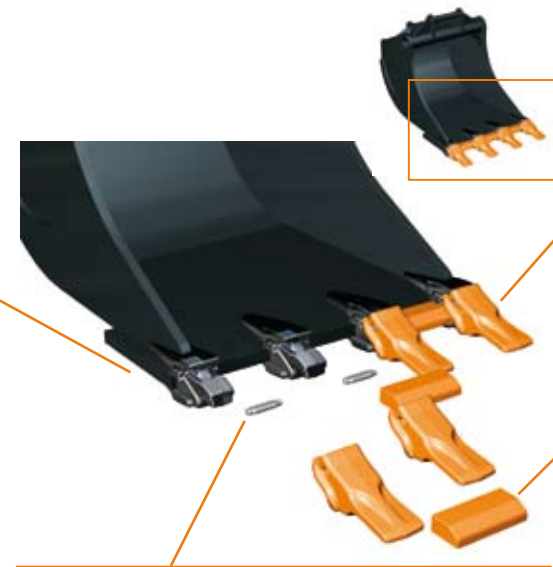


EXCAVATOR BUCKET INSTALLATIONS

The adapter positions the tooth in relation to the cutting edge. If a smooth surface is required on the underside of the bucket, a top mounted adapter, type A1, which positions the tooth somewhat higher, should be used. If, on the other hand, minimal disturbance on the top side of the cutting edge as well as protection for the underside is required, an A8E type adapter should be used. In tough conditions adapters A8E or A5 are recommended together with the applicable shrouds. These adapters position the tooth somewhat lower and in this way better protect the underside of the bucket.



COMBI parts offer two types of locking devices, C-lock and Slag-Lock. The Slag-Lock is recommended in applications where the temperature is constantly above +80°C (176°F), otherwise C-Lock is recommended.

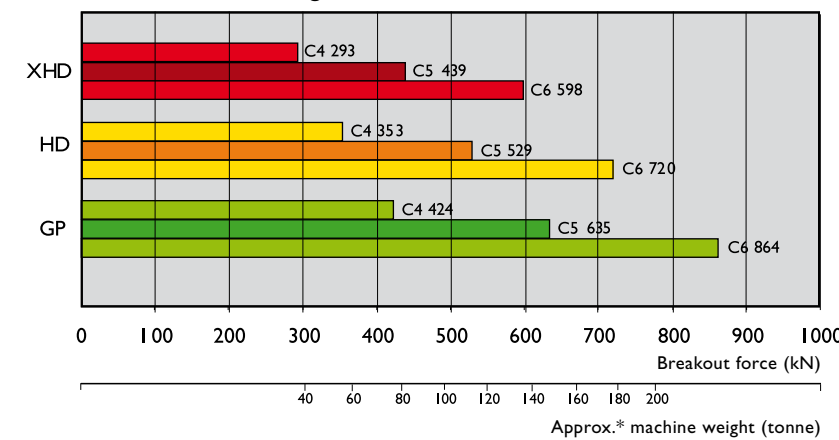
There is a variety of tooth designs available in the COMBI parts range, which are specially designed to cope with different conditions. Select the type of tooth that best suits your needs.

Shrouds are recommended when working with abrasive materials. They increase the service life of the bucket considerably at the same time as reducing downtime. With its S1 shroud and A5 adapter combination, COMBI parts offer a unique bucket protection solution with several advantages:

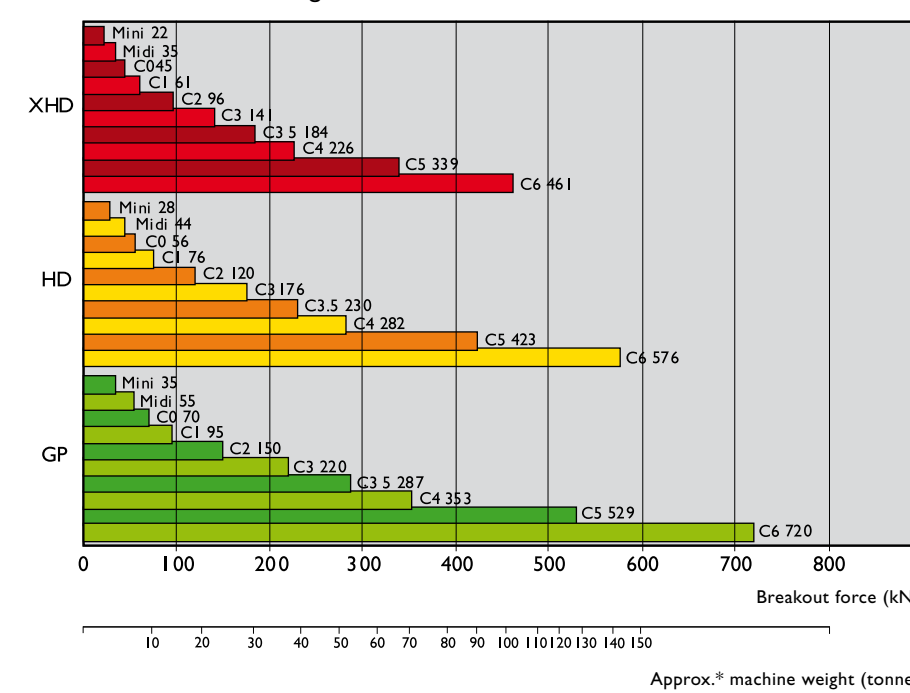
- Retained penetration capability, because of the S1 shroud's low profile.
- Extremely easy to fit and remove.
- No tools required for fitting or removal.

There are also other types of shrouds available in the range.

Break-out force diagram - face shovel



Break-out force diagram - Back hoe



* Machine weight is included as information. The break out force of the machine is that which determines the COMBI size required. See the reverse side for explanations of GP, HD and XHD.

APPLICATIONS 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 resistance, 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 m³.	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.
For further information on dimensions, see specifications.



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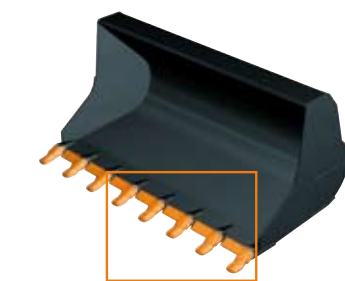
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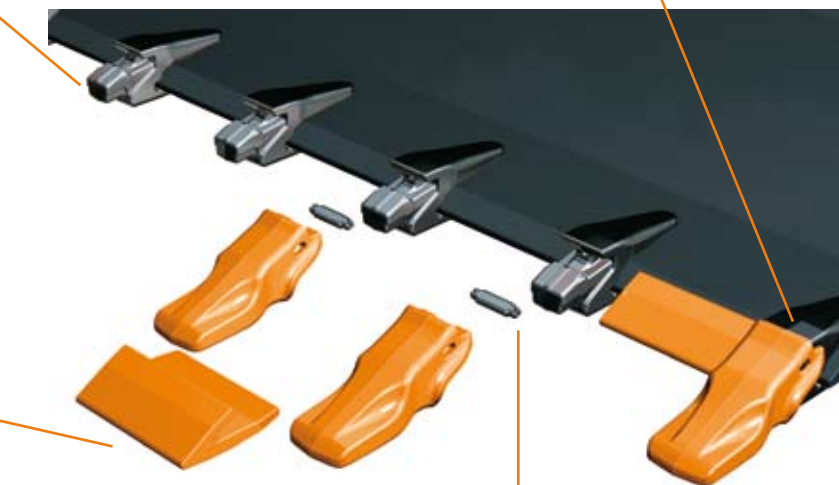
www.combiwearparts.com

LOADER BUCKET INSTALLATIONS

The top mounted A1 adapter is a good choice when a simple solution without shrouds or segments is called for. It is most suitably applied when both wear and impact force are moderate. A smooth bucket underside is the result when it is used in combination with T1, T3 or T29 teeth. The A8L adapter anchorage is strong on both the upper and lower sides of the cutting edge. This makes it suitable for tough conditions and it is always used in combination with shrouds or segments. The bolted mounting of the BA and BAC adapters makes them easy to exchange. They are best used in applications with moderate impact forces.



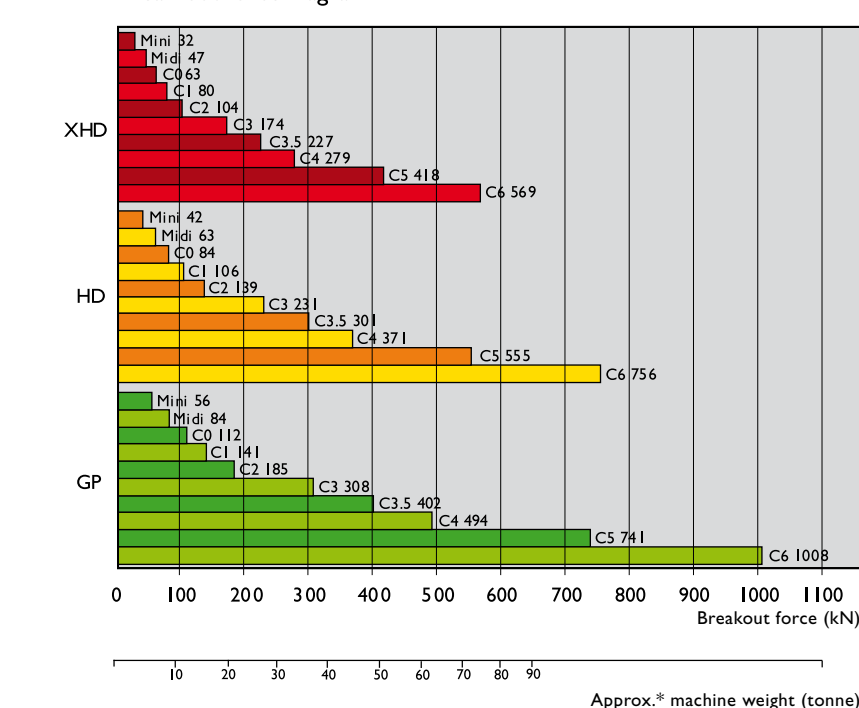
There is a variety of tooth designs available in the COMBI parts range, which are specially designed to cope with different conditions. Select the type of tooth that best suits your needs.



By using shrouds/segments between the adapters, the service life of the cutting edge, underside of the bucket and adapters is increased. Used in combination with adapters A8L and BA/BAC.

COMBI parts offer two types of locking devices, C-lock and Slag-Lock. The Slag-Lock is recommended in applications where the temperature is constantly above +80°C (176°F), otherwise C-Lock is recommended.

Break-out force diagram



* Machine weight is included as information. The break out force of the machine is that which determines the COMBI size required. See the reverse side for explanations of GP, HD and XHD.



PRODUCT RANGE





EXCAVATOR

PRODUCT RANGE OVERVIEW

A1	A5	A8E	T5	T6	T7	T8	T25
Versatile, top mounted adapter designed for use in general conditions whenever a smooth surface is required.	An adapter with long upper and lower legs for use with non-bevelled cutting edges. Uniquely formed with grooves for use with S1 shroud. The shroud is held in place by teeth, meaning that no welding or bolting is required.	A 1 1/2 bottom leg adapter. Designed for both general and tough excavation in different types of ground.	Good penetration and excellent wear resistance from a traditional, chisel shaped tooth. Widely used for general excavation in tough conditions.	Converts a bucket with teeth into a straight-edged cleaning bucket. Ideal for backfilling and cleaning.	The tooth for maximum penetration. Makes light work of hard surface layers and frozen ground.	Maximum wear resistance in highly abrasive ground - particularly suitable where extra wear material is a top priority.	Used primarily in a corner position in combination with T7, this tooth provides the penetration demanded by hard surfaces.

T35	T45	T50	T55	T58	S1	S4	16204
Maximum penetration from a conventionally shaped tooth – perfect for general excavation.	An extra-wide tooth for excavating and cleaning – penetration and straight-edge performance from a single solution.	A tooth that combines good penetration with excellent wear resistance. Ideal for general excavation in tough conditions.	A penetration and wear resistant tooth, particularly suitable for handling blasted material and big rocks.	Self-sharpening tooth with outstanding wear resistance – particularly suitable for quarries that present highly abrasive ground conditions.	This shroud can be cut to length and used with adapter A5. The cutting edge is protected and penetration remains unaffected.	Used to protect the cutting edge between the adapters, this shroud can be welded or bolted in place.	This shroud can be cut to length and mounted between adapters. Mounting is by welding to the cutting edge (especially recommended for XHD applications) or mechanical attachment to the adapters. In the latter case, supports (16205 and 16206) must be welded to the shroud.

	A1	A5	A8E	T5	T6	T7	T8	T25	T29	T35	T45	T50	T55	T58	S1	S4	16204
	Part no. / Lip thickness (mm)	Part no. / Lip thickness (mm)	Part no. / Lip thickness (mm)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)
Mini	17001 / 20 (16-20)		17015 / 16-20			17117 / 0,6			17129 / 0,7								
Midi	18001 / 20 (16-20)		18015 / 16-20			18117 / 0,9			18129 / 1,1								
C0	10001 / 20 (16-25)								10129 / 1,7								
C1	11001 / 20 (20-30)		11002 / 25	11115 / 3,1	11116 / 5,8				11129 / 2,6	11135 / 2,7							
C2	12001 / 25 (25-35)	12002 / 30	12007 / 25 12008 / 30	12115 / 3,9	12116 / 7,0 12126 / 8,1	12117 / 3,0		12125 / 3,6	12129 / 3,9	12135 / 3,4	12145 / 4,1				12201 / 18,2		
C3		13002 / 40	13008 / 40 13009 / 35	13115 / 6,8	13116 / 11,0 13126 / 12,7	13117 / 5,2		13125 / 6,5		13135 / 6,2	13145 / 7,4			13158 / 8,3	13201 / 28,8		
C3.5			135008 / 40 135009 / 50			135117 / 8,6		135125 / 10,5		135135 / 9,6	135145 / 11,9	135150 / 10,7		135158 / 12,8			
C4		14002 / 50	14004 / 60 14008 / 50 14009 / 40	14115 / 14,0		14117 / 9,7	14118 / 17,7	14125 / 15,0		14135 / 13,2	14145 / 16,2		14155 / 14,3	14158 / 17,1	14201 / 46,2	14204 / 15,2	
C5			15007 / 70 15008 / 75 15009 / 60	15115 / 22,6		15117 / 18,6	15118 / 27,4	15125 / 22,5		15135 / 18,4	15145 / 23,5	15150 / 20,2		15158 / 23,6		15204 / 18,0 15205 / 50,8	
C6			*16007 / 75 *16008 / 90	16115 / 38,0						16135 / 35,6			16155 / 47,7	16158 / 49,2			16204 / 43,0

*These are A8L type adapters



WHEEL LOADERS

PRODUCT RANGE OVERVIEW

C-Lock	Slag Lock
Resetting teeth is made easy with this secure, simple locking device. Consists of forged steel profiles and vulcanised rubber core. The locking centralises in the adapter.	A heat resistant locking device. A heat resistant locking device which is recommended when working in temperatures constantly above +80°C.

C-Tool
Tool for driving in and out the locking devices. Simplifies teeth exchange and is recommended for safety reasons.

A1	A8L	BA	BAC	T1	T2	T3	T4
Versatile, top mounted 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.	This adapter can be easily bolted to the cutting edge. Primarily intended for applications with low impact levels.	A corner adapter that is bolted to the side plate of the bucket. Used in combination with BA.	Good penetration and excellent wear resistance from a traditional, chisel shaped tooth. Widely used for work in everything from general to highly abrasive ground conditions.	A tooth with added wear material on the underside - ideal when the lower part of the adapter needs extra protection.	A general-purpose tooth that, compared to T1, has a wider tip and more wear material on the sides. Suitable for abrasive ground conditions.	Designed for use in abrasive ground, this tooth withstands high impact loads.

T8	T9	T29	T48	15206	15208	16207
Maximum wear resistance in highly abrasive ground - particularly suitable where extra wear material is a top priority.	Penetration tooth with extra wear material on the underside.	In both general and highly abrasive environments. This all-round tooth is popular for its excellent penetration.	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.	This shroud is bolted to the cutting edge to provide protection between adapters.	A traditionally shaped, bottom mounted shroud that, bolted to the cutting edge, provides protection between adapters.	This shroud can be cut to length and mounted between adapters. Mounting is by welding to the cutting edge (especially recommended for XHD applications) or mechanical attachment to the adapters. In the latter case, supports (16205 and 16206) must be welded to the shroud.

C-Lock	Slag Lock	C-Tool
Part no.	Part no.	Part no.
17306		17403
18306		17403
10306		10403
11306		10403
12306		12403
13306	13307 13308	12403
135306		135403
14306	14307 14308	135403
15316	15307 15308	135403
16306		16403

	A1	A8L	BA	BAC	T1	T2	T3	T4	T8	T9	T29	T48	15206	15208	16207				
	Part no. / Lip thickness (mm)	Part no. / Lip thickness (mm)	Part no. / Lip thickness (mm)	Part no. / Lip thickness (mm)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)	Part no. / weight (kg)				
Mini	17001 / 20 (16-20)														17129 / 0,7				
Midi	18001 / 20 (16-20)														18129 / 1,1				
C0	10001 / 20 (16-25)														10129 / 1,7				
C1	11001 / 20 (20-30)														11129 / 2,6				
C2	12001 / 25 (25-35)	12012 / 30	12052 / 30 12053 / 35	12060 / 30 12061 / 30 (30-35)	12111 / 4,7		12113 / 5,6								12129 / 3,9				
C3	13001 / 30 (30-40)	13012 / 40 13013 / 35	13051 / 35 13052 / 40		13111 / 7,4	13112 / 9,2	13113 / 8,7	13114 / 9,0							13129 / 6,9	13148 / 9,5			
C3.5	135001 / 40 (40-50)	135012 / 40													135129 / 10,6	135148 / 14,7			
C4	14001 / 50 (50-65) 14011 / 40 (40-55)	14012 / 40 14013 / 45	14052 / 40		14111 / 12,4		14113 / 14,3		14118 / 17,7						14129 / 13,8	14148 / 19,8			
C5	15001 / 65 (65-80)	15006 / 65							15112 / 22,3					15118 / 27,4	15119 / 24,2	15129 / 19,6	15148 / 27,8	15206 / 44,0	15208 / 58,1
C6		16007 / 75 16008 / 90													16129 / 39,3				16207 / 95,0