



EXCAVATOR TEETH AND ADAPTERS

ADAPTER		WEAR CAP	
BE	SL	UA	WC/WCC
A 1 1/2 bottom leg adapter. Designed for both general and tough excavation in different types of ground.	Top mounted single leg adapter designed for use in general conditions whenever a smooth surface is required.	A 1 1/2 top leg adapter. Designed for both excavators and loaders. Can be used with or without a wear cap.	Mechanical wear cap protects the adapter topside in high abrasion and impact applications.

LOCK	
LP	LR
Reusable locking pin of forged steel also usable in hot slag applications.	Locking ring integrated in the tooth. Secures the locking function and simplifies teeth exchange.

TOOTH			
GPE	VE	WE	FE
Standard tooth with slim design for optimal penetration and durability in general purpose applications.	The tooth for maximum penetration. Makes light work of hard surface layers and frozen ground.	Used primarily in a corner position in combination with VE, this tooth provides the penetration demanded by hard surfaces.	An extra-wide tooth for excavating and cleaning – penetration and straight-edge performance from a single solution.

TOOTH	TOOTH	TOOL
AE	PE	LT
Abrasion tooth for highly abrasive soils and rocks such as granite, basalt and sandstone. The design provides maximal wear material with maintained good penetration.	Penetration tooth with added body mass and narrow tip combines penetration with impact and abrasion resistance.	Tool for turning the locking ring in locked and unlocked position.

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LOADER TEETH AND ADAPTERS

ADAPTER			WEAR CAP
SL	TL	UA	WC
Top mounted single leg adapter designed for use in general conditions whenever a smooth surface is required.	A 1 1/2 top leg adapter. Designed for both general and tough loading in different types of ground conditions.	A 1 1/2 top leg adapter. Designed for both excavators and loaders. Can be used with or without a wear cap.	Mechanical wear cap protects the adapter topside in high abrasion and impact applications.

LOCK	
LP	LR
Reusable locking pin of forged steel also usable in hot slag applications.	Locking ring integrated in the tooth. Secures the locking function and simplifies teeth exchange.

TOOTH		
GPL	AL	HAL
In both general and highly abrasive environments. This all-round tooth is popular for its excellent penetration.	Abrasion tooth with a high level of penetration. Recommended in blasted rock application.	Outstanding wear resistance combined with a high level of penetration. This tooth provides extra protection for the lower part of the adapter and is ideal where ground conditions are highly abrasive.

TOOL
LT
Tool for turning the locking ring in locked and unlocked position.



SHROUDS EXCAVATOR

LIP SHROUD

MSC	MSL	MSR	MSP
Mechanical lip shroud Center for straight edges and for use in combination with MSL & MSR on spade nose buckets. Provides full lip protection between adapters in abrasive applications.	Mechanical lip shroud Left* 15° angle for delta and spade nose buckets. * Left from excavating direction.	Mechanical lip shroud Right* 15° angle for delta and spade nose buckets. * Right from excavating direction.	Mechanical shroud protector designed to protect the locking device and the backside of the shrouds.

RAIL	LOCKING PARTS	SIDE SHROUD	PIN AND RING
WSR Welded on shroud rail holds the lip shrouds in secure position.	SHROUD LOCK, BOLT AND WASHER Self tightening lock, bolt and washer for the mechanical shroud.	SSM Mechanical side shroud is used to protect the bucket side plates and fastened with pin and ring.	PIN AND RING Locking pin and ring for the side shroud.

HEEL SHROUD	WELD-ON LIP SHROUD		
WHS Welded on heel shroud provides excellent wear protection of the lower outside corner of all types of buckets.	WSCE Weld-on lip shroud, Center. Fits 40-70mm straight cutting edges.	WSLE Weld-on lip shroud Left*. Fits 60-70mm cutting edges with 15° angle. *Left from excavating direction.	WSRE Weld-on lip shroud Right*. Fits 60-70mm cutting edges with 15° angle. *Right from excavating direction.

WELD ON BASE
WOB Welded on protection of lip shroud pins, welded both on inside and outside.

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APPLICATION TABLE

APPLICATION TABLE Based on DIN 18300 ground classification

Ground classification	Description of ground conditions	Working conditions	Application
Class 1 Top soil without stones	Top layer of soil.	Very little wear. Very little penetration resistance. No impact resistance.	GP
Class 2 Wet ground	Sludge, mud, peat.	Little wear. Very little penetration resistance. No impact resistance.	GP
Class 3 Light ground	Sand, fine gravel, sandy soil. Stone size up to approx. 60 mm	Moderate wear. Little penetration resistance. No impact resistance.	GP
Class 4 Moderately heavy ground	Very stony ground, gravel, stones. Stone size above 60 mm.	Considerable wear. Some penetration resistance. Moderate impact resistance.	GP / HD
Class 5 Dense, moderately heavy ground	Till, rigid clay, sand-clay mix, moraine, marl.	Considerable wear. Moderate penetration resistance. Little impact, some break through resistance.	HD
Class 6 Dense, heavy ground	Hard marl and clay, hard sandy ground, hard stony soil. Stone size up to approx. 200 mm.	Considerable wear. Considerable penetration resistance. Considerable impact and break through resistance.	HD
Class 7 Lighter rock	Loose rock, crumbled rock, slate. Very hard ground with stones, approx. 200 mm or bigger.	Usually considerable wear. Considerable penetration resistance. Considerable impact and break through resistance.	XHD
Class 8 Heavy rock	Blasted rock, size over 0,1 m ³ .	Very significant wear. Considerable penetration resistance. Very significant impact and break through resistance.	XHD

For further information on welding, assembly and maintenance, see welding and assembly instructions.


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SELECTION GUIDE


Breakout force diagram – Backhoe

HD/XHD class 6-8	Breakout Force (kN)
R130	1050 kN
R110	880 kN
R90	720 kN
R70	576 kN
R50	400 kN
R35	296 kN
R29	233 kN
R23	184 kN
R18	147 kN
R14	112 kN
R10	88 kN




Breakout force diagram – Loader


HD/XHD class 6-8	Breakout Force (kN)
R90	1296 kN
R70	1037 kN
R50	720 kN
R35	510 kN
R29	419 kN
R23	331 kN
R18	265 kN
R14	202 kN
R10	158 kN



GP/HD class 1-5	Breakout Force (kN)
R130	1300 kN
R110	1100 kN
R90	900 kN
R70	720 kN
R50	500 kN
R35	370 kN
R29	291 kN
R23	230 kN
R18	184 kN
R14	140 kN
R10	110 kN




GP/HD class 1-5	Breakout Force (kN)
R90	1620 kN
R70	1296 kN
R50	900 kN
R35	637 kN
R29	524 kN
R23	414 kN
R18	331 kN
R14	252 kN
R10	198 kN




Breakout force diagram – Face shovel

HD/XHD class 6-8	Breakout Force (kN)
R130	1312 kN
R110	1100 kN
R90	900 kN
R70	720 kN
R50	500 kN



GP/HD class 1-5	Breakout Force (kN)
R130	1625 kN
R110	1375 kN
R90	1125 kN
R70	900 kN
R50	625 kN



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