

SPECIAL ROCK CUTTERS



English
Imperial Units



KEMROC[®]

revolution of cutting

An innovative, German engineering company developing revolutionary excavator attachments — focused on product development, quality engineering and reliability.



Cutter attachments are our passion. With more than 25 years' experience, we develop and manufacture cutter attachments for excavators and backhoe loaders. Our attachments are robust and strong with main components made in Germany.

Together with our customers, we are constantly developing new solutions for demolition, construction, and mining applications. Challenge us! We guarantee specialist information and professional service for our products. Our international team of specialists will be happy to support you with your individual project.

Attention during production and assembly guarantees the highest level of quality and reliability.

Excellent Service. We support you, our team can help install your KEMROC attachment and train your operators.



Modern production facilities

revolution of cutting

CONTENT

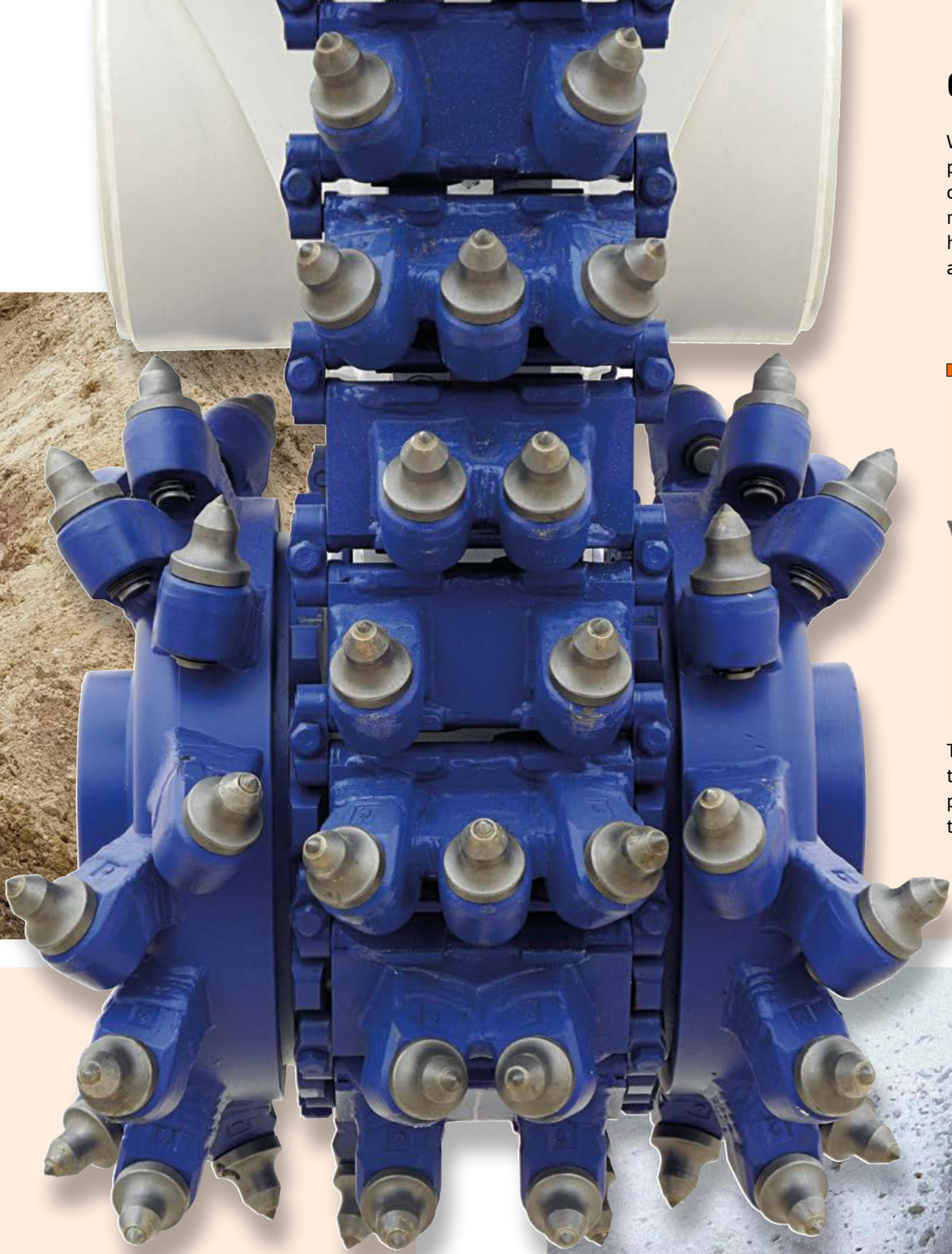
	Page
FEATURES	
Attachments for all trench sizes	4
Cutting technology	5
EK RANGE	
Chain cutters — reduce wear & tear on the excavator swing gear and save energy	6
EKT RANGE	
Rotary drum cutters — can be converted into EK chain cutters	10
KR RANGE	
Rotary drum cutters with spur gears	12
KRD RANGE	
Rotary drum cutters with direct drive	16
KRC RANGE	
Bullhead cutters with full-face coverage for narrow trenches	18
DMW RANGE	
Cutter wheels with double motor for rock up to 20,000 psi	20
KRX RANGE	
Powertool drives with attachments for milling, drilling and mixing	24
EX RANGE	
Patch planers for milling asphalt and concrete with accurate depth control	28
ES RANGE	
Cutter heads for asphalt, concrete and rock	30

	Page
EBA RANGE	
Auger drive attachments for excavators and backhoe loaders	32
KTR RANGE	
Trenching attachments for medium hard rock	34
KDS RANGE	
Diamond saws for a wide variety of applications and materials	36
KRM RANGE	
Rotation units with endless rotation	40
NON-STANDARD MODELS	
Manufactured to order according to customer requirements	42
KEMSOLID	
Special foundation solutions from Kemsolid Division — fast, efficient and environmentally friendly	44
TOOLS	
Picks with matching retainers, pick boxes, diamond saw blades, mounting and dismantling tools	46
HOLE PATTERNS	
Hole patterns for KEMROC attachments	54



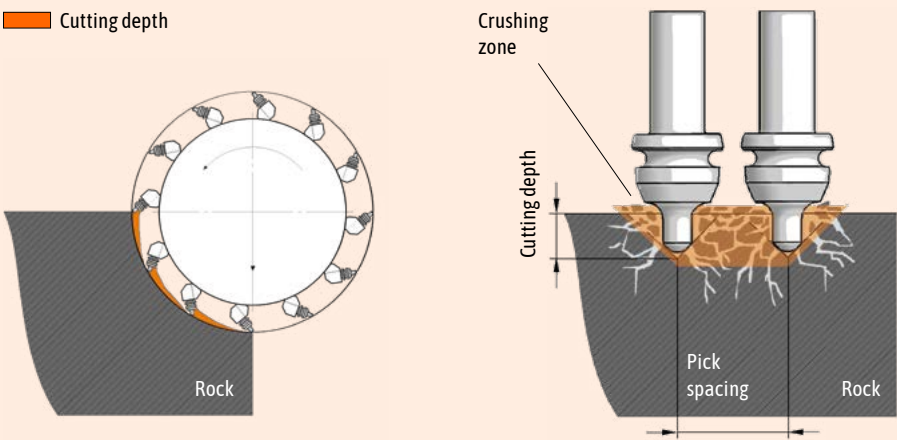
FEATURES

KEMROC cutter attachments work reliably and efficiently in almost any material. Steel, concrete, rock, wood – wherever KEMROC cutter attachments are used, material is removed safely and accurately.



CUTTING TECHNOLOGY

When grinding with round attack picks, each tool penetrates into the rock along parallel paths and breaks material out from the space between the paths. The cutting rate depends to a large degree on the uniaxial compressive strength of the rock being cut. Other significant factors affecting production rates include the hydraulic pressure and flow that the excavator is able to supply to the attachment, as well as the stability and weight of the excavator.



The experience gained from many years of cutting rock has gone into the design of the cutter wheels, drums and chains. They are designed to give maximum cutting performance with minimum wear costs. The selection of picks and boxes, as well as the design of the pick pattern, are part of our continuous product improvement.

ATTACHMENTS FOR ALL TRENCH SIZES

Trenching attachments from KEMROC provide options for trench widths from 3 inches.

	Min. trench width in	Max. trench width in	Trench depth in	Recommended excavator weight lb x 10 ³	Max. uniaxial compressive strength psi	Page
DMW Cutter Wheels	3	16	16–39	30–264	20,000	20
KTR Trenching Attachments	7	18	40–70	40–75	8,700	36
KRX Powertool Drives	15	22	4–120	10–110	20,000	24
EK Chain Cutters	15	–	4–300	5–155	20,000	6
EKT Rotary Drum Cutters	20	–	8–300	5–155	20,000	10
KRC Bullhead Cutters	21	–	8–300	15–175	20,000	18
KR Rotary Drum Cutters	20	–	8–300	1–275	26,000	12
KRD Rotary Drum Cutters	24	–	8–300	1–110	16,000	16





EK RANGE

Chain cutters — reduce wear & tear on the excavator swing gear and save energy

 **5,000 – 155,000 lb**

The EK range of chain cutters are the first of their type on the market. Designed for use on excavators from 5,000 to 155,000 pounds, they are ideal for cutting stone with a uniaxial compressive strength up to 20,000 psi. They are efficient, vibration-free attachments for the excavation of deep narrow trenches with the optimal trench profile. Trench width starts from 15 inches. Another application is mining of medium hard minerals with compressive strength from 2,200 to 11,600 psi, where drill and blast is not possible.

KEMROC chain cutters excavate trenches no wider than absolutely necessary. The continuous chain, driven by the cutter drums, removes the material automatically from the space between the cutter drums. With standard drum cutters, the need to remove this material on technical grounds always results in trenches wider than the cutter. Keeping trenches to the minimum width possible saves unnecessary transport costs for removal of cut material and fill material becomes cheaper. The material produced by the chain cutter is fine grained and is ideal for use as fill.

EK chain cutters reduce wear and tear on the excavator swing gear. In addition, they give a 40 percent energy saving for equivalent production rates compared to conventional rotary drum cutters without the central chain.



EK 140
Trenching and
pipeline work



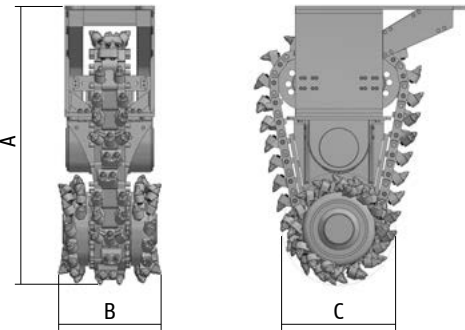
Chain cutters — reduce wear & tear on the excavator swing gear and save energy

Minimal wear on excavator as the method of operation eliminates need for swing motion

Needs approx. 40 percent less energy than equivalent drum cutter without a chain between the drums

Range of cutting widths available

		EK 20	EK 40	EK 60	EK 100	EK 110	EK 140	EK 150	EK 160	EK 220	EK 240
Recommended excavator weight	lb x 10 ³	5–15	10–25	20–35	40–65	55–70	65–100	75–110	75–110	110–155	110–155
Rated power	hp	30	60	80	135	150	190	200	200	295	295
Cutter length (A)	in	39	51	63	78	78	85	85	85	94	94
Cutting width (B)	in	15	20	20 24	24 28 32	24 28 32	32 36 40	32 36 40	32 36 40	36 52	36 52 60
Cutter drum diameter (C)	in	13	19	24	31	31	33	33	33	39	39
Recommended rotation speed	rpm	75	90	80	65	65	70	65	65	45	45
Recommended oil flow ^[1]	gal/min	8	22	37	53	66	73	87	92	145	159
Max. oil flow ^[1]	gal/min	18	30	52	69	79	85	103	112	172	172
Max. operating pressure	psi	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Torque at 5500 psi	lbf-ft	1,750	4,200	8,050	13,950	18,050	18,750	22,350	25,100	53,600	57,800
Cutting force at 5500 psi	lbf	3,325	5,395	8,160	10,610	13,760	13,420	16,030	17,960	33,025	35,585
Max. rock compressive strength	psi	3,600	4,400	7,300	11,600	11,600	14,500	14,500	17,400	20,000	20,000
Weight per cutting width	lb	695	1,655	2,755 2,865	5,400 5,535 5,775	5,400 5,535 5,775	8,045 8,160 8,380	8,045 8,160 8,380	8,045 8,160 8,380	13,010 14,990	13,010 14,990 15,875
Tool holder / pick box	Type	PH 14	PH 20	PH 22	PH 32 HD	PH 32 HD	PH 32 HD	PH 32 HD	PH 32 HD	PH 38 HD	PH 38 HD
Number of picks in cutter drums	Pcs	56	52	40 60	28 40 48	28 40 48	44 48 56	44 48 56	44 48 56	44 72	44 72 84
Number of picks in the cutter chain	Pcs	54	49	53	54	54	63	63	63	58	58
Standard pick ^[2]	Type	1	2	3	4	4	4	4	5	6	6
Standard hole pattern ^[3]	Type	LB 10	LB 10	LB 20	LB 30	LB 30	LB 40	LB 40	LB 40	LB 40	LB 40
Compatible rotation unit	Type	KRM 30	KRM 35	KRM 40	KRM 50	KRM 60	KRM 60	KRM 60	KRM 70	KRM 80	KRM 80



- 1 ER 15/29/26/14 C

2 ER 16/46/38/20 C

3 ER 15/46/38/22 C
- 4 ER 17/75/70/30 Q

5 ER 19/75/70/30 Q

6 ER 25/80/80/38 C

[1] Setting the correct oil flow ensures that maximum output power is never greater than the rated power at any pressure level.

[2] For an overview of standard picks, see pages 49 to 51. Depending on application, cutter heads can be supplied with a choice of pick according to the type of pick box used.

[3] An overview of hole patterns can be found on page 54.

The EK range is patent protected.

Fine grained cut material

Low noise and vibration levels

Works underwater without need for modifications

APPLICATIONS

Trenching and pipeline work

Mining of soft to medium hard minerals

Can also be used for concrete renovation, profiling, underwater excavations and tunneling



Additional applications in KEMROC Projector

projector.kemroc.net/web/?range=ek

EKT RANGE

Rotary drum cutters — can be converted into EK chain cutters

 5,000–155,000 lb

The patented EK range of chain cutters are one of our core products and continues to be recommended as an ideal tool for trenching contractors. This concept is being expanded with the addition of the new EKT range of

traditional style drum cutters. These lower priced models are supplied as rotary drum cutters without a central cutting chain, but conversion kits are available so that cutter chains can be fitted later.

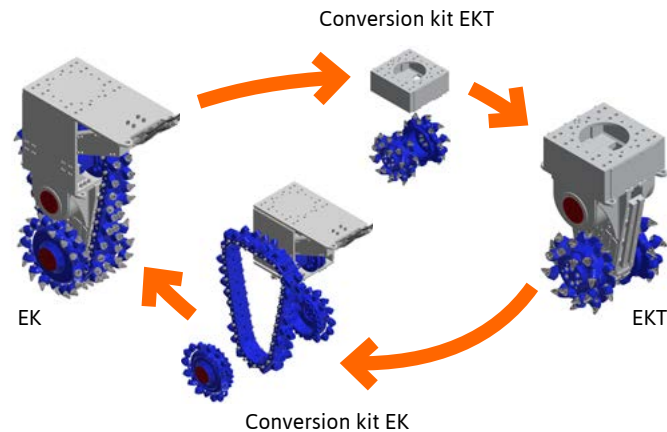
+

Can be converted to an EK model

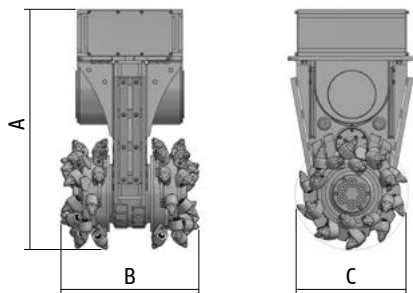
Fast and strong



Converts from a rotary drum cutter to a chain cutter and vice versa.



		EKT 20	EKT 40	EKT 60	EKT 100	EKT 110	EKT 140	EKT 150	EKT 160	EKT 220	EKT 240
Recommended excavator weight	lb x 10 ³	5–15	15–25	25–35	40–65	55–70	65–100	75–110	75–110	110–155	110–155
Rated power	hp	30	60	80	135	150	190	200	200	295	295
Cutter length (A)	in	21	39	47	57	57	61	61	61	69	69
Cutting width (B)	in	16	20	20 24	28 32	28 32	35	35	34 40	36 52	36 52
Cutter drum diameter (C)	in	9	18	23	27	27	28	28	28	34	34
Recommended rotation speed	rpm	75	90	80	65	65	70	65	65	45	45
Recommended oil flow ^[1]	gal/min	8	22	37	53	66	73	87	92	145	159
Max. oil flow ^[1]	gal/min	18	30	52	69	79	85	103	112	172	172
Max. operating pressure	psi	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Torque at 5500 psi	lbf-ft	1,750	4,200	8,050	13,950	18,050	18,750	22,350	25,100	53,600	57,800
Cutting force at 5500 psi	lbf	4,810	5,755	8,295	12,295	15,940	15,850	18,930	21,200	38,015	40,985
Max. rock compressive strength	psi	3,600	4,400	7,300	11,600	11,600	14,500	14,500	17,400	20,000	20,000
Weight per cutting width	lb	285	950	1,600 1,710	2,865 3,000	2,865 3,000	4,410	4,410	4,410 5,510	6,835 7,826	6,835 7,825
Tool holder / pick box	Type	PH14	PH20	PH22	PH32 HD	PH32 HD	PH32 HD	PH32 HD	PH32 HD	PH38 HD	PH38 HD
Number of picks per cutting width	Pcs	56	60	40 60	40 44	40 44	44	44	44 56	44 60	44 60
Standard pick ^[2]	Type	1	2	3	4	4	4	4	5	6	6
Standard hole pattern ^[3]	Type	LB10	LB10	LB20	LB30	LB30	LB40	LB40	LB40	LB40	LB40
Compatible rotation unit	Type	KRM30	KRM35	KRM40	KRM50	KRM60	KRM60	KRM60	KRM70	KRM80	KRM80



- 1 ER15/29/26/14 C
- 2 ER16/46/38/20 C
- 3 ER15/46/38/22 C
- 4 ER17/75/70/30 Q
- 5 ER19/75/70/30 Q
- 6 ER25/80/80/38 C

^[1] Setting the correct oil flow ensures that maximum output power is never greater than the rated power at any pressure level.

^[2] For an overview of standard picks, see pages 49 to 51. Depending on application, cutter drums can be supplied with a choice of pick according to the type of pick box used.

^[3] An overview of hole patterns can be found on page 54.

- +
- Two motors for extra hydraulic power
 - Tough, rigid gearbox housing
 - Drums supported on robust bearings
 - Protection for hydraulic hoses
 - Works underwater without need for modifications



APPLICATIONS

Trenching and pipeline work
Mining of soft to medium hard minerals

Can also be used for concrete renovation, profiling, underwater excavations and tunneling



EKT 40 | Profiling excavation boundaries



EKT 220 | Road building



EKT 100 | Trenching



Additional applications in KEMROC Projector
projector.kemroc.net/web/?range=ekt

KR RANGE

Rotary drum cutters with spur gears

 1,000–275,000 lb

In addition to standard EK and the convertible EKT range, traditional style rotary drum cutters are now also available from KEMROC. They are designated as the new KR range of drum cutters. Designed to be incredibly robust, these attachments are ideal for use on short arm excavators working in confined spaces, especially in tunneling and also for the vibration-free and silent demolition of reinforced concrete structures.

Effective dust control is particularly important in demolition and tunneling applications. The KR range of cutters are designed for the installation of an optional, hydraulically controlled water jet dust control system.



KR 150
Concrete
demolition



Rotary drum cutters
with spur gears

Extra heavy-duty, rigid gear box housing

Exceptional wear protection on the gearbox

Equipped for optional water spray dust suppression system

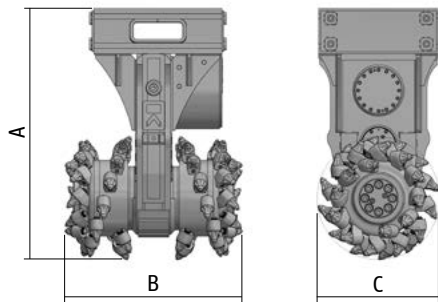
High torque motors for maximum cutting force

Drums supported on heavy-duty bearings

Protected hose management

Works underwater without need for modifications

		KR 10	KR 15	KR 18	KR 20	KR 35 ^[1]	KR 45	KR 50	KR 65	KR 70	KR 80	KR 90	KR 110 ^[1]	KR 120 ^[1]	KR 150 ^[1]	KR 155	KR 165 ^[1]	KR 175 ^[1]	KR 200	KR 250	KR 400 ^[1]	KR 450 ^[1]
Recom. excavator weight	lb × 10 ³	1–6	1–6	4–8	4–8	10–18	20–35	20–35	25–40	35–50	35–55	35–55	45–75	55–100 [45–90]	65–110	65–110	75–120	90–120	110–155	130–175	175–275	220–275
Rated power	hp	15	20	25	25	40	60	60	85	95	105	105	150	160	160	160	215	215	270	270	535	535
Cutter length (A)	in	19	19	19	20	33	39	40	47	47	49	49	58	58	58	58	63	63	65	65	81	81
Cutting width (B)	in	17	17	17	19	24 [20]	24	27	32	32	32	32	41 [35]	41 [35]	41 [35]	41	49 [41]	49 [41]	52	52	65 [51]	65 [51]
Cutter drum diameter (C)	in	9	9	9	9	15	16	18	23	23	23	23	28	28	28	28	28	28	32	32	37	37
Recom. rotation speed	rpm	95	115	115	100	115	105	95	70	70	70	65	70	70	65	65	65	55	50	60	45	45
Recommended oil flow ^[2]	gal/min	4	5	11	9	22	28	25	38	46	49	55	59	85	87	90	100	106	114	153	234	276
Max. oil flow ^[2]	gal/min	11	12	24	22	30	38	34	45	50	55	63	66	95	95	95	106	111	139	159	317	317
Max. operating pressure	psi	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Torque at 5500 psi	lbf-ft	650	750	1,550	1,550	3,250	4,500	4,500	9,050	10,850	11,600	14,400	14,000	20,050	22,000	24,100	26,850	31,700	37,600	44,250	89,600	105,450
Cutting force at 5500 psi	lbf	1,865	2,070	4,225	3,955	5,375	6,900	6,135	9,395	11,265	12,050	14,925	11,845	16,995	18,590	20,390	22,730	26,840	27,720	32,665	57,395	67,665
Max. rock compressive strength	psi	2,900	2,900	2,900	2,900	4,350	5,800	5,800	8,700	10,150	11,600	11,600	13,100	14,500	14,500	14,500	16,000	16,000	20,000	20,000	26,000	26,000
Weight	lb	225	225	225	285	825 [685]	1,100	1,215	1,985	1,985	2,360	2,360	4,520 [4,080]	4,520 [4,080]	4,520 [4,080]	4,520	6,175 [5,620]	6,175 [5,620]	8,200	8,200	15,655 [13,890]	15,655 [13,890]
Tool holder / pick box	Type	PH 14	PH 14	PH 14	PH 14	PH 20	PH 20	PH 22	PH 30 HD	PH 30 HD	PH 30 HD	PH 30 HD	PH 32 HD	PH 32 HD	PH 32 HD	PH 32 HD	PH 32 HD	PH 32 HD	PH 38 HD	PH 38 HD	PH 38 HD	PH 38 HD
Number of picks	Pcs	44	44	44	56	64 [44]	44	44	44	44	44	44	60 [44]	60 [44]	60 [44]	60	64 [60]	64 [60]	64	64	88 [68]	88 [68]
Standard pick ^[3]	Type	1	1	1	1	2	2	3	4	4	4	4	5	5	5	6	6	6	7	7	7	7
Standard hole pattern ^[4]	Type	LB 10	LB 10	LB 10	LB 10	LB 10	LB 20	LB 20	LB 20	LB 20	LB 30	LB 30	LB 40	LB 40	LB 40	LB 40	LB 40	LB 40	LB 40	LB 40	LB 50	LB 50
Compatible rotation unit	Type	KRM 30	KRM 30	KRM 30	KRM 30	KRM 35	KRM 40	KRM 40	KRM 40	KRM 40	KRM 50	KRM 50	KRM 60	KRM 60	KRM 60	KRM 60	KRM 70	KRM 70	KRM 80	KRM 80	—	—



- 1 ER 15/29/26/14 C
- 2 ER 16/46/38/20 C
- 3 ER 12/45/38/22 HC
- 4 ER 17/75/70/30 Q
- 5 ER 19/75/70/30 Q – on KR 110 | 120 | 150
ER 17/75/70/30 Q – on KR 110 C | 120 C | 150 C
- 6 ER 19/75/70/30 Q
- 7 ER 25/80/80/38 C

- [1] Also available in a C version with smaller cutting width under model designation KR 35 C, KR 110 C, KR 120 C, KR 150 C, KR 165 C, KR 175 C, KR 400 C or KR 450 C. Revised values for this C version shown in square brackets.
- [2] Setting the correct oil flow ensures that maximum output power is never greater than the rated power at any pressure level.
- [3] For an overview of standard picks, see pages 49 to 51. Depending on application, cutter drums can be supplied with a choice of pick according to the type of pick box used.
- [4] An overview of hole patterns can be found on page 54.



APPLICATIONS

Tunneling
Demolition
Also used for trenching and pipeline work, renovating concrete, profiling, mining of soft minerals and underwater excavation



Additional applications in KEMROC Projector



projector.kemroc.net
/web/?range=kr



KRD RANGE

Rotary drum cutters
with direct drive

 1,000–110,000 lb



Strong, compact design

Direct drive with particularly strong support for the cutter drums

High power to weight ratio

Protected hose management

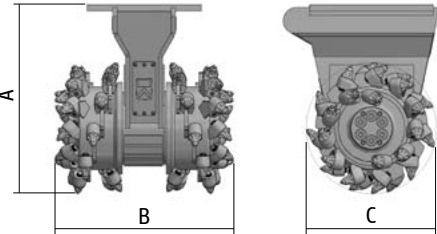
Operational to 30 meters underwater without need for modifications

The KRD range of direct drive drum cutters can be described as compact, lightweight but strong. Lighter and shorter, these attachments are ideal for use on long-arm excavators for

demolition and shaft sinking applications. They can also be used for soil stabilization and concrete renovation applications. Intentionally oversized bearings have been used to support

the cutter drums for a long operating life.

		KRD 15	KRD 18	KRD 30	KRD 45	KRD 70	KRD 100	KRD 120					KRD 150	KRD 155	KRD 165	KRD 175
Recommended excavator weight	lb x 10 ³	1–4	4–8	12–18	20–36	38–55	45–90	55–90					65–90	65–90	75–110	75–110
Rated power	hp	20	25	40	60	95	150	160					160	160	215	215
Cutter length (A)	in	20	20	23	26	37	42	42					42	42	42	42
Cutting width (B)	in	20	20	25	29	37	40	40					40	40	50	50
Cutter drum diameter (C)	in	12	12	15	18	24	29	29					29	29	29	29
Recommended rotation speed	rpm	145	115	110	110	75	70	70					65	65	65	55
Recommended oil flow ^[1]	gal/min	7	11	21	29	53	59	85					87	90	100	106
Max. oil flow ^[1]	gal/min	11	17	26	34	61	66	95					95	95	106	111
Max. operating pressure	psi	5.800	5.800	5.800	5.800	5.800	5.800	5.800					5.800	5.800	5.800	5.800
Torque at 5500 psi	lbf-ft	750	1.550	3.250	4.500	12.000	14.000	20.050					22.000	24.100	26.850	31.700
Cutting force at 5500 psi	lbf	1.550	3.170	5.375	6.180	12.005	11.490	16.500					18.030	19.785	22.570	26.660
Max. rock compressive strength	psi	2.900	2.900	4.400	5.800	11.600	13.100	14.500					14.500	14.500	16.000	16.000
Weight	lb	300	300	550	840	1.875	3.085	3.085					3.085	3.085	4.080	4.080
Tool holder / pick box	Type	PH 14	PH 14	PH 20	PH 22	PH 30 HD	PH 30 HD	PH 30 HD					PH 30 HD	PH 30 HD	PH 30 HD	PH 30 HD
Number of picks	Pcs	66	66	56	46	40	48	48					48	48	64	64
Standard pick ^[2]	Type	1	1	2	3	4	4	4					4	4	5	5
Standard hole pattern ^[3]	Type	LB 10	LB 10	LB 10	LB 20	LB 30	LB 40	LB 40					LB 40	LB 40	LB 40	LB 40
Compatible rotation unit	Type	KRM 30	KRM 30	KRM 35	KRM 40	KRM 50	KRM 60	KRM 60					KRM 60	KRM 60	KRM 70	KRM 70



- 1

2

3

4

5
- ER 15/29/26/14 C

ER 16/46/38/20 C

ER 12/45/38/22 HC

ER 17/75/70/30 Q

ER 19/75/70/30 Q

[1]

Setting the correct oil flow ensures that maximum output power is never greater than the rated power at any pressure level.

[2]

For an overview of standard picks, see pages 49 to 51. Depending on application, cutter drums can be supplied with a choice of pick according to the type of pick box used.

[3]

An overview of hole patterns can be found on page 54.



Direct drive



APPLICATIONS

Demolition using long arm excavators

Ground stabilization

Renovating concrete

Also used for trenching and pipeline work, profiling, mining soft minerals, underwater excavations, tunneling and shaft sinking



KRD 120 | Profiling excavation boundaries



KRD 150 | Excavation work



Additional applications in KEMROC Projector

projector.kemroc.net/web/?range=krd

KRC RANGE

Bullhead cutters with full-face coverage for narrow trenches

 15,000 – 175,000 lb

The KRC range of Bullhead cutters have two cutter drums arranged at an angle to one another so that the two sets of picks provide full face coverage without any gap between them, eliminating the need to swing the cutter from side to side. Operating the

cutter without sideways movement creates a trench with the same width as the cutter attachment.

Compared to the EK range of chain cutters, which also have full-face coverage thanks to the central cutter

chain, the KRC range of bullhead cutters are easier to maintain. However, due to their design, they cannot achieve the extreme narrow trenching widths of the EK chain cutters.



Exceptional narrow width due to special design gearbox

Powerful hydraulics thanks to double motor design

Excavate narrow trenches without sideways movement

Ideal for soil stabilization

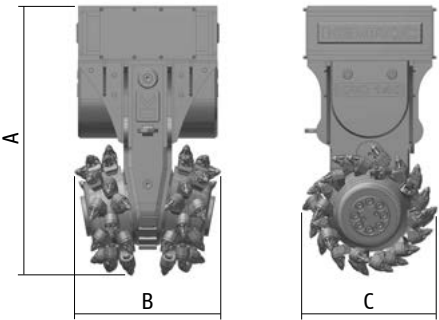
Protected hose management

Operational to 30 meters underwater without need for modifications



KRC 40 KRC 60 KRC 100 KRC 110 KRC 140 KRC 150 KRC 160 KRC 220 KRC 240

Recommended excavator weight	lb x 10 ³	15 – 25	25 – 35	40 – 65	45 – 70	55 – 90	75 – 110	75 – 120	110 – 155	120 – 175
Rated power	hp	55	80	135	150	190	200	215	295	320
Cutter length (A)	in	39	47	55	55	60	60	60	73	73
Cutting width (B)	in	21	24	32	32	35	35	35	47	47
Average cutter drum diameter (C)	in	16	21	26	26	28	28	28	36	36
Recommended rotation speed	rpm	110	85	70	70	75	75	75	50	50
Recommended oil flow ^[1]	gal/min	21	30	54	67	70	87	95	137	148
Max. oil flow ^[1]	gal/min	29	41	61	75	79	95	95	161	166
Max. operating pressure	psi	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Torque at 5500 psi	lbf-ft	3,500	6,700	11,600	14,300	17,800	22,300	24,100	44,600	48,200
Cutting force at 5500 psi	lbf	5,200	7,500	10,900	13,400	15,500	19,400	21,000	29,400	31,700
Max. rock compressive strength	psi	4,350	7,250	11,600	11,600	14,500	14,500	17,400	20,000	20,000
Weight	lb	1,045	1,765	3,085	3,085	4,410	4,410	4,410	9,480	9,480
Tool holder / pick box	Type	PH 20	PH 22	PH 32 HD	PH 32 HD	PH 32 HD	PH 32 HD	PH 32 HD	PH 38 HD	PH 38 HD
Number of picks	Pcs	60	56	52	52	52	52	52	68	68
Standard pick ^[2]	Type	1	2	3	3	3	4	4	5	5
Standard hole pattern ^[3]	Type	LB 10	LB 20	LB 30	LB 30	LB 40	LB 40	LB 40	LB 40	LB 40
Compatible rotation unit	Type	KRM 35	KRM 40	KRM 50	KRM 50	KRM 60	KRM 60	KRM 70	KRM 80	KRM 80



- 1 ER 16/46/38/20 C
- 2 ER 15/46/38/22 C
- 3 ER 17/75/70/30 Q
- 4 ER 19/75/70/30 Q
- 5 ER 25/80/80/38 C

^[1] Setting the correct oil flow ensures that maximum output power is never greater than the rated power at any pressure level.

^[2] For an overview of standard picks, see pages 49 to 51. Depending on application, cutter drums can be supplied with a choice of pick according to the type of pick box used.

^[3] An overview of hole patterns can be found on page 54.



APPLICATIONS

Trenching and pipeline work
Soil stabilization



KRC 150 | Trenching and pipeline work



KRC 100 | Trenching and pipeline work



Additional applications in KEMROC Projector

projector.kemroc.net/web/?range=krc



DMW RANGE

Cutter wheels with double motor for rock up to 20,000 psi

 30,000 – 264,000 lb

Cutter wheels in the DMW range were designed in cooperation with customers for attachment to hydraulic excavators. Two high torque, lateral hydraulic motors guarantee high production rates and maximum cutting forces. As a result, even in hard rock with a uniaxial compressive strength of 20,000 psi as well as reinforced concrete, very high productivity rates can be achieved. KEMROC produces these robust attachments in four sizes for excavators from 30,000 to 264,000 pounds.

To meet the demands of many applications, KEMROC have developed cutter wheel variations for cutting depths to 39 inches. A choice of wheels with different tooling configurations and a range of widths up to 16 inches are available. Wheels with non-standard width and cutting depth are available on demand.

The DMW range is designed to work under water to depths of 100 feet, making the cutter wheels ideal for trenching and underwater demolition projects.



C&B
CUT & BREAK



JB

DMW 220
Bridge demolition using the Cut & Break process



Cutter wheels with double motor for rock up to 20,000 psi

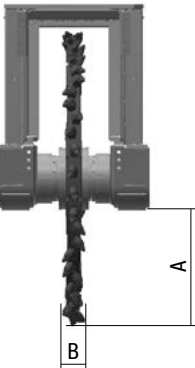
- Two high torque hydraulic motors

Smooth and regular cutting action
- Cutter wheels for various cutting depths and widths

Supports for vibration-free cutting
- Optional – water nozzles for dust suppression

Operational to 100 feet underwater

		DMW 90			DMW 130			DMW 220			DMW 240			DMW 400
		Wheel 400	Wheel 600		Wheel 400	Wheel 600	Wheel 800	Wheel 600	Wheel 800	Wheel 1,000	Wheel 600	Wheel 800	Wheel 1,000	Wheel 1,000
Recommended excavator weight	lb x 10 ³	30 – 55	30 – 55		45 – 90	45 – 90	55 – 90	90 – 130	90 – 130	100 – 130	90 – 130	90 – 130	100 – 130	110 – 154 ^[6] 154 – 264
Rated power	hp	120	120		175	175	175	295	295	295	295	295	295	535
Cutting depth (A)	in	16	24		16	24	31	22	30	39	22	30	39	39
Cutting width (B)	in	3 5 8	3 5 8		3 5 8	3 5 8	3 5 8	5 8 16	5 8 16	5 8 16	5 8 16	5 8 16	5 8 16	6 8 16
Cutter wheel diameter	in	48	63		48	63	79	63	79	101	63	79	101	106
Recommended rotation speed	rpm	90	80		80	80	60	55	55	50	50	50	45	40
Recommended oil flow ^[1]	gal/min	45	40		85	85	66	145	145	132	145	145	132	238
Max. oil flow ^[1]	gal/min	53	53		90	90	90	172	172	172	172	172	172	317
Max. operating pressure	psi	5,800	5,800		5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Torque at 5500 psi	lbf-ft	8,300	8,300		18,100	18,100	18,100	43,900	43,900	43,900	48,200	48,200	48,200	105,200
Cutting force at 5500 psi	lbf	4,200	3,100		9,100	6,900	5,500	16,600	13,300	10,400	18,200	14,600	11,400	23,700
Max. rock compressive strength	psi	8,700	5,800		14,500	11,600	8,700	17,400	17,400	14,500	17,400	17,400	14,500	20,000
Weight of drive unit, approx.	lb	2,425	2,425		2,535	2,535	3,086	6,063	6,063	6,063	6,063	6,063	6,063	12,125
Weight of dipping device, approx.	lb	551	551		661	661	1,213	2,028	2,028	2,028	2,028	2,028	2,028	3,197
Weight of protection cover, approx.	lb	121	121		121	121	121	397	397	397	397	397	397	551
Weight of cutter wheel ^[2]	lb	882	1,764		882	1,764	3,307	1,764	2,756	4,960	1,764	2,756	4,960	7,275
Total weight ^[2]	lb	3,979	4,861		4,200	5,082	7,727	10,251	11,244	13,448	10,251	11,244	13,448	23,149
Tool holder / pick box ^[3]	Type	PH 38 HD	PH 38 HD		PH 38 HD	PH 38 HD	PH 38 HD	PH 38 HD	PH 38 HD	PH 38 HD	PH 38 HD	PH 38 HD	PH 38 HD	PH 38 HD
Standard pick ^[3]	Type	1	1		1	1	1	2	2	2	2	2	2	3
Number of picks ^[4]	Pcs	30	40		30	40	50	40	42	50	40	42	50	62
Standard hole pattern ^[5]	Type	LB 30	LB 30		LB 30	LB 30	LB 30	LB 40	LB 40	LB 40	LB 40	LB 40	LB 40	LB 50
Compatible rotation unit	Type	KRM 50	KRM 50		KRM 60	KRM 60	KRM 60	KRM 80	KRM 80	KRM 80	KRM 80	KRM 80	KRM 80	—



- 1 ER 17/75/70/30 Q
- 2 ER 22/75/70/30 Q
- 3 ER 25/80/80/38 C

- [1] Setting the correct oil flow ensures that maximum output power is never greater than the rated power at any pressure level.
- [2] Weight of cutter wheel depends on cutter wheel diameter and width.
- [3] Contrary to what is shown in the table, 80 mm wide cutter wheels are fitted with PH 25 pick boxes and ER 17/64/60/25 Q picks as standard.
For an overview of standard picks, see pages 49 to 51. Depending on application, cutter wheels can be supplied with a choice of pick according to the type of pick box used.
- [4] The number of picks depends on cutter wheel diameter and width.
- [5] An overview of hole patterns can be found on page 54.

[6] Attachment only with special adapter to boom and additional counterweight on excavator.

KEMROC can supply wheels to order for various cutting widths and depths. Within technical boundaries, cutter wheels can be made to order.

- APPLICATIONS
- Concrete demolition
- Cable trenching
- Tunneling
- Soft rock mining



Additional applications in KEMROC Projector

projector.kemroc.net



RANGE

Powertool drives with attachments for milling, drilling and mixing

 **10,000 – 110,000 lb**

The new range of KRX Powertool drives are extremely robust and use a high torque radial piston motor to generate extremely high torque and cutting forces. Designed for use with a selection of sturdy attachments, they are an ideal addition to your excavator for a wide variety of applications.

Used with a cutter attachment, the KRX drive can be used in trenching, cutting out foundations or for profiling bored pile heads. With a heavy duty hexagonal shaft connection, different attachments can be exchanged quickly and easily.

Milling attachments fitted with dragontooth tools can be used in permafrost or for tree stump grinding. Dragontooth cutters can also be used for mixing and soil stabilization.

When used with a drilling attachment, the Powertool drive can drill shallow holes up to 59 inches diameter. With heavy duty bearings and an oversized hexagonal shaft connection, these tools are extremely strong and capable of drilling rock with uniaxial compressive strengths up to 8,700 psi.



KRX 120
Working bored pile heads



Powertool drives with attachments for milling, drilling and mixing

Drive

Base drive unit without attachment



Milling attachment

Longitudinal cutter head with round attack or dragon tooth picks



Longitudinal cutter head with spiral extension



Drilling attachment

Drilling auger with pilot bit



Attachment for wood

Surface peeler for tree stumps



Conical splitter



KRX 30 KRX 45 KRX 65 KRX 68 KRX 70 KRX 120 KRX 130 KRX 140 KRX 150

Recommended excavator weight	lb x 10 ³	10 – 20	20 – 25	30 – 45	35 – 50	35 – 55	55 – 90	55 – 90	65 – 110	75 – 110
Rated power	hp	40	60	85	85	95	160	160	190	190
Length of drive unit	in	22	24	24	24	33	33	33	34	34
Torque at 5500 psi	lbf-ft	3,200	4,500	8,300	10,800	12,000	22,000	25,100	26,800	31,700
Max. idle oil flow	gal/min	29	34	50	50	79	95	95	103	111
Max. operating pressure	psi	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Weight without attachment	lb	353	529	573	573	1,146	1,190	1,190	1,984	1,984
Hex connection, standard	in	3	3	3	3	6	6	6	6	6
Standard hole pattern ^[2]	Type	LB 10	LB 20	LB 20	LB 20	LB 30	LB 30	LB 30	LB 30	LB 40
Milling attachment (optional)										
Length of standard cutter head	in	14	14	14	14	16	17	17	18	18
Diameter of standard cutter head	in	15	16	16	16	18	20.5	20.5	22	22
Cutting force at 5500 psi	lbf	5,400	6,900	12,700	16,500	16,300	25,700	29,400	29,700	35,100
Recommended idle speed	rpm	80	65	90	70	70	65	60	60	55
Recommended idle oil flow	gal/min	13 – 18	17 – 24	32 – 45	34 – 44	36 – 52	50 – 85	59 – 88	74 – 98	79 – 103
Weight of standard cutter head	lb	149	190	190	190	214	313	313	430	430
Total weight	lb	502	719	763	763	1,360	1,503	1,503	2,414	2,414
Tool holder / pick box	Type	PH 22	PH 22	PH 22	PH 22	PH 22	PH 32 HD	PH 32 HD	PH 32 HD	PH 32 HD
Number of picks	Pcs	26	29	29	29	30	25	25	30	30
Standard pick (round shaft) ^[1]	Type	1	1	1	1	1	3	3	5	5
Standard pick (dragon tooth) ^[1]	Type	2	2	2	2	2	4	4	4	4
Drilling attachment (optional)										
Max. drill diameter	in	24	32	39	39	39	51	51	59	59
Min. drill diameter	in	11	11	11	11	11	11	11	11	11
Max. drilling depth at max. drill diameter	in	59	59	79	79	79	158	158	158	158
Max. drilling depth at min. drill diameter	in	98	118	158	158	276	276	276	315	315
Max. uniaxial compressive strength of the ground	psi	1,450	2,900	2,900	2,900	4,350	7,250	7,250	8,700	8,700
Recommended idle oil flow	gal/min	8 – 17	9 – 21	21 – 40	21 – 38	28 – 52	46 – 78	52 – 82	58 – 92	66 – 103

- 1 ER 12/45/38/22 HC
- 2 DT 22/46/38/22 HC
- 3 ER 17/75/70/30 Q
- 4 DT 22/90/70/30 HQ
- 5 ER 19/75/70/30 Q

^[1] For an overview of standard picks, see pages 49 to 51. Depending on application, cutter heads can be supplied with a choice of pick according to the type of pick box used.

^[2] An overview of hole patterns can be found on page 54.

Multifunctional and versatile thanks to a large selection of attachments

Quick interchangeability of attachments

High torque radial piston motors

Heavy duty, long lasting bearings

Exceptionally robust hexagonal shaft connector



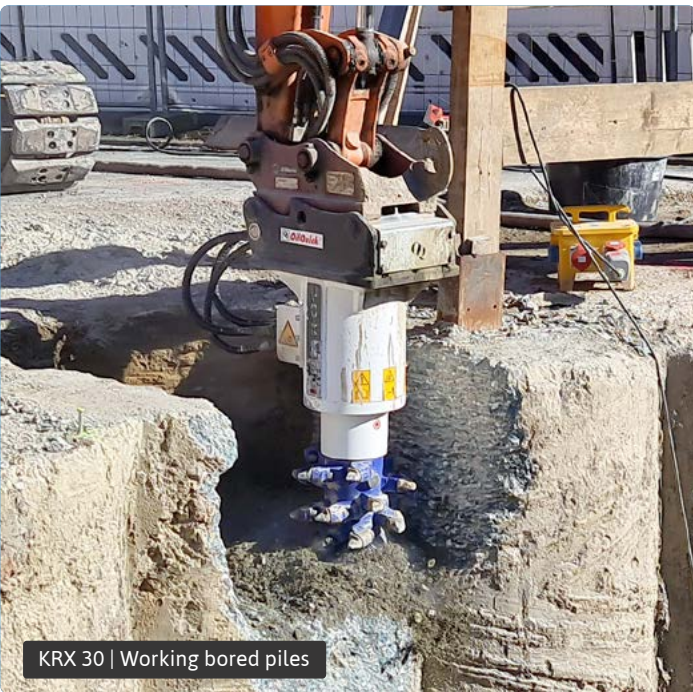
APPLICATIONS

Milling attachment

- Excavating foundations
 - Profiling bored pile heads
 - Tree stump grinding (dragontooth)
- Also suitable for use in trenching, mixing soil formations and for cleaning slag out of runners in steel works

Drilling attachment

- Enlarging holes for sheet pile ramming
- Drilling holes for I-beam shoring
- Drilling planting holes for trees
- Exploratory drilling for ordnance disposal services
- Drilling foundations for sound barriers



Additional applications in KEMROC Projector

projector.kemroc.net/web/?range=krx



APPLICATIONS

Repairing asphalt surfaces
Removal of contaminated concrete surfaces
Milling asphalt for house connections
Milling walls and plaster removal
Renovating locks
Tunnel renovation



EX 45 HD | Tunnel renovation



EX 45 HD | Asphalt removal



Additional applications in KEMROC Projector

projector.kemroc.net/web/?range=ex

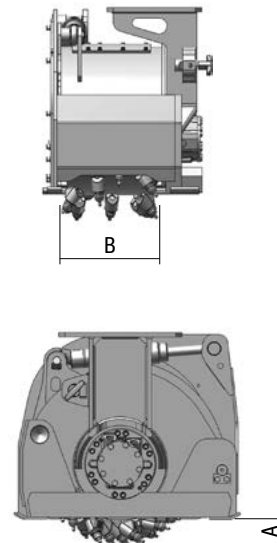


EX RANGE

Patch planers for milling asphalt and concrete with accurate depth control



2,000–55,000 lb



Patch planers in the EX range are ideally suited for the repair of asphalt surfaces, removal of contaminated concrete or milling layers of screed. Mechanical or hydraulic depth control makes milling to very accurate depth possible, to a maximum of 7 inches.

Regardless of whether horizontal, vertical or inclined – the EX range can be used on any surface orientation. KEMROC planers can even be used on overhead surfaces, as can be found for example, in some tunneling applications. Patch planers produce

clean, smooth cut edges (pre-cutting is not necessary) and a fine grained cut material that can be used in other applications.

Depending on the material to be milled, cutter drums can be fitted with different tooling variations. In addition, non-standard drum types and widths can be supplied to meet unusual working conditions and ensure the best performance possible.



A rigid support frame with wear resistant slides

High torque, modifiable, hydraulic motor

Robust housing, low vibration

Accurate depth control (mechanical or hydraulic)

Smooth cut edges and fine grained cut material

Integrated water jets for dust control (connections for vacuum dust extraction optional)

		EX 20	EX 20 HD	EX 30 HD	EX 45 HD	EX 60 HD	EX 70 HD
Recommended excavator weight	lb x 10 ³	2–6	4–8	10–20	20–35	35–50	40–55
Rated power	hp	30	30	40	85	105	105
Cutting depth, adjustable (A)	in	0–3	0–3	0–5	0–6	0–7	0–7
Cutting width (B)	in	8	8	12	18	24	24
Cutter drum diameter	in	14	14	21	23	27	27
Recommended rotation speed	rpm	160	160	110	100	105	80
Recommended oil flow ^[1]	gal/min	11	13	21	41	46	66
Max. oil flow ^[1]	gal/min	13	17	28	48	53	74
Max. operating pressure	psi	4,500	4,500	5,510	5,510	5,510	5,510
Torque at 5000 psi ^[2]	lbf-ft	600	700	3,000	6,400	6,900	13,200
Cutting force at 5000 psi ^[2]	lbf	900	1,300	3,400	6,700	6,200	11,900
Total weight	lb	365	400	925	1,610	2,710	2,710
Tool holder / pick box	Type	PH 14	PH 14	PH 20	PH 20	PH 20	PH 20
Number of picks	Pcs	42	42	35	49	69	69
Standard pick ^[3]	Type	1	1	2	2	3	3
Standard hole pattern ^[4]	Type	LB 10 ^[5]	LB 10 ^[5]	LB 10	LB 20	LB 20	LB 20
Compatible rotation unit	Type	KRM 20	KRM 20	KRM 30	KRM 30	KRM 30	KRM 30

1 ER 16/28/26/14 H

2 ER 16/48/32/20 H

3 ER 19/48/36/20 H

^[1] Setting the correct oil flow ensures that maximum output power is never greater than the rated power at any pressure level.

^[2] Models EX 20 and EX 20 HD designed for use at 3000 psi.

^[3] For an overview of standard picks, see pages 49 to 51. Depending on application, cutter drums can be supplied with a choice of pick according to the type of pick box used.

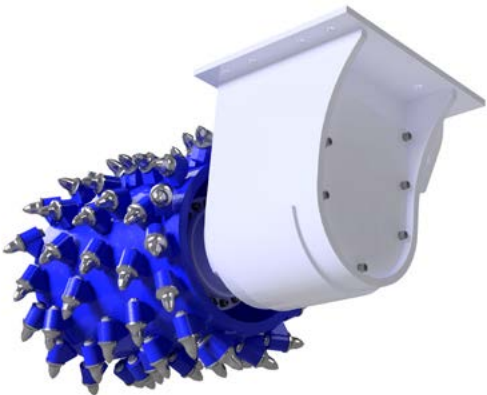
^[4] An overview of hole patterns can be found on page 54.

^[5] Plus AC-SB152 hydraulic hammer hole pattern.

Cutter heads for asphalt, concrete and rock



2,000–90,000 lb



The ES range of cutter heads are ideally suited for accurate profiling of horizontal or vertical surfaces.

Whether for surface cleaning, profiling, straightening or simply for material removal, depending on the

application, various types of cutter drum can be used for processing asphalt, concrete and rock.

		ES 20	ES 20 HD	ES 30 HD	ES 45 HD	ES 60 HD	ES 70 HD
Recommended excavator weight	lb x 10 ³	2 – 7	4 – 9	12 – 22	22 – 36	35 – 50	45 – 55
Rated power	hp	30	30	40	85	105	105
Cutter drum diameter (A)	in	14	14	20	23	26	26
Cutting width (B)	in	8	8	12	18	24	24
Cutting depth	in	3	3	4	4	7	7
Min. rotation speed	rpm	85	85	80	65	90	55
Min. oil flow	gal/min	5	7	16	26	40	48
Max. oil flow	gal/min	18	24	29	48	55	55
Max. operating pressure	psi	4,500	4,500	5,800	5,800	5,800	5,800
Torque at 5500 psi ^[1]	lbf-ft	600	700	3,200	6,900	7,400	14,400
Cutting force at 5500 psi ^[1]	lbf	1,000	1,200	3,800	7,300	6,800	13,100
Weight of base drive unit	lb	175	175	275	595	615	615
Tool holder / pick box	Type	PH 14	PH 14	PH 20	PH 20	PH 20	PH 20
Number of picks	Pcs	42	42	35	49	69	69
Standard pick ^[2]	Type	ER16/28/26/14 H	ER16/28/26/14 H	ER16/48/32/20 H	ER16/48/32/20 H	ER16/48/32/20 H	ER16/48/32/20 H
Standard hole pattern ^[3]	Type	LB10 ^[4]	LB10 ^[4]	LB10	LB20	LB20	LB20

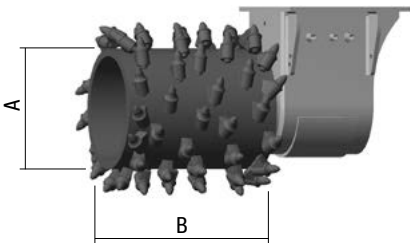
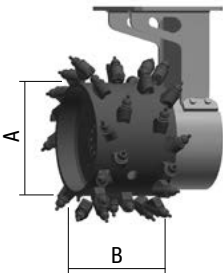
		ES 80 HD	ES 90 HD	ES 110 HD	ES 120 HD
Recommended excavator weight	lb x 10 ³	35 – 55	45 – 65	55 – 90	55 – 90
Rated power	hp	105	105	150	160
Cutter drum diameter (A)	in	32	32	31	31
Cutting width (B)	in	24 31	24 31	24 31 39	24 31 39
Cutting depth	in	6	6	4 6	4 6
Min. rotation speed	rpm	60	55	45	45
Min. oil flow	gal/min	40	48	55	61
Max. oil flow	gal/min	55	55	92	92
Max. operating pressure	psi	5,800	5,800	5,800	5,800
Torque at 5500 psi ^[1]	lbf-ft	11,200	14,400	20,100	24,000
Cutting force at 5500 psi ^[1]	lbf	8,300	10,600	15,600	18,700
Weight of base drive unit	lb	1,280	1,280	2,460	2,460
Tool holder / pick box	Type	PH 32 HD	PH 32 HD	PH 32 HD	PH 32 HD
Number of picks per cutting width	Pcs	50 69	50 69	46 53 62	46 53 62
Standard pick ^[2]	Type	ER17/75/70/30 HQ	ER17/75/70/30 HQ	ER19/75/70/30 HQ	ER19/75/70/30 HQ
Standard hole pattern ^[3]	Type	LB 30	LB 40	LB 40	LB 40

- +

Tool carrier with high torque hydraulic motor
- +

Milling attachment for the precise removal of material from horizontal and vertical surfaces
- +

An integrated rotation unit, providing continuous stepless rotation, is available as an option



^[1] Models ES 20 and ES 20 HD designed for use at 3000 psi.

^[2] For an overview of standard picks, see pages 49 to 51. Depending on application, cutter drums can be supplied with a choice of pick according to the type of pick box used.

^[3] An overview of hole patterns can be found on page 54.

^[4] Plus AC-SB152 hydraulic hammer hole pattern.

An overview of compatible rotation units for the ES range can be found on pages 40 to 41.



APPLICATIONS

- Grinding jet grouting material
- Lock renovation
- Grinding diaphragm walls
- Profiling blocks of natural stone
- Grinding shotcrete in tunnels
- Cleaning concrete piled walls



Additional applications in KEMROC Projector

projector.kemroc.net/web/?range=es



APPLICATIONS

- Pre-drilling for rammed sheet piles
- Drilling holes for I-beam shored walls
- Drilling holes for tree planting
- Exploration drilling for ordnance disposal services



EBA 2300 | Drilling for mast foundations



EBA 2300 | Drilling for support shoring

EBA 2800 | Drilling for support shoring



Additional applications in KEMROC Projector

projector.kemroc.net/web/?range=eba



Short and heavy duty construction

Robust and rigid bracket

Direct drive without planetary gears

Robust hexagonal shaft connector

Wear resistant augers

Pilot bits for various applications

EBA

RANGE

Auger drive attachments for excavators and backhoe loaders



15,000 – 90,000 lb

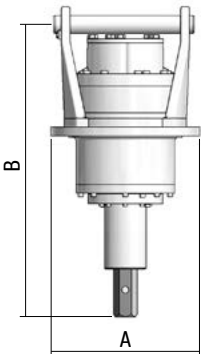
The EBA range of auger drive units allows you to quickly convert your excavator or backhoe loader into a drill rig by simply changing the attachment.

These auger drive units are ideal for drilling holes in soft to compact soils, cobbles and in soft rock with compressive strengths up to 7,300 psi.

For use in harder rock, KEMROC have developed special drilling tools to ensure higher drilling speeds.



		EBA 500	EBA 750	EBA 1000	EBA 1500	EBA 2300	EBA 2800	EBA 3300
Recommended excavator weight	lb x 10 ³	15 – 30	15 – 35	30 – 35	35 – 45	40 – 75	45 – 90	55 – 90
Rated power	hp	55	55	85	85	150	200	215
Diameter of drive unit (A)	in	15	15	15	15	20	20	20
Length of drive unit (B)	in	25	25	25	25	39	39	39
Recommended rotation speed ^[1]	rpm	75	65	65	60	70	65	60
Recommended oil flow ^[2]	gal/min	13 – 18	16 – 21	21 – 32	26 – 40	40 – 85	48 – 87	58 – 90
Max. oil flow ^[2]	gal/min	22	22	40	40	95	95	95
Max. operating pressure	psi	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Torque at 5500 psi	lbf-ft	3,850	5,400	8,350	10,850	20,050	22,350	25,100
Cutting force at 5500 psi	lbf	11,690	16,500	25,380	33,000	40,760	45,365	50,920
Weight	lb	355	355	395	395	795	795	795
Auger connection	Type	H 80	H 80	H 80	H 80	H 80	H 80	H 80
Tool holder / pick box	Type	PH 22	PH 22	PH 22	PH 22	PH 22	PH 22	PH 22
Standard pick	Type	1	1	1	1	1	1	1
Drilling attachment (optional)								
Max. drill diameter	in	31	31	39	39	47	59	59
Min. drill diameter	in	8	8	8	8	12	12	12
Max. drilling depth with max. drill diameter	in	79	79	118	118	157	157	157
Max. drilling depth with min. drill diameter	in	197	197	197	197	315	315	315
Max. rock compressive strength	psi	7,300	7,300	7,300	7,300	7,300	7,300	7,300



1 ER 22/46/38/22 H

^[1] Recommended rotation speed depends on the drill bit diameter.

^[2] Recommended oil flow depends on the drill bit diameter. Setting the correct oil flow ensures that maximum output power is never greater than the rated power at any pressure level.



Notes for drilling with KEMROC auger drive units:

When mounted on an excavator arm, the augers are not supported in a feeder. Due to the natural curve of the excavator arm, augers can be bent during drilling. Therefore, special care must be taken to ensure that the augers are always working vertically. Only by keeping the auger in the vertical position can you guarantee a straight bore hole. Take great care to avoid bending the augers. Excessive bending of the auger can result in the hex drive breaking and damage to the auger drive. Select the auger rotation speed that corresponds to the auger diameter and material being drilled. Generally, rotation speeds should be lower for larger diameter augers or when drilling in harder material.

KTR RANGE

Trenching attachments for medium hard rock

 40,000–75,000 lb

The KTR range of trenchers can produce trenches with perfect profiles in widths from 7 to 18 inches to a maximum depth of 70 inches. Chose from a range of cutting chain widths, each fitted with wear resistant picks.

When starting the trench, the KTR is supported while sumping down to the desired cutting depth. When the trencher has reached the required depth, the excavator is driven backwards or the trencher

is pulled forward with the excavator arm. Finally, the milled material is transported via a special discharge housing or screw conveyor and deposited next to the trench.



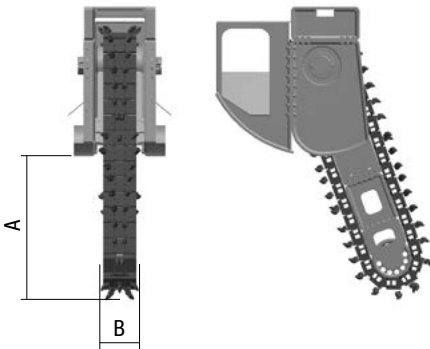
- + Driven by two high torque hydraulic motors to obtain maximum cutting force
- + Housing with spoil discharger and sumping aid
- + Adjustable length cutter chain
- + Maintenance free cutter chain with high operating life

KTR 65

KTR 120

Recommended excavator weight	lb x 10 ³	40 – 55	55 – 75
Rated power	hp	85	160
Cutting depth (A)	in	40 – 60	40 – 70
Cutting width (B)	in	7 – 14	8 – 18
Recommended chain speed	ft/s	6.6 – 8.2	6.6 – 8.2
Recommended oil flow ^[1]	gal/min	50	80
Max. oil flow ^[1]	gal/min	60	95
Max. operating pressure	psi	5,800	5,800
Torque at 5500 psi	lbf-ft	8,900	20,100
Cutting force at 5500 psi	lbf	10,900	21,100
Max. rock compressive strength	psi	7,300	8,700
Weight at max. cutting depth and width	lb	3,750	5,950
Tool holder / pick box	Type	PH 22	PH 22
Standard pick ^[2]	Type	ER 12/45/38/22 HC	ER 12/45/38/22 HC
Standard hole pattern ^[3]	Type	LB 30	LB 30
Compatible rotation unit	Type	KRM 50	KRM 60
Recommended chain slack	in	5.1	7.1

^[1] Setting the correct oil flow ensures that maximum output power is never greater than the rated power at any pressure level.



^[2] For an overview of standard picks, see pages 49 to 51. Depending on application, cutter chains can be supplied with a choice of pick according to the type of pick box used.

^[3] An overview of hole patterns can be found on page 54.



KTR 65 | Trenching and pipeline work



KTR 65 | Trenching and pipeline work



APPLICATIONS

Trenching and pipeline work



KTR 120 | Trenching and pipeline work

Additional applications in KEMROC Projector



projector.kemroc.net/web/?range=ktr



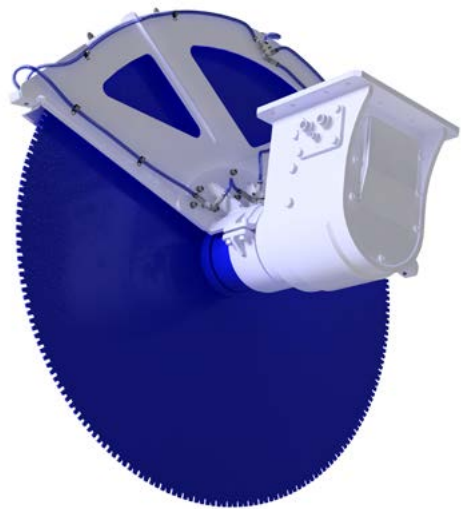
KDS RANGE

Diamond saws for a wide variety of applications and materials

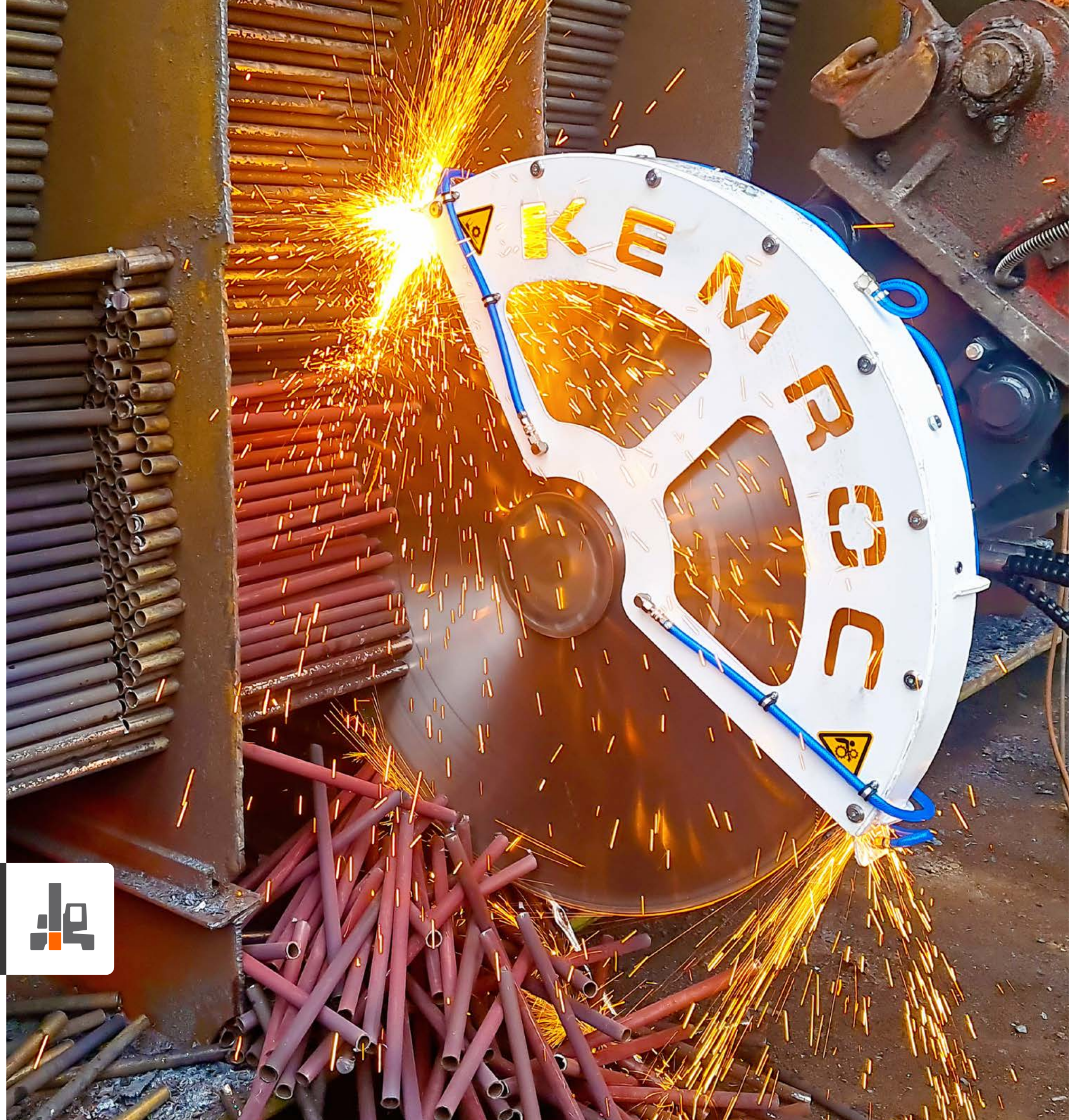
 0–110,000 lb

The KDS range of diamond saws are designed for cutting a variety of materials including natural stone, concrete, reinforced concrete, asphalt, plastics, wood, paper, sheets, steel and aluminum. Mounted on crawler or wheeled excavators or backhoe loaders and connected to their on-board hydraulics, they deliver high performance levels in many applications with very little burden for the machine, the operator or the environment. High rotation speeds and a good selection of diamond saw blades enable them to cover a wide range of applications very efficiently.

From road construction to precision demolition and on to high-performance recycling—KDS diamond saws are robust, reliable and economical in all applications.



KDS 50
Cutting stainless
steel tubes



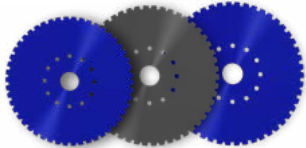
Diamond saws for a wide variety of applications and materials

High rotation speed up to 2,000 rpm
Drive motors with heavy-duty bearings

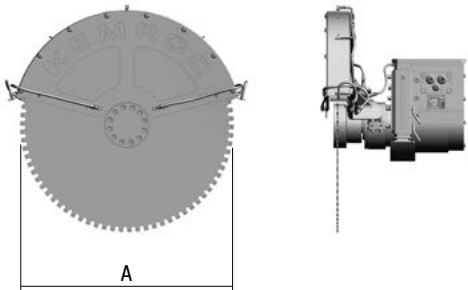
Lateral pull-out protective covers for all saw blade diameters

Effective cooling of saw blades

		KDS 15	KDS 20	KDS 30	KDS 40	KDS 50	KDS 50 HD	KDS 60	KDS 70
Recommended excavator weight	lb x 10 ³	0–5	5–10	10–30	20–35	30–65	40–75	45–90	55–110
Rated power	hp	30	30	50	95	115	245	320	460
Max. saw blade diameter (A)	in	39	39	55	63	79	79	98	118
Max. rotation speed	rpm	1,100	1,100	1,100	1,100	1,100	1,100	950	850
Recommended rotation speed	rpm	690–1,050	730–1,000	550–1,000	480–1,000	380–900	390–1,000	310–920	250–810
Recommended oil flow ^[1]	gal/min	4–7	7–9	8–15	13–29	13–30	29–74	42–128	53–172
Max. operating pressure	psi	5,080	5,080	5,080	5,080	5,080	5,080	5,080	5,080
Torque at 5,000 psi	lbf-ft	100	100	200	400	500	1,200	2,100	3,300
Weight of drive unit, approx.	lb	230	230	550	750	925	990	1,325	1,435
Standard hole pattern ^[2]	Type	LB 10	LB 10	LB 10	LB 20	LB 20	LB 20	LB 30	LB 30
Compatible rotation unit	Type	KRM 20	KRM 20	KRM 30	KRM 30	KRM 30	KRM 30	KRM 30	KRM 30



- Saw blades for:**
- Natural stone, concrete and reinforced concrete
 - Asphalt, GRP, airplanes
 - Steel
 - Wood, plastic, paper rolls, foil rolls, aluminum



^[1] The recommended oil flow depends on the material being cut and the saw blade diameter.
^[2] An overview of hole patterns can be found on page 54.

An overview of saw blades can be found on page 53.



APPLICATIONS

- Cutting rotor blades from wind turbines
- Cutting asphalt in road works
- Demolition of reinforced concrete
- Cutting aluminum sheets
- Cutting wood
- Cutting natural stone such as limestone, sandstone, etc



KDS 50 | Cutting concrete



KDS 30 | Cutting asphalt



KDS 50 HD | Recycling wind turbine components

Additional applications in KEMROC Projector



projector.kemroc.net/web/?range=kds



KRM RANGE

Rotation units with endless rotation

 **5,000 – 155,000 lb**

Rotation units in the KRM range have been developed for use with KEMROC milling attachments. In combination with rotation units, milling attachments can always be placed in the correct position while facing in the right direction. As a result, in most cases work is completed faster and with more accuracy.

When used with EX patch planers, it is possible to mill longitudinally in front of the excavator as well as 90° across the excavator without having to move the excavator. You can even work to the side of the excavator. DMW, EK or KTR attachments working in combination with KRM rotation units can also benefit from this flexibility of working

position. Horizontal slots can be cut easily using a KDS attachment together with a KRM rotation unit.

Depending on the application, productivity can be increased by up to 50 percent when using KRM rotation units – especially in sewer and pipeline construction, profiling and tunneling.



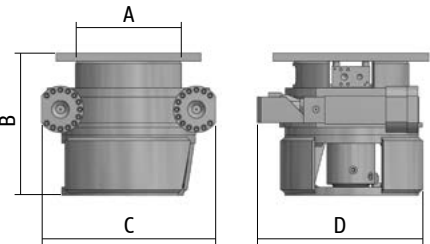
- Compact and low maintenance
- Continuous and stepless rotation
- High holding torques
- Durable worm gear drive
- Heavy duty bearings
- Save up to 50 percent working time
- Oil distributors developed in-house guarantee flow rates of oil and water



APPLICATIONS

- Trenching and pipeline work
- Tunneling
- Demolition and renovation
- Profiling

		KRM 20	KRM 30	KRM 35	KRM 40	KRM 50	KRM 60	KRM 70	KRM 80
Recommended excavator weight	lb x 10 ³	5 – 15	10 – 25	15 – 35	25 – 40	40 – 60	55 – 90	65 – 110	110 – 155
Diameter (A)	in	9	15	15	18	22	24	28	35
Height (B)	in	13	15	15	16	17	24	24	32
Length (C)	in	14	20	20	22	27	31	36	46
Width (D)	in	20	24	24	32	34	30	34	39
Recommended idle speed	rpm	9	7	5	3	1	1	1	1
Max. idle oil flow	gal/min	11	11	11	11	11	11	11	11
Max. operating pressure	psi	2,320	2,320	2,320	2,320	2,320	2,320	2,320	2,320
Max. holding torque	lbf-ft	4,425	6,638	13,276	33,190	70,068	147,512	199,142	258,147
Weight	lb	305	740	855	1,085	1,385	2,005	2,265	4,560
Number of drive motors	Pcs	1	1	2	2	2	2	2	2
Standard hole pattern ^[1]	Type	LB 10	LB 10 20 30	LB 10 20 30	LB 20	LB 30	LB 40	LB 40	LB 40
Recommended KEMROC attachments									
EK Chain Cutters	Type		EK 20	EK 40	EK 60	EK 100	EK 110 140 150	EK 160	EK 220 240
EKT Rotary Drum Cutters	Type		EKT 20	EKT 40	EKT 60	EKT 100	EKT 110 140 150	EKT 160	EKT 220 240
KR Rotary Drum Cutters	Type		KR 18 20	KR 35	KR 45 50 65 70	KR 80	KR 110 120 150	KR 165 175	KR 200 250
KRD Rotary Drum Cutters	Type		KRD 18	KRD 30	KRD 45	KRD 70	KRD 100 120 150	KRD 165	
KRC Bullhead Cutters	Type				KRC 60	KRC 100	KRC 110 140 150	KRC 160	KRC 220 240
DMW Cutter Wheels	Type					DMW 90	DMW 130		DMW 220
EX Surface Milling Attachments	Type	EX 20	EX 30 45 60 70						
ES Cutter Heads	Type	ES 20	ES 30		ES 45	ES 60 70 80 90	ES 110 120		
KTR Trenching Attachments	Type					KTR 65	KTR 120		
KDS Diamond Saw Attachments	Type	KDS 15 20 30	KDS 40 50 60 70						



^[1] An overview of hole patterns can be found on page 54.



KRM 50 | Trenching and pipeline work



KRM 60 | Foundation work



Additional applications in KEMROC Projector

projector.kemroc.net/web/

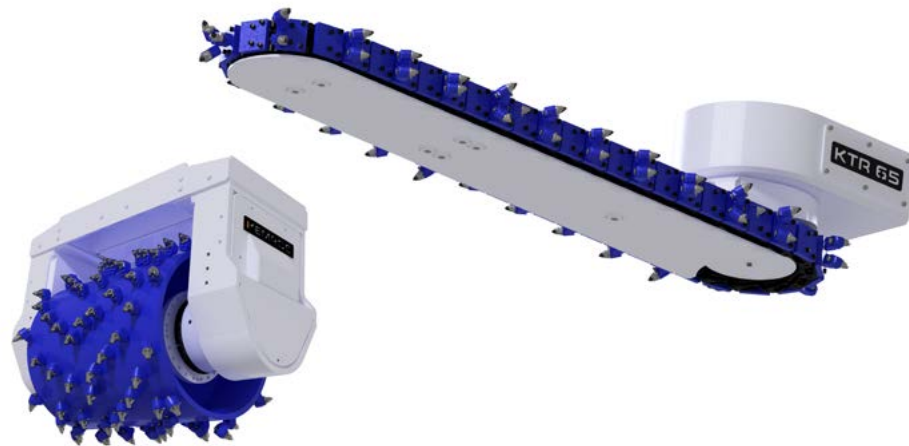
NON-STANDARD MODELS

Manufactured to order according to customer requirements

+ Non-standard attachments that can be produced according to specific customer requirements.

Cutter drums with double motor

High torque and cutting force characterize milling cutter drums with double motor in the DMD range. They feature an adjustable milling depth setting and are ideally suited for milling and profiling concrete surfaces, natural stone, rock walls, and tunnel profiles. DMD cutter drums are available for excavators from 18,000 to 110,000 pounds.



Track bed cleaners

The GBR range of track bed cleaners are attachments specifically designed for clearing ballast from under railway tracks and for removing loose materials such as those accumulating under conveyor belts.

The attachments are for tracked or mobile excavators weighing 40,000 to 77,000 pounds. Clearing heights vary from 7 to 18 inches.

Cutter wheels for narrow trenching

The SMW range is designed for use as an excavator slot cutting attachment. It can cut narrow trenches in soft and medium hard rock, especially for laying cables, quickly and efficiently. The reinforced mounting for the cutter wheel provides the strength required for cutting depths down to 39 inches.



Trenching attachments for soils and soft rock

The KTS range of trenchers can be used for producing clean, correctly profiled trenches quickly in cohesive soils as well as in soft rocks with uniaxial compressive strengths up to a maximum of 3,000 psi.

Trenchers are designed for use on 6,000 to 22,000 pound excavators and can be mounted on skid steer loaders with a suitable adapter bracket.



Grinding attachments for wood and removal of tree stumps

The range of KST wood grinders can remove tree stumps cleanly, quickly and effectively. Models, available for use on excavators from 5,000 to 55,000 pound operating weight as well as backhoe and skid steer loaders, can operate with rotation speeds up to 2,000 rpm.

Due to the design of the cutter disk, hard wood can be ground very effectively as well as soft woods.



Cleaning head attachments for use on flat surfaces

The EXRUST range of cleaning head attachments were developed by KEMROC to clean flat metal surfaces such as those found in the holds of cargo ships.

The drums rotate at a speed of 800 rpm. During operation, a specially made chain removes paint or other materials from the metal surface.



DMD | Concrete demolition



SMW | Cable trenching with vacuum extractor



KTS | Trenching and pipeline work



EXRUST | Cleaning steel surfaces

Special foundation solutions from Kemsolid Division — fast, efficient and environmentally friendly



Sealing walls, dam stabilization, and basin renovation for flood protection

Soil improvement and ground stabilization



Decontamination and remediation

Shoring excavations for building, civil engineering and pipeline construction



Barrier installation, road shoulder renovation, slope and embankment work in road building

Railway construction



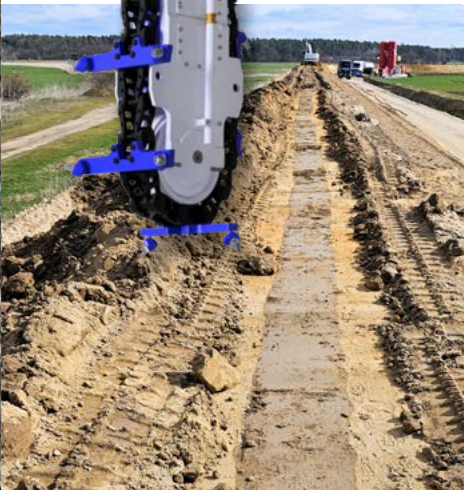
Kemsolid TSM solution

The TSM or Trench Soil Mixing technology is a process used to produce soil-cement structures that function as cut-off, retaining and shoring walls, as well as for soil stabilization as an alternative to the installation of concrete columns or piles.

KSI soil mixing attachments for Kemsolid TSM solution are available in four sizes for mounting on excavators or piling rigs. Depending on the model, they can be produced with blades for mixing depths from 13 to 52 feet and for different mixing widths.

		KSI 7000	KSI 12000	KSI 12000 W	KSI 16000
Carrier type	Type	Excavator	Excavator / Rig	Excavator / Rig	Excavator / Rig
Recom. excavator weight	lb x 10 ³	75 – 120	175 – 265 ^[1]	175 – 265 ^[1]	265 – 440 ^[2]
Recom. rig weight	lb x 10 ³	—	110 – 155	110 – 155	130 – 220
Rated power	hp	175	295	295	400
Mixing depth	ft	13 16 20 23	20 23 26 30 33 36 40	13 20 26	20 26 33 40 46 52
Mixing width	in	14 – 20	20 – 26	16 – 41	18 – 38
Recom. oil flow	gal/min	75 – 90	130 – 160	160 – 200	175 – 215
Weight at max. mixing depth and max. mixing width	lb	10,800	29,800	27,600	46,300

^[1] KSI 12000 and KSI 12000 W: Use on excavators from 110,000 to 175,000 lb possible with special adapter.
^[2] KSI 16000: Use on excavators from 165,000 to 265,000 lb possible with special adapter.



Kemsolid MSM solution

Mass Soil Mixing (MSM) technology is a process for soil improvement and stabilization. Depending on the requirements, slurry, concrete or a dry binder is mixed mechanically with the soil in-situ for stabilization and solidification.

Mixing attachments in the KDM range are available in five sizes for 55,000 to 110,000 pound excavators. Due to the range of mixing drums available and extension possibilities, a variety of mixing widths and depths can be achieved.

		KDM 120	KDM 150	KDM 155	KDM 165	KDM 175
Recommended excavator weight	lb x 10 ³	55 – 90	65 – 90	65 – 90	75 – 110	75 – 110
Rated power	hp	160	200	210	220	235
Length of the mixing unit without extension	in	45	45	45	47	47
Mixing width	in	43 51	51 59	59	55 67	67 79
Recommended oil flow	gal/min	79	86	90	95	106
Weight per mixing width	lb	3,415 3,750	3,750 3,970	3,970	4,960 5,510	5,510 5,950





TOOLS

Picks with matching retainers

Pick boxes

Diamond saw blades

Mounting and dismantling tools

KEMROC cutters and cutting wheels work under extremely hard conditions in trenching, demolition, rock excavation and tunneling, in steel mills as in other unusual applications. This puts very high demands on the cutter drums and cutting tools.

The result of many years experience, with machines working around the world, can be seen in the type of picks used and their placement on the drums. This unique combination provides maximum productivity with minimum wear, ensuring the economical performance of KEMROC products even in the hardest conditions.

Modern technology and continuous product development are the basics for ensuring the economic benefits of using our cutting tools and attachments. In our range of cutter picks, we have paid special attention to the optimum shape, high quality materials and sustainable quality of the production process. This helps you to keep your consumable costs to a minimum.

The following pages are intended to provide an overview of our standard range of picks, retainers and pick boxes suitable for the majority of applications.

In addition to alternative design cutter drums, we also offer a large variety of pick types even for unusual applications. If you have an extremely unusual application or requirement, don't hesitate to contact us. Our specialists are pleased to provide advice and support in your search for the most suitable cutter tools.

Simple facts about picks

PICKS

The tungsten carbide insert brazed into the body of the pick is at the heart of the cutting operation and is subject to extreme stresses due to it coming continuously into contact with the rock. The pick body (head and shaft) is made from heat-treated steel and serves as the support for the tungsten carbide insert and also as protection for the pick box.

The tungsten carbide insert is extremely wear resistant and tough to withstand impact. The insert is a sintered material made up of tungsten carbide with a cobalt binder. Depending on application, a variety of carbide grades and shapes are available.

Pick dimensions can be found from the numbers in the four-part numbering system:

- | | |
|--------------------|---|
| XX/xx/xx/xx | 1. Number: Diameter of tungsten carbide insert (mm) |
| xx/XX/xx/xx | 2. Number: Length of the head of the pick (mm) |
| xx/xx/XX/xx | 3. Number: Diameter of pick shoulder (mm) |
| xx/xx/xx/XX | 4. Number: Diameter of shaft of the pick (mm) |

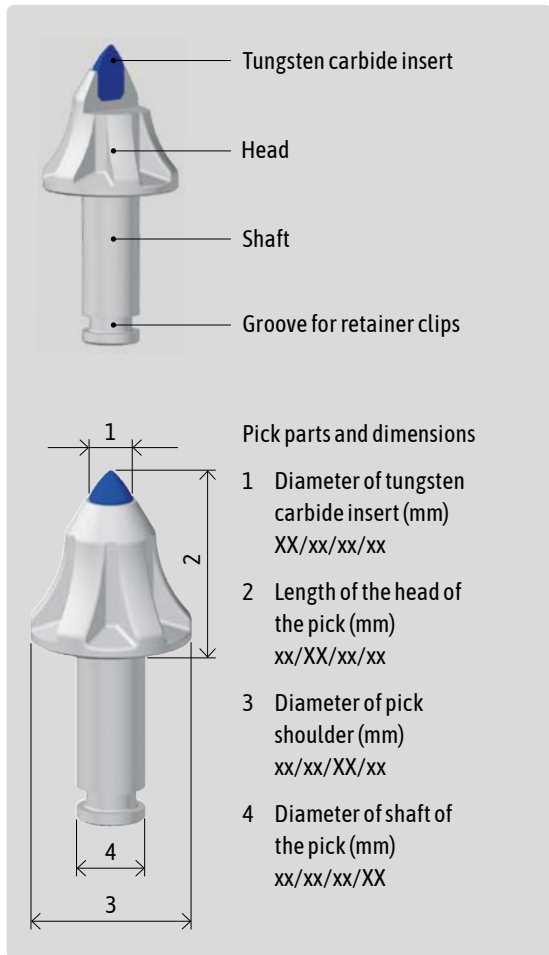
Example:

- Round attack pick ER 19/75/70/30 Q:
- | | |
|--|-------|
| 1. Number - Diameter of tungsten carbide insert: | 19 mm |
| 2. Number - Length of the head of the pick: | 75 mm |
| 3. Number - Diameter of pick shoulder: | 70 mm |
| 4. Number - Diameter of shaft of the pick: | 30 mm |

THE RETAINER

Retaining clips ensure that picks do not fly out of the pick boxes. Various types of retaining clip are available depending on pick type and application area e.g. retaining collars for soft rock or circlip type systems for hard rock applications.

For quick and easy changing of picks, KEMROC offers the QuickSnap retaining system, which allows picks to be changed in a matter of seconds. This represents a saving of over 50 percent in time compared with normal circlip or knock on retainer systems. Due to the deeper groove in the shaft of the pick and the larger surface area between pick and holder, the KEMROC QuickSnap system is more secure and has less wear.



Easier and quicker pick changes with KEMROC QuickSnap.

Picks with matching retainers

PH 14



Round attack pick
ER 15/29/26/14 C
incl. ES 14

Application
Asphalt, concrete, soft to medium hard rock

Part No. 15292614



Round attack pick
ER 16/28/26/14 H

Application
Asphalt, concrete, soft to medium hard rock

Part No. 16282614

PH 15



Round attack pick
ER 19/33/30/15 S

Application
Asphalt, concrete, soft to medium hard rock

Part No. 19333015



Circlip retainer
SG 15

Part No. 99999990

PH 20



Round attack pick
ER 12/45/38/20 K

Application
Concrete, soft to medium hard rock

Part No. 12453821



Round attack pick
ER 16/46/38/20 C

Application
Concrete, soft to medium hard rock

Part No. 16463820



Retaining clip
ES 20

Part No. 99999991



Round attack pick
ER 16/48/32/20 H

Application
Asphalt

Part No. 16483220



Picks with matching retainers

**PH
22**



Round attack pick
ER 12/45/38/22 HC

Application
Concrete, medium hard
and abrasive rock

Part No. 12453823



Retaining clip
ES 22

Part No. 99999996



Round attack pick
ER 15/46/38/22 C

Application
Concrete, medium hard
rock

Part No. 15463822



Retaining clip
ES 22

Part No. 99999996



Round attack pick
ER 19/51/45/22 H

Application
Asphalt, soft and abrasive
rock

Part No. 19514522



Dragontooth pick
DT 22/46/38/22 HC

Application
Soft and abrasive ground
and rock, wood

Part No. 22463822



Retaining clip
ES 22

Part No. 99999996

**PH
25**



Round attack pick
ER 17/64/60/25 Q

Application
Concrete, medium hard
rock

Part No. 17646026



QuickSnap^[1]
QS 25

Part No. 99250025



Round attack pick
ER 17/64/60/25 C

Application
Concrete, medium hard
rock

Part No. 17646025



Retaining clip
ES 25

Part No. 99999994



Round attack pick
ER 19/64/60/25 Q

Application
Concrete, medium hard
rock

Part No. 19646026



QuickSnap^[1]
QS 25

Part No. 99250025



Round attack pick
ER 22/64/60/25 H

Application
Asphalt, soft and abrasive
rock

Part No. 22646025



Dragontooth pick
DT 22/58/46/25 K

Application
Soft and abrasive ground
and rock, wood

Part No. 22465825

**PH
30 | 30 HD | 32 HD**



Round attack pick
ER 17/75/70/30 Q

Application
Concrete, medium hard
rock

Part No. 17757036



QuickSnap^[1]
QS 30

Part No. 99500030



Round attack pick
ER 19/75/70/30 Q

Application
Concrete, medium hard
rock

Part No. 19757035



QuickSnap^[1]
QS 30

Part No. 99500030



Round attack pick
ER 22/75/70/30 Q

Application
Concrete, medium hard to
hard rock

Part No. 22757032



QuickSnap^[1]
QS 30

Part No. 99500030



Round attack pick
ER 30/77/70/29 Q

Application
Asphalt, soft, medium hard
and abrasive rock

Part No. 30777032



QuickSnap^[1]
QS 30

Part No. 99500030



Round attack pick
ER 25/80/80/38 C

Application
Concrete, medium hard to
very hard rock

Part No. 25808039



Retaining clip
ES 38

Part No. 99500034

NEW: Triple-plane milling teeth
For better rotation in soft rock



Round attack pick
ER 17/75/70/30 HD TP Q

Application
Soft and medium hard
rock

Part No. 17757037



QuickSnap^[1]
QS 30

Part No. 99500030



Round attack pick
ER 19/75/70/30 HD TP Q

Application
Soft and medium hard
rock

Part No. 19757036



QuickSnap^[1]
QS 30

Part No. 99500030



Round attack pick
ER 15/90/70/30 Q

Application
Salt, gypsum, medium
hard, fractured rock

Part No. 15907035



QuickSnap^[1]
QS 30

Part No. 99500030



Dragontooth pick
DT 22/90/70/30 HQ

Application
Soft and abrasive rock,
wood

Part No. 22907030



QuickSnap^[1]
QS 30

Part No. 99500030

^[1] QuickSnap QS 30 is the standard retainer for this pick. Retaining clip ES 30 available as an alternative.



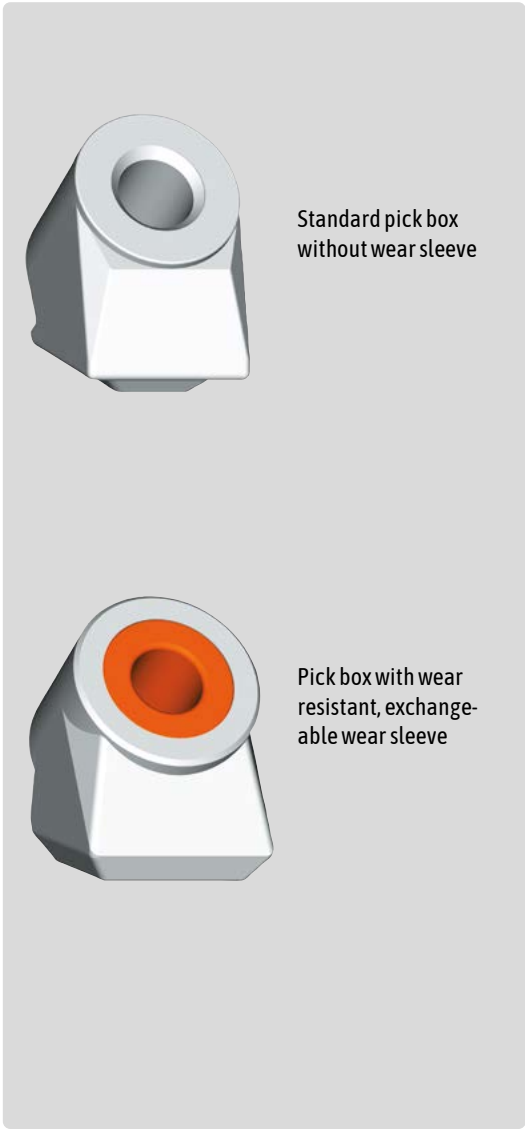
Retaining clip
ES 30

Part No. 99500032

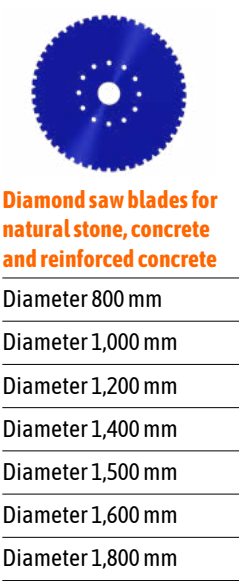
Pick boxes

Pick boxes welded onto the cutter head or cutter wheel determine where and how picks penetrate into the rock. The special attack angle ensures a continuous rotation of the pick creating a self sharpening action for the tungsten carbide insert during the cutting action. The correct angle ensures maximum productivity with minimum wear.

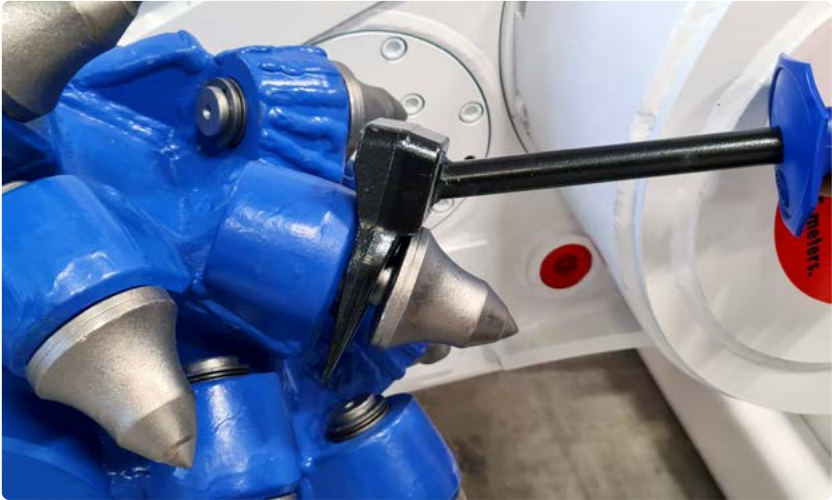
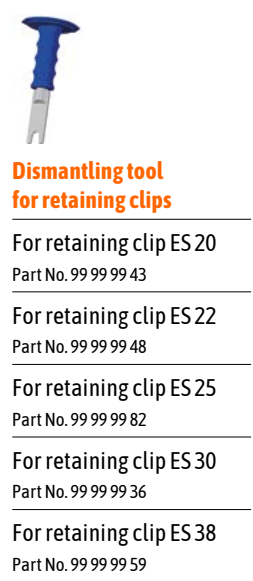
Pick boxes are made from specially heat treated steel and depending on applications, are available with exchangeable wear sleeves.



Saw blades for the KDS range



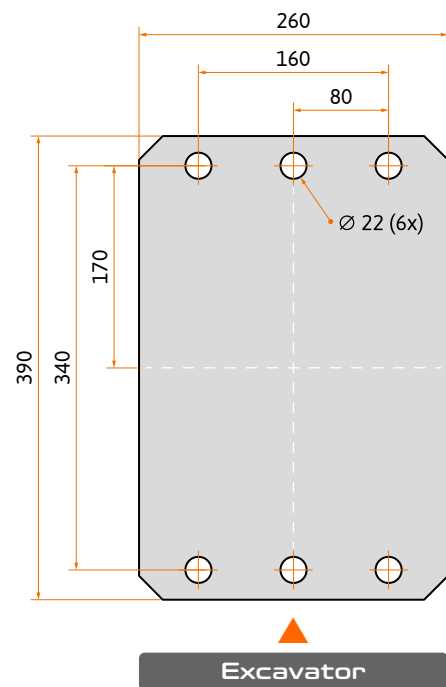
Mounting and dismantling tools



HOLE PATTERNS

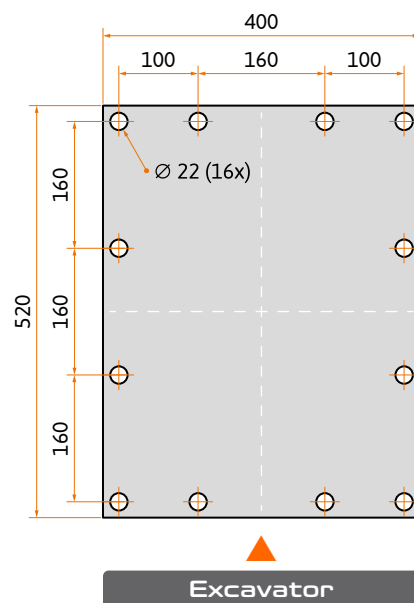
Hole patterns for KEMROC attachments

LB 10



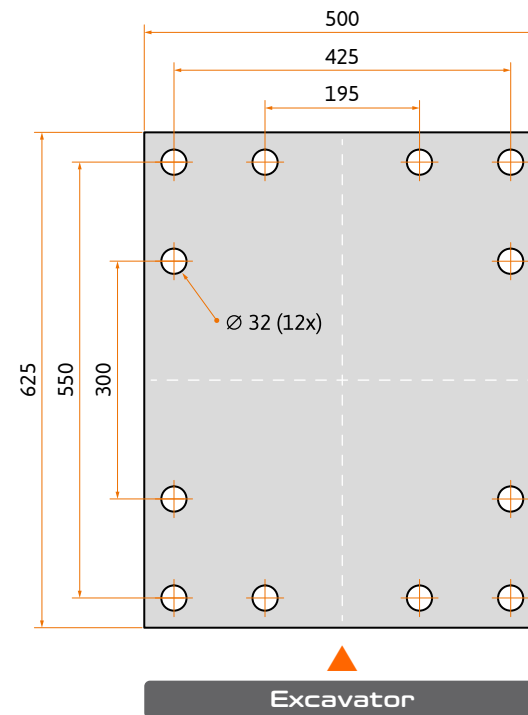
Dimensions in mm

LB 20



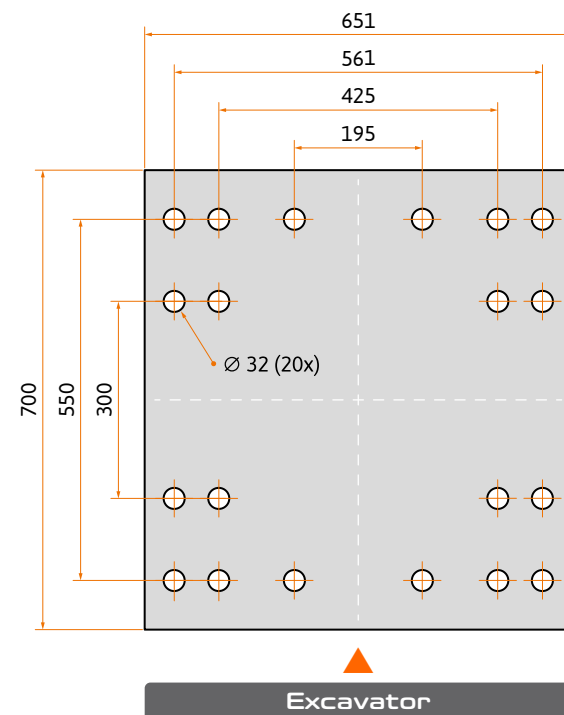
Dimensions in mm

LB 30



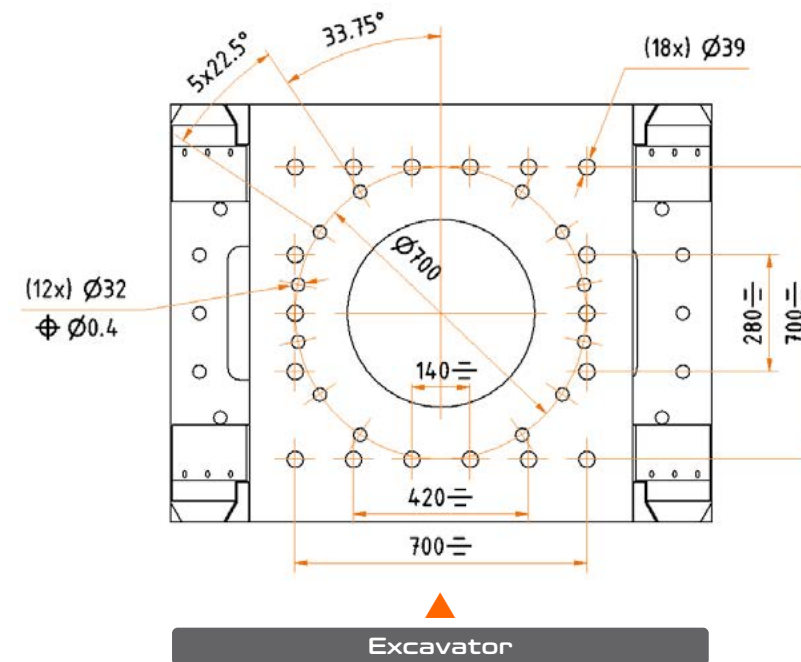
Dimensions in mm

LB 40



Dimensions in mm

LB 50



Dimensions in mm





Your local dealer



This catalog is used to describe our products and accessories. The information contained in it does not imply any certified properties or indicate any suitability for certain or assumed purposes. Technical changes are reserved without prior announcement. We disclaim any liability arising from the illustrations and information in the catalog and from all our representatives.

2026-09

www.kemroc.com

KEMROC Inc.
539 W. Commerce St. #6072
Dallas, TX 75208
United States

Phone +1 877-222-9050
Email usa@kemroc.com
www.kemroc.com

KEMROC®

revolution of cutting