

cutting | the | world

CUTTING EDGE TECHNOLOGY

FOR MANY APPLICATIONS, A SMART SOLUTION

ER RANGE
ERC RANGE
ERU RANGE
ER-L RANGE
ADU RANGE

 **erkat**[®]

CUTTING THE WORLD

A German company focused on technology leading the way with modern production facilities and unbeatable service.



We have over 17 years experience in the development, manufacture and application of rock cutting excavator attachments. With all main components manufactured in Germany, the cutter attachments are robust and reliable. Our international team of specialists are available to provide support.

In this catalogue you will find a large range of special cutter attachments for excavators and skid steers that have been developed in cooperation with customers. Practical experience from job sites around the world is used in our continuous product development process.



Since 1st of February 2017 the **erkat** brand officially belongs to the Atlas Copco Group, making us stronger than ever regarding the future. Although with a new owner, **erkat** will continue its commitment with its products and services as usual.



For excavators



For skid steers

Page

TECHNICAL CHARACTERISTICS APPLICATIONS



ER RANGE
erkat Double head drum cutters
(Profiling and tunneling cutters)

X

X

16



ERC RANGE
erkat Cutters with integrated rotators

X

X

18



ERU RANGE
erkat Rotation units

X

X

20



ER-L RANGE
erkat Longitudinal drum cutters
(Standard)

X

X

22



ADU RANGE
erkat Auger drive units

X

X

24



NON-STANDARD MODELS
For profiling, tree stump grinding, tunnel profiling, etc.

X

X

26



STANDARD TOOLS
Picks, retaining clips, pick boxes

27

Made to measure service – we will travel to you, provide support during installation and commissioning and provide training if required.



Close attention to detail during assembly guarantees the highest levels of product quality and reliability.

TRIED & TESTED TECHNOLOGY “MADE BY ERKAT”

ROBUST

Features that make **erkat** machines so reliable, long lasting and low maintenance include an over engineered drive train, secure attachment of cutter drums, rigid and wear resistant gear housing as well as pick boxes with hardened wear sleeves (ER 1500–ER 5500).



STRONG

erkat cutter heads are designed to provide the optimum cutting power at the recommended rotation speeds. They guarantee a smooth cutting action while providing each pick with the maximum cutting power to penetrate the rock.

FLEXIBLE

A range of cutter drum designs and widths combined with a choice of motors with different displacement and torque provides several options to adapt the drum cutter to excavator specifications as well as the needs of the job site and ground conditions.

RELIABLE

erkat special drum cutters use extremely large spur gears driven by high torque hydraulic motors. The gear wheels are so robust the drum cutters can be used in the most difficult conditions without risk of failure.

QUIET AND LOW VIBRATION

With low vibration and quiet operation, **erkat** drum cutters can also work in sensitive areas.

ADJUSTABLE

A central fixing system allows **erkat** transverse drum cutters to rotate through 360° without having to be disconnected from the excavator.



Drum cutter in 180° position

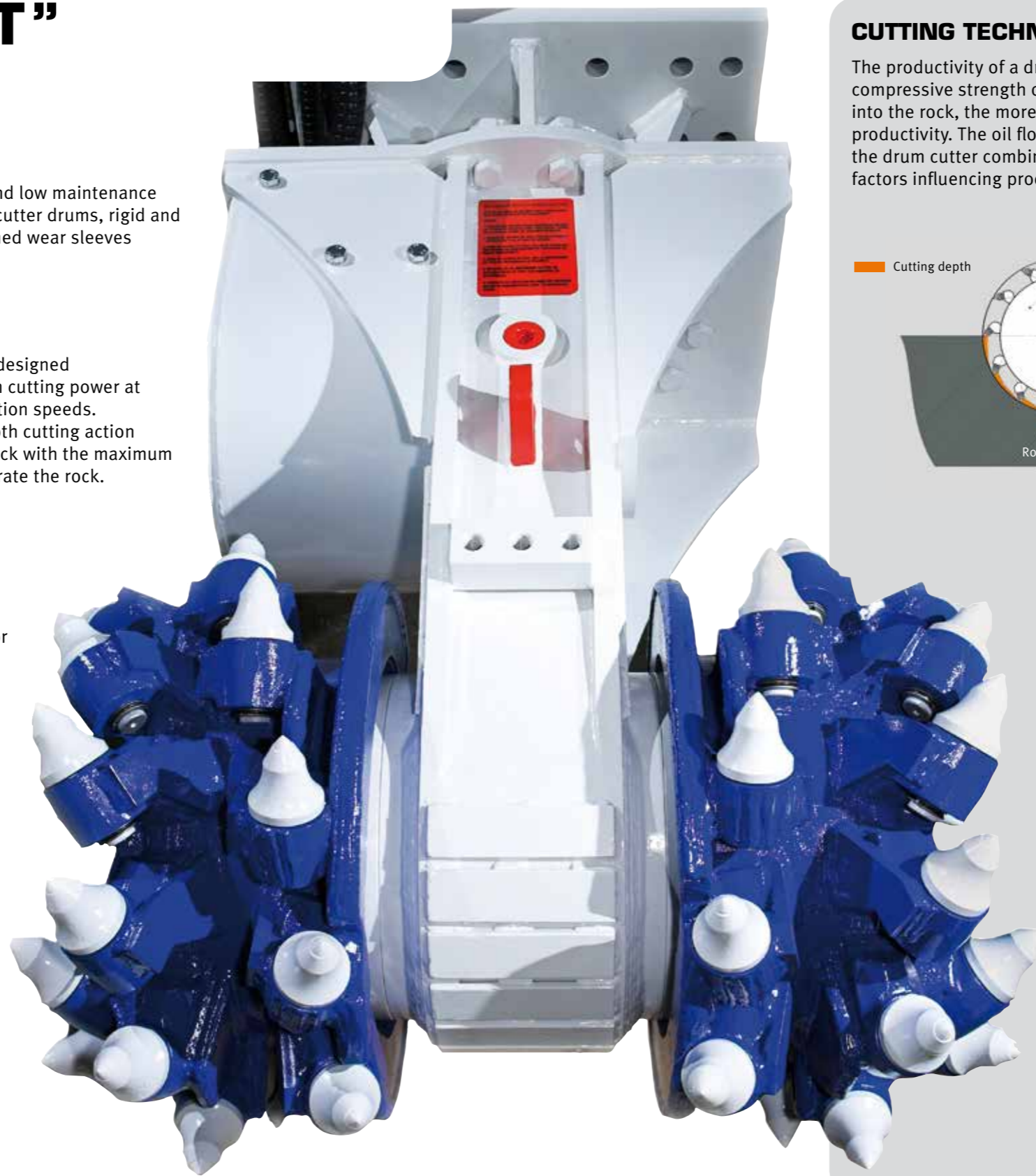


Drum cutter turned to the left or right



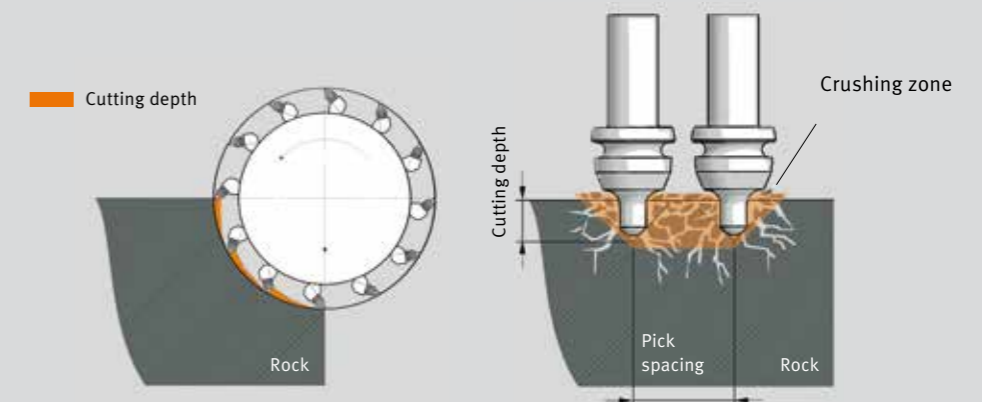
Drum cutter in 90° position, turned left or right

The main components in **erkat** drum cutters, such as gear wheels and cutting heads are primarily manufactured in Germany.



CUTTING TECHNOLOGY

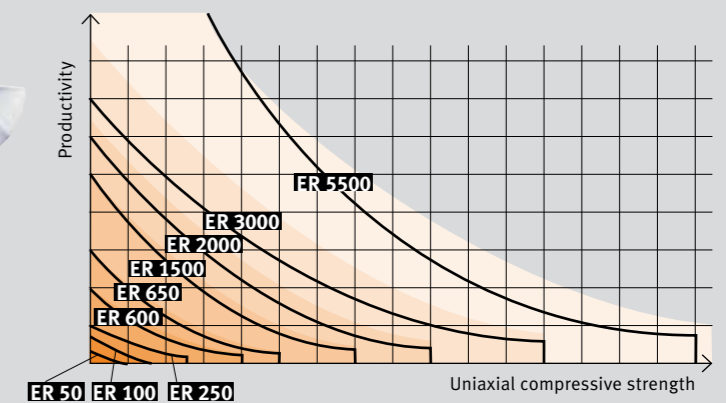
The productivity of a drum cutter depends to a large extent on the uniaxial compressive strength of the material to be cut. The deeper the pick can be forced into the rock, the more material it can break out from it which in turn, increases productivity. The oil flow and pressure that the excavator is able to provide to the drum cutter combined with excavator weight and stability are also critical factors influencing productivity.



With more than 17 years of experience in cutting rock, the cutter drums on **erkat** machines have been through a lengthy period of continuous product development. They allow high cutting performance with low running costs.

PRODUCTIVITY OF A DRUM CUTTER

This diagram illustrates how productivity varies with model size and the uniaxial compressive strength of the rock. In addition, we have production curves for each model size which can be requested from us at any time.



WHERE TRADITIONAL METHODS ARE UNSUITABLE OR TOO EXPENSIVE

TRENCHING

1
Riad (Riyadh)
With a production rate of 6–8 m³/hr, this **ER 1500X** was used to excavate a trench 8.5 m deep in Riyadh, Saudi Arabia. The limestone had an unconfined compressive strength of 60–80 MPa. For this job, the drum cutter was extended by 2.5 m. Note how accurately the trench wall has been cut.



2
Qatar
The **ER 1500L** cut a 70 cm wide foundation in medium hard limestone with a production rate of 5 m/hr.



3
Germany
Canal trenching with an **ER 1500X**, working with low vibration next to sensitive service pipelines.



4
Middle East
Trenching in limestone
The **ER 1200** mounted on a 20 ton Hyundai excavator in the Middle East had a production rate up to 10 m³/hr.

5
Qatar
Excavating a trench 5 m deep in hard limestone in Qatar. In rock with a uni-axial compressive strength of 100 MPa, an **ER 1200** mounted on a 35 t crawler excavator achieves up to 7 m³/hr. The spoil extracted from the trench can be used as back fill without any additional crushing.



7
Middle East
Highly efficient pipeline trenching in hard limestone with an **ER 1500XQ**. The drum cutter can go as deep as the reach of the excavator.

6
Abu Dhabi
A powerful **ER 5500** achieved a production rate of approx. 70 m³/hr in hard limestone.



8
India
Trenching in India
The **ER 650**, mounted on a Hitachi EX 250 achieved production rates of 15 m³/hr in the 50 MPa hard rock.

9
Egypt
At this building site in Egypt, the performance of this **ER 1500XL-Q** reached 18 m³/hr. The drum cutter was used on a 30 t Doosan excavator and the rock was a soft limestone.

HIGH PERFORMANCE UNDER HARSH CONDITIONS

TUNNELING

1
South Korea
Pyongtaek Railroad Tunnel
 An **ER 1500XL** excavates a tunnel for a high speed railway line. As the tunnel was passing under an existing gas line, it had to be excavated without any vibration. With the **erkat** drum cutter, recorded vibration levels remained below 0.3 mm/sec. The rock was gneiss with weathered granite and it's compressive strength varied between 50 and 80 MPa (in locations rising to 120 MPa). Cutting performance was 20 m³/hr.



2
Germany
Tunneling project near Bad Reichenhall
 This **ER 650** had to be mounted on a Menzi Muck carrier due to the very limited space available. The production rate was 2 m³/hr in the 100 MPa compressive strength dolomite rock.

3
Austria
 An **ER 1500XL** attached to a Liebherr R924 tunnel excavator opening an underground access cavern for a TBM.



4 + 5 + 6
Germany
Albaufstieg Tunneling Project
 Excavating the tunnel crown (4), benching (5), break-through (6)
 An **ER 2000**, mounted on a Liebherr 944 tunnel excavator. At this project alone, 9 drum cutters from **erkat** were being used.



7 + 8
India
Tunneling project in Assam
 This **ERC 1500** cut 32 m³/hr at a tunneling project in Assam, the most eastward state capital in India. It was mounted on a Liebherr 924 tunnel excavator.

LOW VIBRATION IN DEMOLITION

DEMOLITION / REFURBISHMENT

When low vibration methods of demolition are required, **erkat** drum cutters give you the cutting edge.

1
Germany
Mounted on a CAT 345 excavator, this **ER 2000** cut 15 m³/hr demolishing a bunker.

2
Spain
An **ERC 650** profiling a retaining wall in Spain. The cutter was mounted on an 18 t Daewoo excavator.

3
Germany
An **ER 50** mounted on a Brokk 160 demolition robot removes contaminated concrete from the wall of a house.



4
Germany
Thanks to the **ER 1700**, equipped with a special universal console with integrated water spray system, dust created during the operation can be efficiently reduced, attributing to better working conditions for your construction team.

5
Scandinavia
A Brokk 90 with an **ER 50** cuts a drainage trench into the concrete crown of a dam.

6
Luxembourg
An **ER 2000** working with low noise and low vibration in order to deconstruct a strongly reinforced foundation plate.



STRONG IN QUARRYING / EXCAVATING

QUARRYING / EXCAVATING

1
Germany
An **ER 1500** transversal drum cutter doing foundation work by silently cutting its way through hard rock in the inner city of Bad Wildbad.

2
Austria
Cutting slope profiles for a new highway access track, the **ER 1500** brings its full power into play by biting its way through hard and abrasive sand stone.



3 + 4
Brazil
An **ER 1500** mounted on a Komatsu PC 200 produces 30 m³/hr in sandstone.

5 + 6 + 7
Brazil
Happy customers in Brazil
An **ER 2000**, mounted on a Volvo EC 380 C, achieves a production rate of 55 m³/hr. The material produced had the ideal grain size allowing it to be sold without any need for additional material handling or crushing.



MEETING SPECIAL NEEDS

SPECIAL FOUNDATIONS / AUGER DRILLING

1 + 2
Italy
 This **ADU 1500** has been equipped with a 9 m drilling auger, carrying a special rock drill bit. It has been mounted on a Liebherr 926, equipped with a special boom for sheet piles. The purpose of the holes was to allow sheet piles to be driven down to depths of 9 m in a river bed after the soil had been loosened. Drilling speeds were from 1.2 to 1.5 m/min.

3
Germany
 An **ER 650** profiling a concrete diaphragm. With the help of the infinite rotation unit, the drum cutter can reach any angle or position, without having the excavator moved to a new position, achieving time savings of at least 30%!

4
Dubai
 Michael Schumacher Tower 2008 in Dubai. The **ER 1500L** cleaning pile heads with diameter of 120 cm.

5 + 6
India
 It takes approx. 7 min for **ADU 1500**, mounted on a Hitachi EX 350 excavator, to drill 3 m deep holes, 450 mm diameter in rocky soil in India.



UNDERWATER / STEEL INDUSTRY APPLICATIONS

1
China
 This **ER 1500** is working in China. It is used to excavate drainage channels in a 100% brine solution at a salt mining location. Since 2005, 30 drum cutters from **erkat** have been working at this location without interruption.

2
Indonesia
 It is possible to use **erkat** drum cutters to 30 m underwater without modifications. To allow the super tankers of the future to dock at the Port of Batam, an **ER 1500XL** was used to deepen the port.

3
Algeria
 Deepening of a harbour basin with an **ER 5500**. Attached on a Liebherr R984 with long reach boom the drum cutter can reach under water up to a cutting depth of 16 m.

4
Germany
 An **ER 650W** cutting wood piles under water at the harbour area in Lübeck. The excavator is standing on a ponton/fleet and equipped with a long reach arm, so that it can reach a working depth of 10 m.

5
The Netherlands
 An **ER 400L** being used to clean runners at a steel works in the Netherlands.

6
Austria
 An **ER 1200** with a rotation unit, cleaning a cast iron runner in a steel factory. The surrounding temperature is higher than 250°C.

ER RANGE

TRANSVERSE DRUM CUTTERS

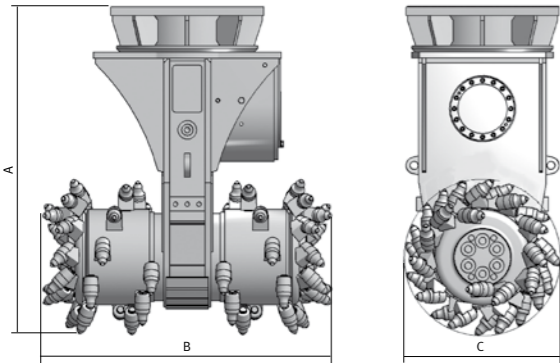
For excavators with weight from 1 to 125 tons

The transverse drum cutter is ideally suited for trenching, tunneling, special foundation work, demolition and for soil mixing. The operating characteristics of **erkat** special drum cutters allow them to be used in noise and vibration sensitive areas.

The ER range of transverse drum cutters consists of 15 different models.

By changing the cutter drums, **erkat** transverse drum cutters can be easily converted to suit several special applications such as tunneling, profiling or cutting wood (non-standard models).

- + Mechanical 360° rotatable console with standard Atlas Copco hole pattern (except for ER 5500)
- + Adaptable hydraulic motors with high torque
- + Extremely robust spur gear drive
- + Cutter heads mounted on oversized bearings to guarantee long operating and service life
- + Heavy duty fasteners guarantee secure fixture of cutter heads
- + Large variety of special cutting heads for profiling, mixing and mining as well as wood cutting (non-standard models)



TECHNICAL DATA	Unit	ER 50 ER 50 X	ER 100 ER 100 X	ER 250 ER 250 X	ER 600	ER 650	ER 1500 X	ER 1500 XL	ER 1700	ER 2000 ER 2000 X	ER 3000	ER 5500
Recommended excavator weight	t	1–3	3–8	8–15	10–18	15–25	20–40	20–40	30–50	35–50	50–70	70–125
Rated power	kW	18	30	45	65	80	120	120	120	160	200	400
Length of drum cutter (A)	mm	610	805	965	1,130	1,200	1,420	1,420	1,430	1,580	1,650	1,970
Width of cutter head (B)	mm	500 405	610	680	780	800	880	1,000	1,040	1,240 1,050	1,330	1,600
Diameter of standard cutter drums (C)	mm	225	370	450	575	575	670	670	680	720	805	920
Recommended rotation speed	rpm	150	110	90	80	85	75	75	75	65	55	50
Recommended oil flow	l/min	25–38	41–62	60–85	120–150	140–190	180–300	180–300	250–320	300–390	350–450	700–950
Max. oil flow at 10 bar	l/min	60	90	100	170	210	320	320	360	410	500	1,000
Max. operating hydraulic pressure ¹⁾	bar	400	400	400	400	400	400	400	400	400	400	400
Max. torque at 350 bar ^{1) 3)}	Nm	960–1,420	2,100–3,120	3,500–5,200	8,700–10,400	9,400–14,000	15,600–23,400	15,600–23,400	23,300–27,900	22,300–33,500	31,200–45,800	74,300–109,100
Max. cutting force at 350 bar ³⁾	N	12,600	17,800	23,200 26,000	36,200	48,700	69,900	69,900	77,500	93,000	113,900	237,200
Weight	kg	140 130	310	470	820	1,000	1,750	1,850	2,200	2,600 2,500	3,500	6,000
Number of picks	Pcs	60 40	64 44	44	48	44	44	48	56	56	64	68
Standard pick ²⁾	Type	ER 19/31/30/15 S ER 11/28/24/12 C	ER 12/45/38/20 K	ER 12/45/38/22 HC ER 16/46/38/20C	ER 17/64/60/25 Q	ER 17/75/70/30 Q	ER 17/75/70/30 Q	ER 17/75/70/30 Q	ER 19/75/70/30 Q	ER 19/75/70/30 Q	ER 25/77/80/38-30 Q	ER 25/80/80/38 S

1) Maximum oil flow and pressure figures shown in the table cannot be achieved at the same time. Contact **erkat** to discuss hydraulic requirements once actual conditions are known.
 2) An overview of standard picks is shown on page 27. Cutter drums can be supplied with picks to suit special applications as required – see cutter tool catalogue.
 3) Values for torque and cutting force shown in the table above are those achieved with the most powerful motor options. For values with other motor options, please refer to data sheets at www.erkat.de



ERC RANGE

ROTATING CUTTER TECHNOLOGY

Revolving rotary drum cutters for excavators from 2 to 70 tons

The ERC range from **erkat** represents a new generation of drum cutters that extends significantly the number of applications where they can be successfully employed. They have an integrated, hydraulically driven rotation unit designed by **erkat**.

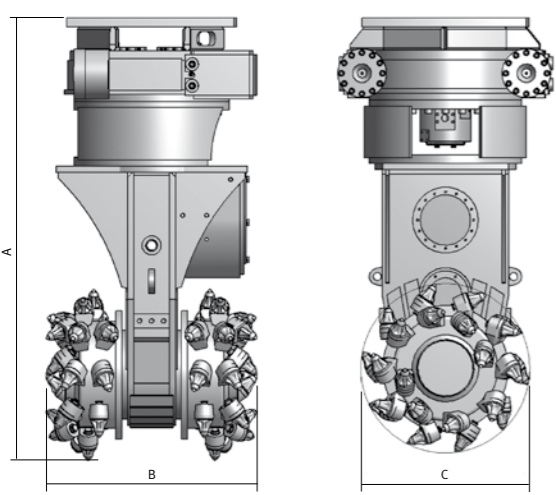
The range consists of 9 models suitable for excavators from 2 to 70 tons.

The integrated rotation unit with continuous infinite rotation, allows the drum cutter to be ideally oriented to the cutting surface under all conditions. The extra manoeuvrability makes the cutter more efficient in many applications. Rotation units are supplied with integrated hydraulic swivel joints as standard.



In tunneling and wall profiling applications, the rotation unit can increase productivity by 50%. Profiling accuracy and production rates increase, resulting in more cost effective operating results.

- + Continuous, infinite **erkat** rotation unit
- + Narrower trenching
- + Special hydraulic swivel allowing oil flow up to 450 l/min
- + Stepless positioning of the cutter drums
- + Reduced excavator wear due to optimum positioning of the drum cutter
- + Increased life of hydraulic hoses, reduced pick consumption



Continuous rotating drum cutter with **erkat** rotation unit



TECHNICAL DATA	Unit	ERC 50	ERC 100	ERC 250	ERC 600	ERC 650	ERC 1500 X	ERC 1500 XL	ERC 1700	ERC 2000	ERC 3000
Recommended excavator weight	t	2-3	4-8	8-15	12-18	15-25	23-40	23-40	30-50	35-50	50-70
Rated power	kW	18	30	45	65	80	120	120	120	160	200
Length of drum cutter (A)	mm	910	1,120	1,335	1,580	1,640	1,870	1,870	1,870	1,950	2,255
Width of cutter head (B)	mm	480	610	680	780	800	880	1,000	1,040	1,200	1,330
Diameter of standard cutter drums (C)	mm	225	370	450	575	585	670	670	680	680	805
Recommended rotation speed	rpm	150	110	90	80	85	75	75	75	65	55
Recommended oil flow	l/min	25-40	41-62	60-85	120-150	140-190	180-300	180-300	250-320	300-390	350-450
Max. oil flow at 10 bar	l/min	60	90	100	170	210	320	320	360	410	500
Max. operating hydraulic pressure	bar	400	400	400	400	400	400	400	400	400	400
Max. torque at 350 bar	Nm	960-1420	2,100-3,120	3,500-5,200	8,700-10,400	9,400-14,000	15,600-23,400	15,600-23,400	23,300-27,900	23,300-33,500	31,200-45,800
Max. cutting force at 350 bar	N	12,600	17,800	23,200	36,200	48,700	69,900	69,900	77,500	77,500	113,900
Weight	kg	275	490	850	1,490	1,570	2,450	2,550	3,000	3,320	5,250
Number of picks	Pcs	60	64	44	48	44	44	48	56	56	64
Standard pick ¹⁾	Type	ER 19/33/30/15S	ER 12/45/38/20 K	ER 12/45/38/22 HC	ER 19/64/60/25 Q	ER 17/75/70/30 Q	ER 17/75/70/30 Q	ER 17/75/70/30 Q	ER 19/75/70/30 Q	ER 19/75/70/30 Q	ER 25/77/78/38-30 Q
Rotation unit	Type	ERU 1	ERU 2	ERU 3	ERU 4	ERU 4	ERU 5	ERU 5	ERU 6	ERU 6	ERU 7

¹⁾ An overview of standard picks is shown on page 27. Cutter drums can be supplied with picks to suit special applications as required – see cutter tool catalogue.



ERU RANGE

ROTATING CUTTER TECHNOLOGY

Rotation units for use with excavator mounted drum cutters in tunneling, trenching and profiling vertical surfaces

The ERU range from **erkat** represents a new generation of rotation units, tough enough for use with drum cutters in tunneling, trenching and profiling applications. The rotation units are long-lasting, reliable and low maintenance.

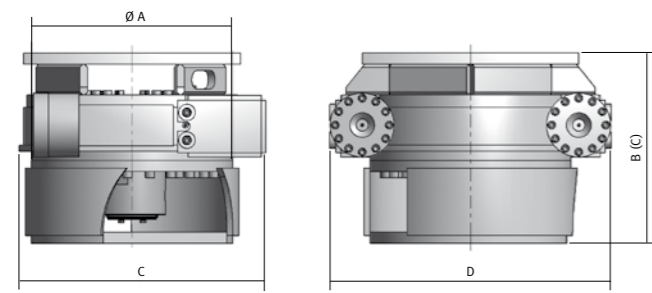
In total there are 7 models that can be used on excavators from 2 to 70 tons. The ERU 3 and larger models are fitted with two hydraulic motors as standard.

When combined with the endlessly rotating **erkat** rotation units, rotary drum cutters can be located in the ideal position to meet cutting requirements. All rotation units have a hydraulic swivel joint as standard allowing endless rotation.

Combining your standard **erkat** drum cutter with a rotation unit is a simple procedure. **erkat** rotation units can also be fitted to drum cutters from other manufacturers!



- + Long lasting and robust worm gear and gearbox
- + Components made to tight tolerances
- + Worm gear made from high-quality steel
- + Heavy duty bearings
- + Hydraulic swivel joint with maximum oil flow capacity up to 450 l/min
- + Continuous and infinite rotation
- + Extremely high holding torque; up to 350 kNm
- + Compact and low maintenance
- + Double rotation motors used in models ERU 3 and upwards



TECHNICAL DATA	Unit	ERU 1	ERU 2	ERU 3	ERU 4	ERU 5	ERU 6	ERU 7
Recommended excavator weight	t	2-5	5-8	9-15	15-25	25-40	30-50	50-70
Diameter of gearbox (A)	mm	270	370	460	570	610	700	900
Overall height of rotator (B)	mm	415	450	520	620	635	640	820
Length (C)	mm	445	640	760	770	770	910	1,040
Height (D)	mm	370	500	600	700	780	860	1,170
Max. oil flow of rotary feedthrough	l/min	60	100	130	170	320	320	450
Max. hydr. pressure of rotary feedthrough	bar	350	350	350	350	350	350	350
Max. oil flow of rotary drive	l/min	10	10	30	40	40	40	60
Max. hydr. pressure for rotary drive	bar	160	160	160	160	160	160	160
Max. holding torque of rotator drive	Nm	4,000	11,100	44,700	95,000	200,000	270,000	350,000
Number of rotary drive motors	Pcs	1	1	2	2	2	2	2
Weight	kg	160	200	440	700	900	1,000	2,000
Recommended for erkat drum cutter	Type	ER 50	ER 100	ER 250	ER 600, ER 650	ER 1200, ER 1500	ER 1500, ER 1700, ER 2000	ER 3000



ER-L RANGE

LONGITUDINAL DRUM CUTTERS

For excavators with weight from 3 to 50 tons

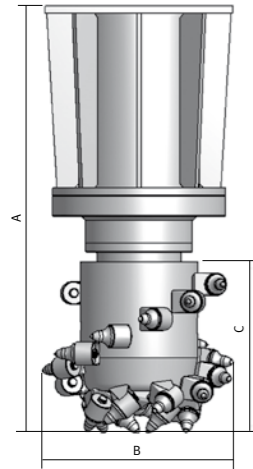
Typical applications for **erkat** longitudinal drum cutters include trenching, accurate excavation of irregular shaped foundations, slag removal in steel mills, cleaning pile heads and soil mixing.

erkat longitudinal drum cutters are designed to be mounted on excavators from 3 to 50 tons and are available in 9 different sizes.

Longitudinal drum cutters are driven by a powerful radial piston motor creating extremely high cutting forces. The robust cutter drums together with their secure fixing method enable them to operate in the most demanding conditions. Consoles can be supplied with different lengths to suit a variety of applications.

By exchanging the cutter head, the **erkat** longitudinal cutter can be easily converted into a powerful ADU auger drive unit for vertical and horizontal holes.

- + Robust, high torque drive
- + Different length consoles available
- + Secure, strong cutter drum fixture
- + Oversized, long-lasting cutter drum bearings
- + Robust long-lasting cutter drums
- + Larger diameter cutter drums available on request



NEW
Range of longitudinal drum cutters
ERL 700 and ERL 1100

The ERL 700 and ERL 1100 range have a new attachment method that allows a quick and simple conversion between grinder head and auger drive. These machines are ideally suited for the cleaning of pile heads or drilling shallow holes.

See also ADU range on page 24.



TECHNICAL DATA	Unit	ER 100 L	ER 250 L	ER 400 L	ER 450 L	ER 600 L	ERL 700	ERL 1100	ER 1500 L	ER 2000 L
Recommended excavator weight	t	3-7	8-15	12-17	12-17	15-22	15-25	25-35	20-40	35-50
Rated power	kW	30	45	65	65	65	70	120	120	160
Length of drum cutter (A)	mm	810	1,130	1,130	1,160	1,340	1,230	1,280	1,440	1,500
optionale Length of drum cutter (A)	mm	-	1,430	1,430	1,460	-	-	-	-	-
Diameter of standard cutter drums (B)	mm	370	400	400	450	535	450	500	680	740
Length of standard cutter head (C)	mm	310	355	355	380	550	450	500	590	600
Recommended rotation speed	rpm	110	90	80	80	80	75	75	75	75
Recommended oil flow	l/min	52	60-85	120-150	120-150	120-150	160	300	180-300	180-300
Maximum oil flow at 10 bar	l/min	90	100	170	170	170	200	320	320	320
Maximum operating hydraulic pressure	bar	400	400	400	400	400	400	400	400	400
Max. torque at 350 bar	Nm	2,600-3,100	3,500-5,200	8,700-10,400	8,700-10,400	8,700-10,400	11,700	23,400	13,600-23,400	22,300-33,500
Max. cutting force at 350 bar	N	16,900	26,000	51,900	46,200	38,900	52,000	93,600	68,800	90,500
Weight	kg	210	340	365	375	580	630	660	1,200	1,500
Number of picks	Pcs	32	44	44	30	42	30	26	24	26
Standard pick ¹⁾	Type	ER 16/46/38/20 S	ER 12/45/38/20 K	ER 12/45/38/20 K	ER 12/45/38/22 HC	ER 12/45/38/22 HC	ER 12/45/38/22 HC	ER 17/75/70/30 Q	ER 17/75/70/30 Q	ER 19/75/70/30 Q

¹⁾ An overview of standard picks is shown on page 27.
Cutter drums can be supplied with picks to suit special applications as required – see cutter tool catalogue.

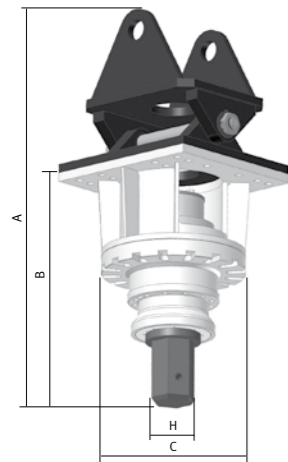




ADU RANGE

AUGER DRIVE UNITS

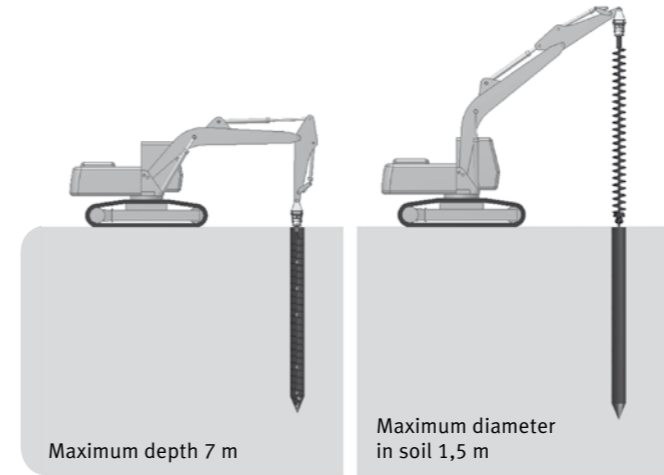
For excavators with weight from 3 to 50 tons



The design and assembly of this new, innovative range of auger drive excavator attachments has benefitted from many years of experience in cutting rock with longitudinal drum cutters.

The ADU range of **erkat** auger drive units are designed for use on excavators from 3 to 40 tons. ADU auger drive units are indestructible, high performance drives that have proven themselves many times while successfully drilling holes in medium hard limestone with 60 MPa compressive strength.

The conversion of an ER-L longitudinal cutter to an ADU requires an adaptor that bolts onto the output shaft. The adaptor has a hexagonal drive for connection to the augers.



- + Strong universal swing bracket
- + High torque hydraulic motor
- + Robust, compact design
- + Powerful drive unit
- + Intentionally oversized bearing system for the drive shafts
- + Extra strong, wear resistant hexagon drive

ADAPTABLE

The **ER-L RANGE** of longitudinal cutters can be converted with an adaptor to an **ADU** auger drive unit. See also ER-L range on page 22.



Auger with pilot drilling bit

TECHNICAL DATA	Unit	ADU 100	ADU 250	ADU 600	ADU 1500	ADU 2000
Recommended excavator weight	t	3–6	7–13	14–17	18–35	30–50
Rated power	kW	30	45	65	110	140
Max. drill depth / at drilling diameter						
Soil classification 1–3	m/mm	3/D.300	5/D.300	6/D.400	7/D.800	7/D.800
Soil classification 4–5	m/mm	2/D.300	3/D.300	4/D.500	6/D.800	7/D.800
Soil classification 6–7 (up to 60 MPa max)	m/mm	–	–	2/D.500	2/D.800	5/D.800
Max. drilling diameter / at drill depth						
Soil classification 1–3	mm/m	500/2	1,000/2	1,200/2	1,500/2	1,700/2
Soil classification 4–5	mm/m	400/2	700/2	900/2	1,200/2	1,200/3
Soil classification 6–7 (max. UCS: 60 MPa)	mm/m	–	–	500/2	800/2	800/5
Length of auger drive (A)	mm	800	1,100	1,300	1,750	1,800
B	mm	640	810	850	1,200	1,250
C	mm	300	350	350	600	660
H	mm	80	80	160	160	160
Recommended rotation speed at drill diameter						
300 mm	rpm	80	80	80	70	70
600 mm	rpm	60	60	60	60	60
1.000 mm	rpm	40	40	40	40	40
1.500 mm	rpm	25	25	25	25	25
Max. oil flow	l/min	50	85	150	300	400
Max. operating hydraulic pressure	bar	400	400	400	400	400
Max. torque at 350 bar	Nm	3,500	5,200	10,400	23,400	33,500
Weight without hydraulic hoses and top bracket, with swing bracket	kg	230	400	600	1,300	1,600



Soil classification 1–2



Soil classification 3–5





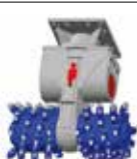





Soil classification 6–7 max. 60 MPa

Choice of drill bits

Notes for drilling with erkat auger drive unit: If the auger string is not vertical during drilling with the ADU, strong bending forces are exerted on the hexagonal drive shaft. It is therefore important that care is taken to maintain the auger in a vertical position while drilling to avoid these bending stresses from occurring.



SPECIAL MODELS

SPECIAL MODEL	Image of special model	Width of cutting head
ER 250 P Application area: Profiling Excavator weight: 7–15 t		800
ER 250 W Application area: Removal of tree stumps Excavator weight: 7–15 t		550
ER 650 P Application area: Profiling Excavator weight: 15–25 t		1,070
ER 650 W Application area: Removal of tree stumps Excavator weight: 15–25 t		660
ER 650 T Application area: Tunnel profiling Excavator weight: 15–25 t		1,000
ER 1500 P Application area: Profiling Excavator weight: 25–30 t		1,200
ER 1500 T Application area: Tunnel profiling Excavator weight: 20–40 t		1,500
ER 1500 HD Application area: Tunneling and extraordinary applications Excavator weight: 30–45 t		1,040

SPECIAL MODEL	Image of special model	Width of cutting head
ER 1500 M Application area: Treating soft soils Excavator weight: 20–40 t		935
ER 1500 M (Extension) Application area: Treating soft soils Excavator weight: 20–40 t		935
ER 1500 G Application area: Mining gypsum and other soft rock Excavator weight: 20–40 t		1,040
ER 1500 LS Application area: Trenching Excavator weight: 20–40 t		750
ER 2000 T Application area: Tunnel profiling Excavator weight: 30–50 t		1,560



An overview of associated cutting tools can be found in our Cutter Tool Catalogue.

STANDARD TOOLS

SPECIAL MODEL	Standard pick	Retainer	Standard pick box
ER 50 X	 Round attack pick ER 11/28/24/12 C Art. No. 11 28 24 12	 Retaining clip ES 50 Art. No. 99 99 99 51	 Pick box PH 50 Art. No. 70 04 99
ER 50 ERC 50	 Round attack pick ER 19/33/30/15 S Art. No. 19 33 30 15	 Circlip SG 100 Art. No. 99 99 99 90	 Pick box PH 50 N Art. No. 70 04 50
ER 100 ER 250 L, ER 400 L ERC 100	 Round attack pick ER 12/45/38/20 K Art. No. 12 45 38 20	Retainer sleeve on the shaft	 Pick box PH 250 Art. No. 72 10 24 E
ER 100 L ER 250 X	 Round attack pick ER 16/46/38/20 C Art. No. 16 46 38 20	 Retaining clip ES 250 Art. No. 99 99 99 91	 Pick box PH 250 Art. No. 72 10 24 E
ER 250 ER 450 L ERC 250	 Round attack pick ER 12/45/38/22 HC Art. No. 12 45 38 23	 Retaining clip ES 450 Art. No. 99 99 99 96	 Pick box PH 450 Art. No. 72 10 25 UA
ER 600 L ERL 700	 Round attack pick ER 15/46/38/22 C Art. No. 15 46 38 22	 Retaining clip ES 450 Art. No. 99 99 99 96	 Pick box PH 450 Art. No. 72 10 25 UA
ER 600 ERC 600	 Round attack pick ER 17/64/60/25 G Art. No. 17 64 60 26	 QuickSnap QS 600 Art. No. 99 25 00 25	 Pick box PH 600 Art. No. 76 10 25
ER 650 ERL 1100	 Round attack pick ER 17/75/70/30 G Art. No. 17 75 70 35	 QuickSnap QS 5000 Art. No. 99 50 00 30	 Pick box PH 1000 Art. No. 71 16 10
ER 1500 ERC 1500 ER 1500 L	 Round attack pick ER 17/75/70/30 G Art. No. 17 75 70 35	 QuickSnap QS 5000 Art. No. 99 50 00 30	 Pick box PH 1500 Art. No. 71 10 22
ER 1700 ER 2000 ERC 2000	 Round attack pick ER 19/75/70/30 G Art. No. 19 75 70 35 E	 QuickSnap QS 5000 Art. No. 99 50 00 30	 Pick box PH 1500 Art. No. 71 10 22
ER 3000	 Round attack pick ER 25/77/80/38-30 G Art. No. 25 77 80 35 E	 QuickSnap QS 5000 Art. No. 99 50 00 30	 Pick box PH 5300 Art. No. 75 30 10
ER 5500	 Round attack pick ER 25/80/80/38 S Art. No. 25 80 80 38	 Circlip SG 5500 Art. No. 99 55 00 38	 Pick box PH 5500 Art. No. 75 30 20

Additional pick types to suit special applications can be found in the cutter tool catalogue. We are pleased to provide advice so you can find the right type of pick for your application.



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