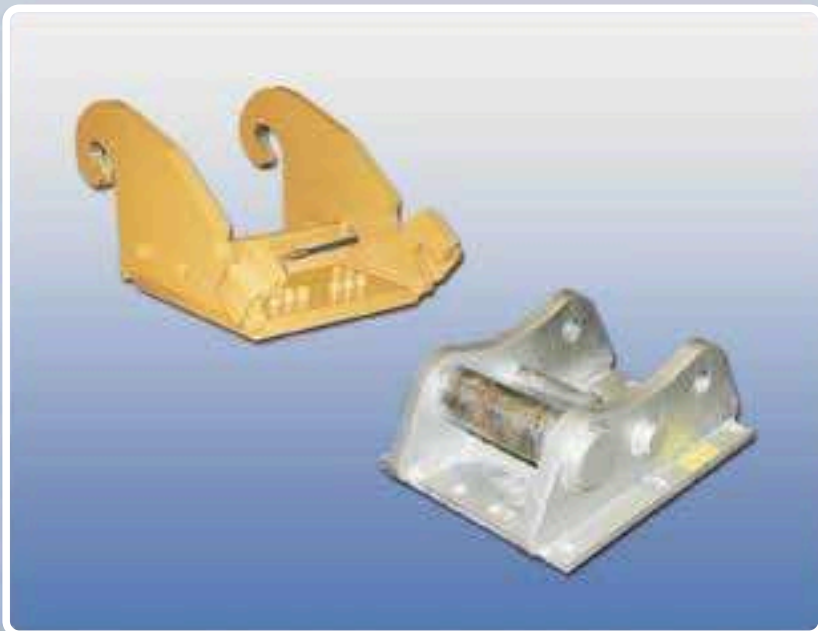
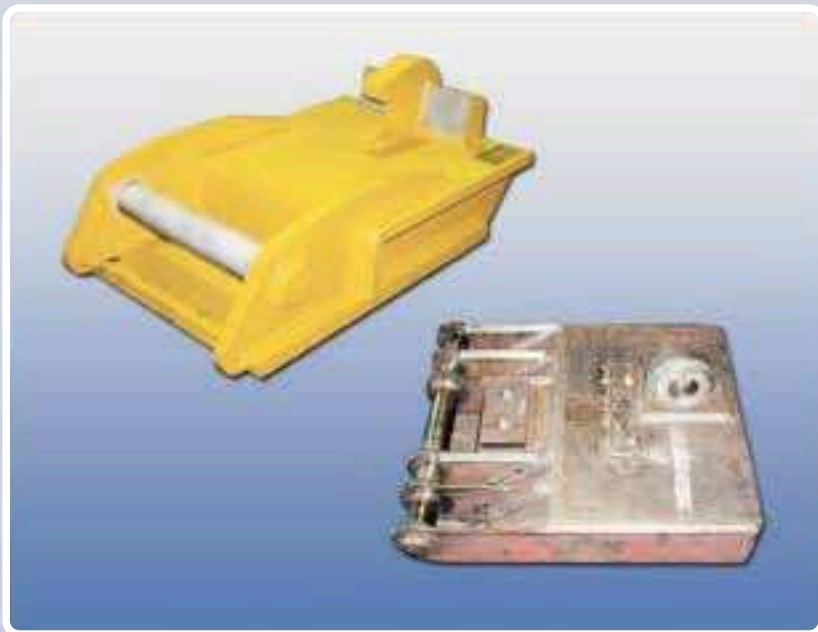
## Technical data

- Bottom width approx. 400 mm
- Angle of slope independently adjustable between 30 and 55 degrees on either side
- 360 degree rotation
- Tilting 45 degrees either side
- For excavators of 12 to 18 tonnes operating weight



# External Quick Coupler Adapters and Hammer Mounting Plates

(for buckets)



## Our line of products

For the quick coupler systems indicated below we manufacture all sizes of

- Buckets
- Weld-on/bolt-on mounting plates
- Hammers and shears
- Grab adapters
- Eccentric adapters

## Systems:

- Baumaschinentechnik
- Kewaco
- Lehnhoff
- Liebherr
- Nado
- Oil Quick
- Schaeff
- SMP
- Stury
- Verachttert
- Volvo / Akermann
- Wimmer
- Winkelbauer

# SWM/H Quick Coupler

mechanical / hydraulic (without bucket modification)



Short conversion times serve to enhance profitability, optimise utilization of your bucket and minimize interruptions of machine operation. In short: The use of quick couplers is economical and should be a matter of course.

**No need for bucket modification**  
means that it can be used with all commercially available buckets

**No wear**  
owing to permanent frictional connection

**Compact design**  
causes only minor changes to the breakout area

**Bucket**  
can be mounted to the excavator again any time

**Bucket reversible**  
Bucket can be used in face position as well

**Safety ensured**

- by BG (German accident insurance) certification
- by a check valve directly integrated in the cylinder and by another safety valve fitted on the cylinder



# SWP Quick Coupler for excavators from 10 to 260 tonnes

mechanical / hydraulic



Among the impressive features of hydraulic SWP quick couplers are their low design and their zero-clearance fit.

All components subject to high stress such as bucket pins, catch hooks and contact areas are amply dimensioned and made of hardened steel. The hydraulic quick coupler is conveniently operated at the touch of a button from inside the operator's cab.

### Safety features

- Continuous pressure serves to keep cylinder preloaded
- Maximum safety ensured by a check valve directly integrated in the cylinder and by another safety valve fitted on the cylinder
- Lockable safety switch as well as warning buzzer for the operator's cab
- System tested for safety and approved by German statutory accident insurance
- Option of emergency release from outside in case of failure of excavator hydraulics

### Technical Data - Quick Coupler

Model	I	II	III	IV	V	VI	VIs	VII	VIIs
Max. machine weight (tonnes)	22	33	40	50	70	100	130	185	260
Quick Coupler width	400	470	520	750	750	1000	1000		
Hook pin diameter	∅ 70	∅ 80	∅ 90	∅ 100	∅ 100	∅ 140	∅ 140	on request	
Weight (kg)	250	350	450	850	950	1400 - 1900			

### Technical Data - Standalone Bucket Top

Model	I	II	III	IV	V	VI	VIs	VII	VIIs
Max. machine weight (tonnes)	22	33	40	50	70	100	130	185	260
Hook pin diameter	∅ 70	∅ 80	∅ 90	∅ 100	∅ 100	∅ 140	∅ 140	∅ 220	∅ 220
Approx. weight (kg)	150	230	300	580	580	900 - 1400			
Width of standard top	520	630	650	900	900	1300		on request	
Width of narrow top	400	470	-	-	-	-	-		
Pin support	2 x	2 x	2 x	2 x	3 x	2 x	3 x		



# "Verachtert" Quick Coupler System



## CW quick coupler system

This system can be used to convert hydraulic excavators into universally applicable carrier machines. The product line includes eight models, and of the five middle models a narrow version is available in addition, to fit buckets of narrow cutting width. The quick coupler system puts a single machine into a position to perform a variety of different functions. Since the system enables fast switching between work tools – be they buckets, grabs, shears, cutters, or hammers, for example – a great number of jobs can be carried out at significantly reduced equipment expenditure and thus cost.

## Hydraulic actuation

This makes it possible for the operator to pick up and put down the attachments in a matter of seconds without leaving the cab

## Technical Data

Model	CW-00	CW-05	CW-10	CW-20	CW-30	CW-40	CW-45	CW-55	CW-70
Approx. weight (kg)		25	75	190	230	240	440	760	1300
Boss spacing A (mm)		200	300	475	475	475	570	650	875
Width without bosses B (mm)		175	310	550	550	550	690	830	840
Mechanical version		x	x	x	x	x	x	x	-
Spindle version	-	x	x	x	x	x	x	x	-
Hydraulic version		x	x	x	x	x	x	x	-
Excavator weight class (tonnes)	1	- 3,5	3,5-10,5	7,5-15	15-25	20-30	25-40	35-60	65-90



# "Lehnhoff" Quick Coupler System



## Quick coupler systems

for excavators of 0.7 to 70 tonnes operating weight, with mechanical/hydraulic locking

- Fast and safe switching
- Zero-clearance connection between quick coupler and adapter
- Sealed locking mechanism, long service life, minimum maintenance requirements
- Universal adapter system suiting all makes of excavator
- Minimum loss of crowd force

## Rugged quick coupler

The system is made up of two components, the quick coupler and the adapter for the attachment. The quick coupler features a rugged enclosed housing with two solid coupling claws which can be used for lifting, moving and positioning the attachment prior to locking

## Firm seating in the adapter

The adapter mounting and contact areas of the quick coupler have been fabricated. The adapter is made up of the locating shaft and the fabricated locking plate which feature high dimensional accuracy and superior quality. Once locked, the two component parts form a tight, solid combination

## Locked either mechanically

Two locking pins and a mechanical dead centre locking mechanism allow the quick coupler to be locked quickly and with ease – simply by means of a socket wrench

## ... or hydraulically

A hydraulic cylinder with two pilot controlled check valves keeps the locking pins securely in place

Quick Coupler Model	MS 01	MS 03	MS/HM 08	MS/HS 10	MS/HS 21	MS/HS 25	HS 40
Excavator class (to)	0.7-2	1,5-5	5-10	10-19	18-26	28-40	40-70
Length (mm)	235	295	400	520	545	545	760
Width (mm)	180	200	290	395	495	495/600	750
Weight (kg)	15	25	75	170	270	310	600-800
Adapter	SW 01	SW 03	SW 08	SW 10	SW 21	SW 25	SW 40
Spindle (mm) Ø	Ø 40	Ø 50	Ø 60	Ø 70	Ø 80	Ø 80	Ø 100

MS: mechanical HS: hydraulic

HS100 system on request

## Advantages (compared to other manufactures)

- Catch hooks of HB 400
- Cylinder with main check valve and back-up safety valve
- Rear wall adjustable by shims for exact seating (MS10 – HS40)
- Continuous pressure application
- Option of emergency release from outside



# Multi-Coupling System



The Rädlinger multi-coupling system enables a significant increase in efficiency: The hydraulic hoses can be replaced particularly quickly and easily.

## Technology

- Multi-coupling system with locking lever and safety lock
- Original TEMA plug-in profiles with low-leakage flat-face design
- Lock coupling/nipple with high-flow valve system

## Pressure range

Max. pressure: 350 bar (4-way safety function)

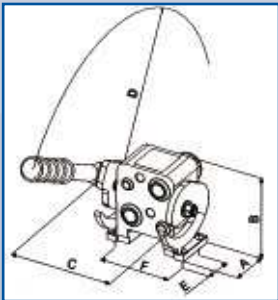
## Pressure eliminator

- All connectors are fitted with pressure eliminators
- Pressure eliminators eliminate residual pressure on the connector side up to the maximum operating pressure
- Can be coupled up to 50 bar on the coupling side

## Advantages at a glance

- Can be used for all quick couplers
- Attractively priced
- Quick mounting to shaft etc. with no need to manipulate the excavator hydraulics
- Can be used with pressures of up to 350 bar
- 2 1/2" couplings
- 2 3/4" couplings
- For excavators and wheel loaders
- Tool-side pressure eliminator
- Electrical connection possible

## Coupling plate/combinations

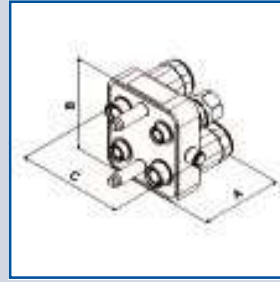


	1/2" 1/2"+3/8" clamp arm	1/2" 1/2"+3/8" lever arm, fixed	1/2", 1/2"+3/8" lever arm, removable
A	60,0	60,0	60,0
B	143,5	143,5	143,5
C	160,6	165,0	170,0
D	270,0	290,0	276,0
E	40,0	40,0	40,0
F	121,5	121,5	121,5

	3/4"+1/2" 3/4"+1/2"+3/8" clamp arm	3/4"+1/2" 3/4"+1/2"+3/8" lever arm, fixed	3/4", 1/2" 3/4"+1/2"+3/8" lever arm, removable
A	70,0	70,0	70,0
B	143,5	143,5	143,5
C	160,6	165,0	170,0
D	270,0	290,0	276,0
E	50,0	50,0	50,0
F	121,5	121,5	121,5

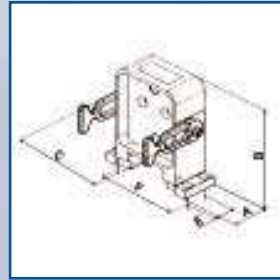






**Plug-in board/combinations**

	1/2" 1/2"+3/8"	3/4"+1/2" 3/4"+1/2"+3/8"
A	60,0	60,0
B	143,5	143,5
C	160,6	165,0

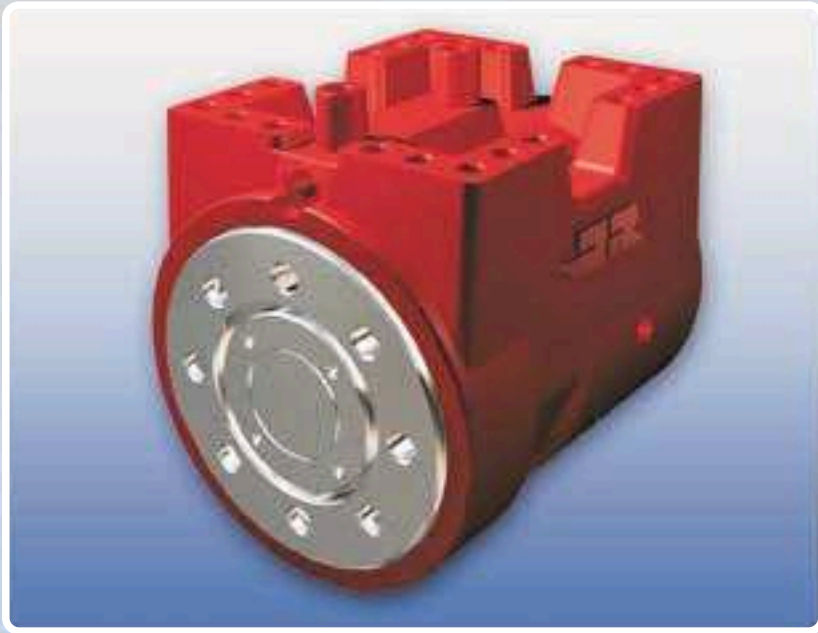


**Parking station**

	All models
A	60,0
B	143,5
C	160,6
D	270,0
E	40,0
F	121,5



# Rädlinger Tilt Motor



## Compact design

The tilt motor takes the place of conventional swivel heads with cylinders and is thus responsible both for power transmission between excavator and bucket and for the tilting movements.

## Ruggedness

and outstanding resistance owing to the use of high-strength alloys

## Safety

The hydraulic hoses are routed directly to the tilt motor so that there is virtually no risk of the hoses getting damaged

## Plainness

The high-performance work tool dispenses with pins, cylinders and cylinder covers

## Zero maintenance

Being lubricated by the hydraulic oil of the grab rotation mechanism, the motor does not require any maintenance

## Variability

The suspension is bolt-mounted and can be replaced to suit various carrier machines

All the benefits are transferable by mounting the tilt motor to various other work tools such as backhoe buckets, demolition hammers, ripper teeth, etc.

## No wear

Amplly dimensioned and hardened components serve to ensure rotary motion without play also after many years of operation

## Sophisticated system

Reflecting more than 15 years of experience of manufacturing the motors



Contact us to obtain a copy of our separate detailed tilt motor brochure.

# Technical Data

## Tilt motor Cl. 03 ( - 3,5 tonnes):

Dimensions (WxHxL):	170 x 190 x 220
Weight:	36 kg
Tilt angle:	95°
Torque:	2.100 Nm at 150 bar
Holding torque:	ca. 3.000 Nm
Oil requirement:	0,4 ltr. / 95°
Operating pressure:	150 bar
Max. operating pressure:	180 bar
For excavator weights:	of 1,5 to 3,5 tonnes

## Tilt motor Cl. 07 ( 4,0 - 6,5 tonnes):

Dimensions (WxHxL):	206 x 228 x 291
Weight:	72 kg
Tilt angle:	100°
Torque:	4.000 Nm
Holding torque:	ca. 7.000 Nm
Oil requirement:	0,7 ltr. / 100°
Operating pressure:	150 bar
Max. operating pressure:	180 bar
For excavator weights:	of 4,0 to 6,5 tonnes

## Tilt motor Cl. 09 ( 7 - 10 tonnes):

Dimensions (WxHxL):	250 x 265 x 319
Weight:	103 kg
Tilt angle:	100°
Torque:	6.900 Nm at 150 bar
Holding torque:	ca. 13.000 Nm
Oil requirement:	1,1 ltr. / 100°
Operating pressure:	150 bar
Max. operating pressure:	180 bar
For excavator weights:	of 7 to 10 tonnes

## Tilt motor Cl. I ( 11 - 14 tonnes):

Dimensions (WxHxL):	260 x 265 x 350
Weight:	128 kg
Tilt angle:	100°
Torque:	8.500 Nm at 150 bar
Holding torque:	ca. 16.000 Nm
Oil requirement:	1,4 ltr. / 100°
Operating pressure:	150 bar
Max. operating pressure:	180 bar
For excavator weights:	of 11 to 14 tonnes

## Tilt motor Cl. II ( 15 - 22 t ) / ( Cl. IIs - 23 t )::

Dimensions (WxHxL):	310 x 340 x 368	( 346 x 363 x 368 )
Weight:	180 kg	( 193 kg )
Tilt angle:	100°	
Torque:	16.000 Nm at 150 bar	
Holding torque:	ca. 30.000 Nm	
Oil requirement:	2.5 ltr. / 100°	
Operating pressure:	150 bar	
Max. operating pressure:	180 bar	
For excavator weights:	of 15 to 22 tonnes	

## Tilt motor Cl. III L ( 24 - 26 t ) / Cl. III ( 27 - 29 t )::

Dimensions (WxHxL):	360 x 370 x 420	365 x 408 x 471
Weight:	235 kg	330 kg
Tilt angle:	100°	100°
Torque: (150 bar):	19.500 Nm	23.000 Nm
Holding torque:	ca. 38.000 Nm	ca. 43.000 Nm
Oil requirement:	3 ltr. / 100°	3.5 ltr. / 100°
Operating pressure:	150 bar	150 bar
Max. operating pressure:	180 bar	180 bar
For excavator weights:	von 24 -26 t	von 27 t - 29 t

## Tilt motor Cl. IV ( 30 - 38 tonnes):

Dimensions (WxHxL):	405 x 448 x 540
Weight:	452 kg
Tilt angle:	100°
Torque:	33.000 Nm at 150 bar
Holding torque:	ca. 62.000 Nm
Oil requirement:	5.5 ltr. / 100°
Operating pressure:	150 bar
Max. operating pressure:	180 bar
For excavator weights:	of 30 to 38 tonnes

## Tilt motor Cl. V ( -50 tonnes):

Dimensions (WxHxL):	455 x 458 x 635
Weight:	690 kg
Tilt angle:	100°
Torque:	47.000 Nm at 150 bar
Holding torque:	ca. 90.000 Nm
Oil requirement:	8,3 ltr. / 100°
Operating pressure:	150 bar
Max. operating pressure:	180 bar
For excavator weights:	of 39 to 50 tonnes



# Tilt Rotator



The tilt rotator is a multifunctional adapter arranged between the stick of the excavator and the attachment. All functions are controlled by solenoid valves and can be conveniently operated from inside the cab as a matter of course. Discover entirely new opportunities and extend the scope of application of your hydraulic excavator.

## Tilting

50 degree tilt in two directions is effected by a maintenance-free tilt motor and in combination with rotation enables high-precision work to be performed

## Rotation

The tilt rotator features full 360 degree rotation about its own axis in either direction. This allows the attachment to be positioned at a great number of different angles to the carrier machine so that repositioning of the excavator can be minimized

## Compatibility

with quick couplers of

- Rädlinger
- Lehnhoff system
- Verachttert system
- other quick couplers on request





### Flexibility

Unique bolting technology (modular system) allows the rotator to be combined with all common quick coupler systems and subsequently be replaced again where necessary

### Compact design

The two cylinders arranged in V form are replaced by the tried and proven tilt motor, which makes the design narrower by up to 350 mm

### Plainness

Vulnerable parts such as pins and cylinders are dispensed with

### Tilt Rotator



	JR5	JR10	JR15	JR15	JR20	JR30
Excavator class (tonnes)	- 6	- 10	- 13,5	-17	- 23	- 30
Tilt motor model:	07	09	I	IIs	IIs	III
Width (mm): <small>(Tilt rotator)</small>	465	530	550	550	600	680
Height (mm): <small>(Tilt rotator without QC, without suspension)</small>	380	440	440	475	500	620
Weight (kg): <small>(Tilt rotator without QC, without suspension)</small>	170	260	330	375	400	680
Tilt range: <small>(Tilt motor)</small>	2 x 47°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°
Max. working pressure (bar): <small>(Tilt motor)</small>	180	180	180	180	180	180
Tilting torque at 150 bar (Nm): <small>(Tilt motor)</small>	4.000	6.900	8.500	16.000	16.000	23.000
Holding torque at 150 bar (Nm): <small>(Tilt motor)</small>	7.000	13.000	16.000	30.000	30.000	43.000
Oil requirement (litres)/tilt angle (°): <small>(Tilt motor)</small>	0,7 / 95°	1,1 / 100°	1,4 / 100°	2,5 / 100°	2,5 / 100°	3,5 / 100°
Oil flow rate with "Control option 5" (litres/min): <small>(Tilt rotator)</small>	40	60	60	60	60	80
Speed of rotation (rpm) at 50 litres/min: <small>(Rotator)</small>	15	8	7	7	6	4
Torque at 210 bar (Nm): <small>(Rotator)</small>	5000	9000	10000	10000	12000	20000
Max. working pressure (bar): <small>(Rotator)</small>	210	210	210	210	210	210



# Custom-Built Equipment

**Ball Clamp**



**Stick Extension**



**Ripper Tooth**



**Body Extension**



**Screening Plant**



**High-tip buckets RH90**



**Dragline Bucket**



**Hammer Mounting Plates**



# Custom-Built Equipment

**Collecting tank**



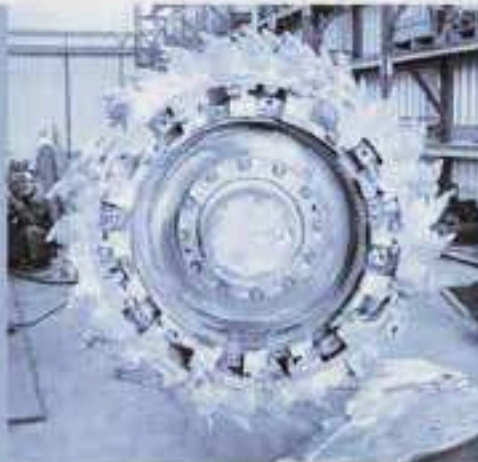
**Milling drum – equipment**



**Pusher blade**



**Clearing rake**





**Bridge-working platform**



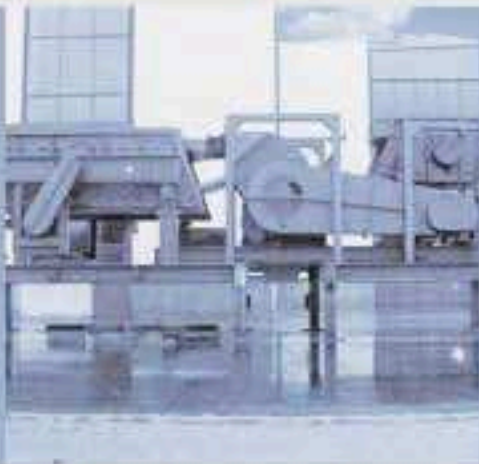
**Draw-out slide**



**Pipe assembling fork**



**Crusher plants**



# Light Material Bucket



This bucket with toothed cutting edge is ideally suited for handling of bulk material. Compared with use of the bucket with teeth, service life of the cutting edge is several times higher.

## Range of application:

- Handling of lightweight bulk material
- Feedstuff industry; composting facilities; coal loading; sawmill; snow transport

### Wheel loader bucket, "light-duty"

Class	Cutting width (mm)	SAE capacity (ltr.)
I	ca. 1800	480* / 700**
II	ca. 1900	600* / 900**
III	ca. 2000	840* / 1200**
IV	ca. 2100	1080* / 1500**
V	ca. 2200	1440* / 2000**
VI	ca. 2400	2000* / 2700**
VII	ca. 2600	2400* / 3200**
VIII	ca. 2800	3000* / 3700**
IX	ca. 3000	4000* / 5000**
X	ca. 3200	4900* / 6000**
XI	ca. 3600	5760* / 7200**
XII	ca. 3800	-----* / -----**

- Fitted with 8 teeth (CAT or BOFORS B-Lock) on all cutting widths
- \* "Light-duty" version with either bolt-on reversible cutting edge or teeth
- \*\* Without bolt-on reversible cutting edge
- "Light-duty" (large volume) version for bulk density < 1.5 metric tons with bolt-on reversible cutting edge



Optional features: 100% HB 400, bolt-on reversible cutting edge

# Standard Bucket



Our loader bucket is the result of continuous research and development and in various neutral tests takes an exemplary top position.

## Versatility

A standard feature of our loader buckets is the backdrag edge at the rear. During backward movement, the edge acts as a dozer cutting edge so that the loading area is kept smooth

## Productivity

The shape of the bucket has been designed for fast loading and optimum filling

## Customization

Individual customer requirements can of course be catered for with all buckets

## Tailored versions

All commercial tooth systems, cutting edges as well as toothed edges can be installed to customer requirements. Moreover this loader bucket can be manufactured in whatever size and for all carrier machines

Wheel loader bucket, "standard-duty"		
Class	Cutting width (mm)	SAE capacity (litr.)
I	ca. 1800	400
II	ca. 1900	500
III	ca. 2000	700
IV	ca. 2100	900
V	ca. 2200	1200
VI	ca. 2400	1700
VII	ca. 2600	2000
VIII	ca. 2800	2500
IX	ca. 3000	3300
X	ca. 3200	4200
XI	ca. 3600	5000
XII	ca. 3800	7000



Optional features: 100% HB 400, bolt-on reversible cutting edge

# Rock Bucket



With its two boxes of exceptionally massive dimensions and with the curved side cutters the rock bucket is capable of managing even severe applications in an exemplary manner. For this bucket, highly abrasion-resistant steels are used exclusively.

## Range of application:

- Loading jobs in the quarrying and mining industries involving particularly heavy wear
- Loading and handling of quarry and rock materials

### Wheel loader bucket, "heavy-duty"

Class	Cutting width (mm)	SAE capacity (litr.)
VIII	ca. 2800	2300
IX	ca. 3000	3000
X	ca. 3200	3700
XI	ca. 3600	4400
XII	ca. 3800	6100
XIII a	ca. 4300	9000
XIII b	ca. 5000	12000

### Standard features:

- Spade cutting edge
- All cutting widths fitted with 8 teeth
- Spill guard with tubes or slots



Optional features: 100% HB 400; side rock deflectors; protection segments; bolt-on segments

# Top Clamp Bucket



## Loader bucket with hold-down clamp

- For handling of bulky goods
- Used in recycling and composting applications in particular
- For loading of wood waste, brush, paper, sheet metal scrap, etc.
- Hold-down clamp to customer requirements



Optional features: 100% HB 400; hose kit; bolt-on reversible cutting edge

# High Dump Bucket



The high dump bucket is suited for all applications where major dump heights are needed.

## Technical features

- Adjustable cushioned cylinders
- Hydraulic piping covered in protective box
- Two-cylinder design

Class	Cutting width (mm)	SAE capacity (ltr.)
III	2100	1200
IV	2200	1700
V	2300	1200
V	2300	1700
VI	2400	1700
VI	2400	2500
VII	2500	2500
VII	2500	3000
VIII	2700	3000
VIII	2700	4000
IX	2900	4000
IX	2900	5000
X	3200	5000
X	3200	6500

High dump buckets of up to 20 m<sup>3</sup> capacity on request



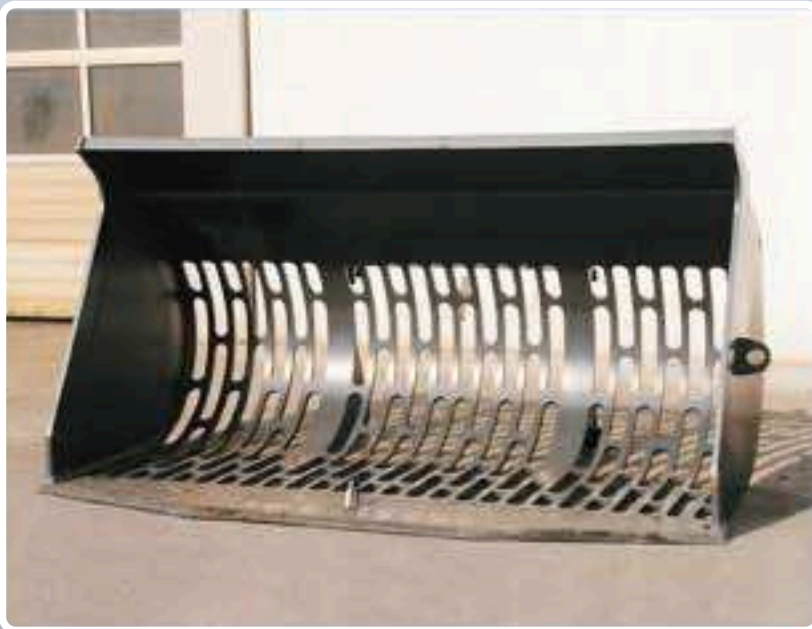
Optional features: 100% HB 400; hose kit; bolt-on reversible cutting edge

# Skeleton Bucket



## Scope of application:

- Loading and sorting operations
- Loading of boulders
- Bar spacing to customer requirements



Optional features: 100% HB 400; bolt-on reversible cutting edge

# Wheel Loader Quick Coupler, Standard Type



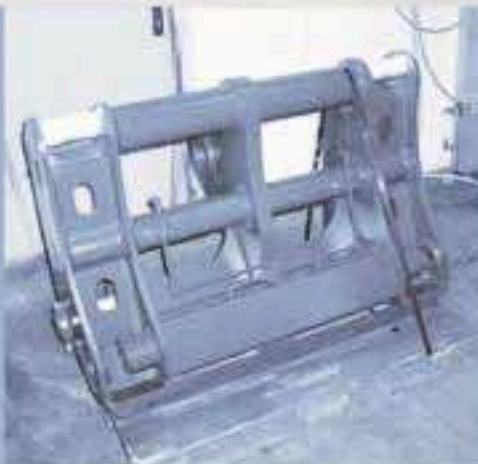
The quick coupler permits work tools to be changed quickly and easily.

- Hydraulic exchange of attachments from inside the operator's cab, at the touch of a button
- Excellent price/performance ratio
- Available for all common types of machine
- Ideally suited for all-round applications

## QC + adapter for wheel loaders "standard duty"

Class	Operating weight	Type
III, IV, V	3,5 - 7 to.	N III
VI, VII	7 - 11 to.	N VI
VIII, IX	11 - 17 to.	N VIII
X	17 - 22 to.	N X

"N"models: usual applications with bolt locking at the bottom





# Wheel Loader Quick Coupler, Wedge Type



The quick coupler permits work tools to be changed quickly and easily.

- Hydraulic exchange of attachments from inside the operator's cab, at the touch of a button
- Designed for most severe applications
- Front end extension is very limited, which means high breakout forces at the work tools
- Zero-clearance and wear-free fit

## QC + adapter for wheel loaders "heavy duty"

Class	Operating weight	Type
X	17 - 22 to.	S X
XI	22 - 28 to.	S XI
XII	28 - 45 to.	S XII

"S" models: severe applications (quarry) with wedge locking at the bottom



# Rock Fork



## Scope of application:

- Perfectly suited for most severe applications
- Optimum means of transport of loosened blocks of rock from the face to the truck
- Available for machines of up to 50 metric tons operating weight

Class	Operating weight	Type	Load capacity Pair (kg) (with 2.5-fold safety)	Dimension Fork carriage	Dimension Tines
X	-22 to.	wedge	22000	approx. 1800	250x100x1600
XI	-28 to.	wedge	28000	approx. 1800	280x105x1600
XII	-45 to.	wedge	48000	approx. 1800	300x140x1600



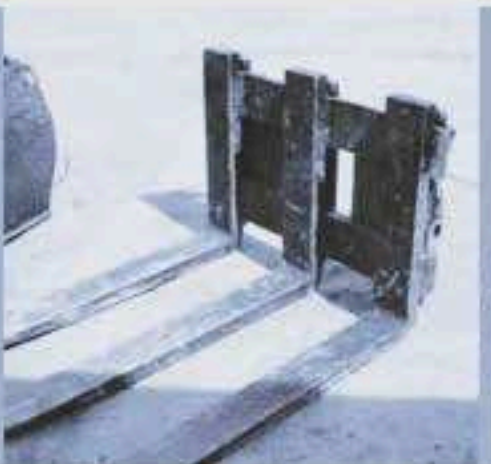
# Pallet Fork



## Scope of application:

- Lifting and transporting of pallets (with ground clearance for insertion of forks) and of all kinds of goods
- Pallet forks of up to 16.000 kg load capacity
- Special designs available

Class	Operating weight	FEM-class	Type	Load capacity Pair (kg) (with 2.5-fold safety)	Dimension Fork carriage	Dimension Tines
I, II	-3,5 to.	II	normal	2500	1400	120x40x1200
		III	wedge	4000	1500	125x45x1200
III, IV, V	-7 to.	III	normal	4000	1500	125x45x1200
		III	normal	5000	1500	150x50x1200
VI, VII	-11 to.	III	normal	5000	1500	150x50x1200
		IV	wedge	8000	1750	150x60x1200
VIII	-17 to.	IV	wedge	8000	1750	200x60x1500
		IV	normal	8000	1750	150x60x1200
		IV	normal	8000	1750	200x60x1500
		V	wedge	12000	1750	200x70x1500
X	-22 to.	V	normal	12000	1750	200x70x1500
		VI	wedger	16000	1750	200x80x1500



# Regeneration and Repair



## Regeneration

Major welding certificate LGA DIN 18800 ensures proper performance of welding operations.

- Ditch cleaning buckets
- Backhoe buckets and front shovels
- Loader buckets
- Sticks and booms
- Bowls, bodies, trucks
- Screening and crushing plants





## Wear Parts and Spare Parts



