

PRODUCT RANGE



SCHAEFF

Produced by ATLAS Maschinen GmbH

HYDRAULIC CUTTING UNITS

HYDRAULIC CUTTING UNITS



PROVEN FOR THE TOUGHEST DAY-TO-DAY USE

If you work with the toughest rock and concrete on a daily basis, on land or under water; if you need to cut with a high degree of precision; or if you work in restricted spaces, trenches or underground, then you need the productivity and reliability offered by SCHAEFF Cutters.

These are tools that enable you to achieve your objectives. No matter where you are in the world, you'll find us close by. Our extensive network of SCHAEFF partners is here to provide expert advice, local service and an efficient spare parts service.



▶ **Transverse cutting units**

Power range	18 - 140 kW
Cutting widths range	500 - 1400 mm
Recommended excavator size	2 - 60 t



▶ **Cutting units with rotator**

Power range	18 - 90 kW
Cutting widths range	500 - 900 mm
Recommended excavator size	5 - 35 t



▶ **Cutter buckets**

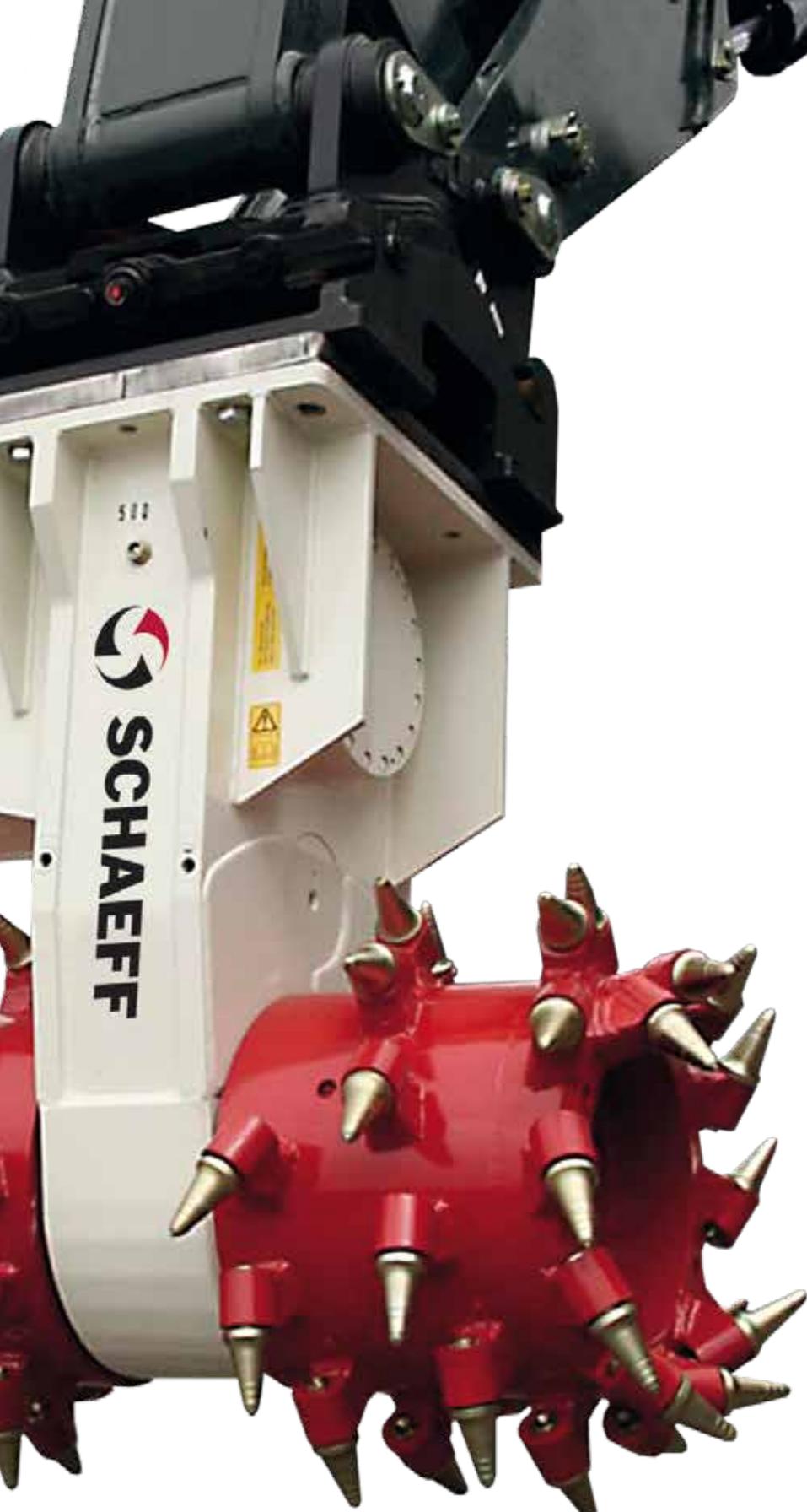
Power range	18 - 140 kW
Cutting widths range	500 - 1400 mm
Recommended excavator size	5 - 60 t



▶ **Patch planers**

Standard cutting widths	300 / 450 / 600 mm
Cutting depth	0 - 125 mm
Recommended excavator size	5 - 18 t





CONTENTS

SCHAEFF® hydraulic cutting units	2
Applications	4
Transverse cutting units	6
Cutting units with rotator	8
Cutter buckets	10
Patch planers	12
Cutting drums and picks	14
Special solutions	16
Technical data	18

A CUTTER FOR EVERY APPLICATION

Reliable, efficient and economical, the modular system of hydraulic motors, cutting heads and picks makes SCHAEFF Cutters the ultimate tool that is easily adapted to a wide range of applications and carriers.

TRENCH AND PIPELINE CONSTRUCTION



SENSITIVE APPLICATIONS



DEMOLITION / CONCRETE / BUILDING RENOVATION



PROFILING / LEVELLING



SOIL PREPARATION / MIXING



LANDSCAPING / TREE STUMP CUTTING



UNDERWATER CUTTING



TUNNEL CONSTRUCTION



ROADBUILDING



PLANING



EFFICIENT AND VERSATILE

One tool for many tasks: SCHAEFF cutters are highly versatile. The multifunctional transverse cutters are at home on all the most common types of construction site. Cutters are available in power levels of 18 to 140 kW for carriers of 2 to 60 tonnes.

For more specialised applications, the modular design allows the cutters to be adapted to the task in hand with a range of hydraulic motors, cutting heads and picks.

EFFICIENT AND PATENTED CUTTING TECHNOLOGY

Efficient and highly productive, our cutters use rugged spur gear units driven by high-torque motors.

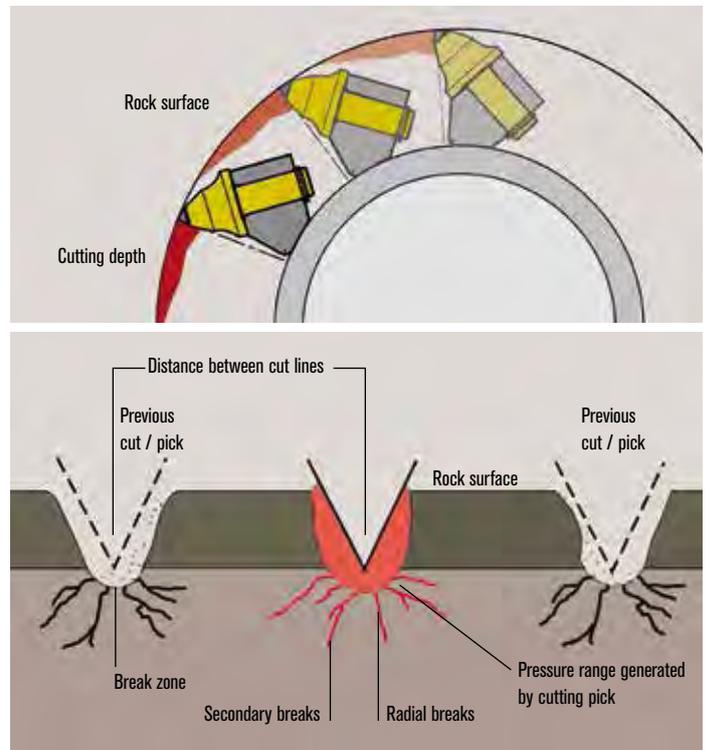
It's the power of the picks that dictates cutting efficiency, not the power in kilowatts of the cutting unit. A patented SCHAEFF transmission provides maximum cutting power by delivering very high torque to the cutting head.

Depending on the cutter or drum type, between 48 and 140 picks cut into the rock. The optimum number of picks and their arrangement ensures maximum cutting performance, minimum vibration and quiet operation.

What this means for you:

- ! Multifunctional transverse cutters, suitable for a wide range of job sites.
- ! High economy achieved by re-use of excavated material for backfilling.
- ! Made-to-measure individual solutions for special applications.
- ! Selection of different cutting drums for different applications.
- ! Over 50 years' experience in cutting technology. Made in Germany.

How SCHAEFF cutting technology works





Low vibration and noise level reduces fatigue.

Maximum cutting output thanks to patented transmission concept.

Hydraulic motor displacement can be adjusted to hydraulic oil flow on excavator.

Rugged and low-maintenance thanks to solid drive shaft and heavy-duty sealing system.

Gear sealing system suitable for underwater use up to depth of 25 m.

Economical – cutting tools under load can be easily replaced.

Narrow transmission case allows narrow trench widths even at greater depths.

EXPAND THE POSSIBILITIES

SCHAEFF® Transverse Cutters can be operated with a rotator unit. This combination expands its field of operation and increases productivity.

360°

The cutter can be rotated (360°) for precision demolition in trenches and tunnels. It offers accurate positioning in angles and corners and precision working on wall surfaces. Because the cutter can be accurately positioned, even sensitive demolition work is manageable.

The rotator unit always positions the cutter head in the optimum working position for the most effective cutting. This significantly increases overall productivity. It also reduces wear to the picks and means less stress on the excavator's boom.

What this means for you:

- ❗ Models from 18 - 90 kW, for excavators of 5 - 35 t.
- ❗ Higher cutting performance, especially in trench and tunnel construction.
- ❗ Saves time – no need to reposition the excavator.
- ❗ Very economical for profiling.
- ❗ One rotator unit for a range of cutters and attachments, e.g. buckets, hammers and grabs.



Fast, infinite and smooth variable rotation for short work cycles.

Angled connecting plate allows side clearance when cutter is rotated.

Integrated rotary feedthrough for maximum oil flow and high operating pressures (up to 350 bar).

Resilient: the rugged housing protects the hydraulic motor and lines from damage.

Accurate head positioning means less pick wear and stress to the carrier.

Selection of cutting drums and picks.

Economical – modular design means every component can be replaced individually.



ONE TOOL – FOUR FUNCTIONS

SCHAEFF® Cutter Buckets combination allows operators to excavate, cut, crush and mix all in one process. There is no need to change implements or tools, provide intermediate storage, or transport material back and forth, and the need for material supply and removal is reduced. The combination allows softer material to be excavated with the cutter bucket while more solid rocks are dislodged with the integrated cutter. The material picked up with the bucket can be crushed immediately in the trench and processed if necessary.

TYPICAL APPLICATION

- ▶ In the cable trench as cutter, bucket and ground stabilizer
- ▶ On flat terrain as cutter and ground stabilizer
- ▶ On the waste heap as a recycling unit

What this means for you:

- ! No tool changes required.
- ! Cutter guided with precision over the bucket, which means less vibration.
- ! Excavated material broken up on site for re-use on the same site (e.g. backfilling).
- ! Removed material mixed with cohesive soils.
- ! Reduction in equipment, removal and landfill costs.
- ! Cutter can also be used conventionally without bucket attachment.
- ! Cutter bucket system can be retrofitted on all SCHAEFF transverse cutters.

ON LEVEL TERRAIN

Cutting on level terrain is also possible with the cutter bucket. The bucket assumes the guide function and sets the depth for the cutting operation. Cutting vibration is thereby largely reduced and the carrier is exposed to less strain.

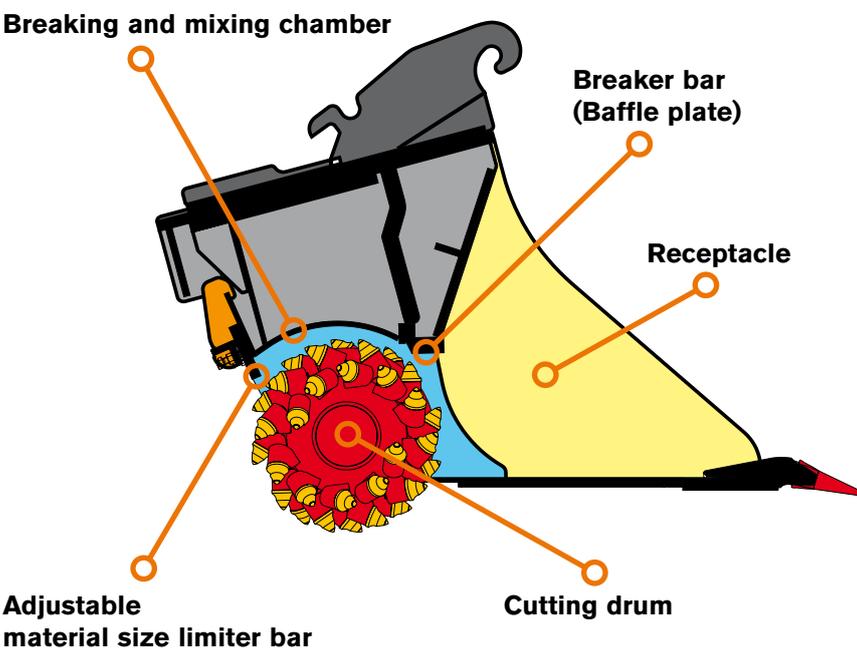
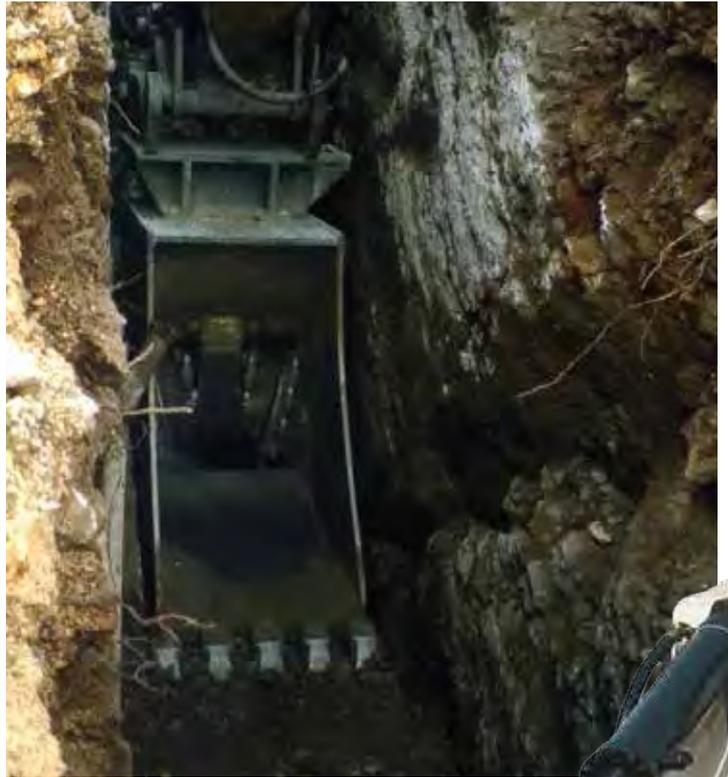
FOR SOIL PREPARATION

The mixing cutter bucket was specially developed for soil preparation and conditioning. A feeding system on the cutter bucket allows binders such as lime or additives to be measured into the mixing chamber.

The material picked up by the bucket is crushed by the grinding unit. The additives are mixed in at the same time and processed into a homogenous soil material.

TWO-SPEED HYDRAULIC MOTOR

Two cutting speeds ensure optimum operation of the mixing cutter bucket. Opt for powerful cutting and crushing at low speed and high torque, or mixing with a high drum speed and reduced torque.



LOOKING GOOD FROM ANY ANGLE

Regardless of whether it's asphalt, rock, concrete or contaminated surfaces, SCHAEFF® patch planers are the optimum high-performance tools for horizontal, vertical, diagonal and overhead work. The cutters can be used on excavators or backhoe loaders of 5 to 18 tonnes. With their low vibration and precise straight and parallel cutting edges, they are the ideal implements for surface repairs, precise levelling and efficient surface removal.

LOW VIBRATION

The centrally aligned, forked swivel arm ensures that forces from the carrier vehicle act directly upon the cutting drum. This increases the patch planers stability, whilst reducing tension and vibrations. The heavy-duty frame with rollers keeps friction to a minimum during motion. An optional tilt and swivel head allows increased accuracy.

Standard cutting widths of 300, 450 and 600 mm – smaller cutting drum widths available on request.

Optional water nozzle to minimise dust.

Mechanically adjustable cutting depth for even surface removal.

Guide frame with hard-wearing rollers for reduced friction.

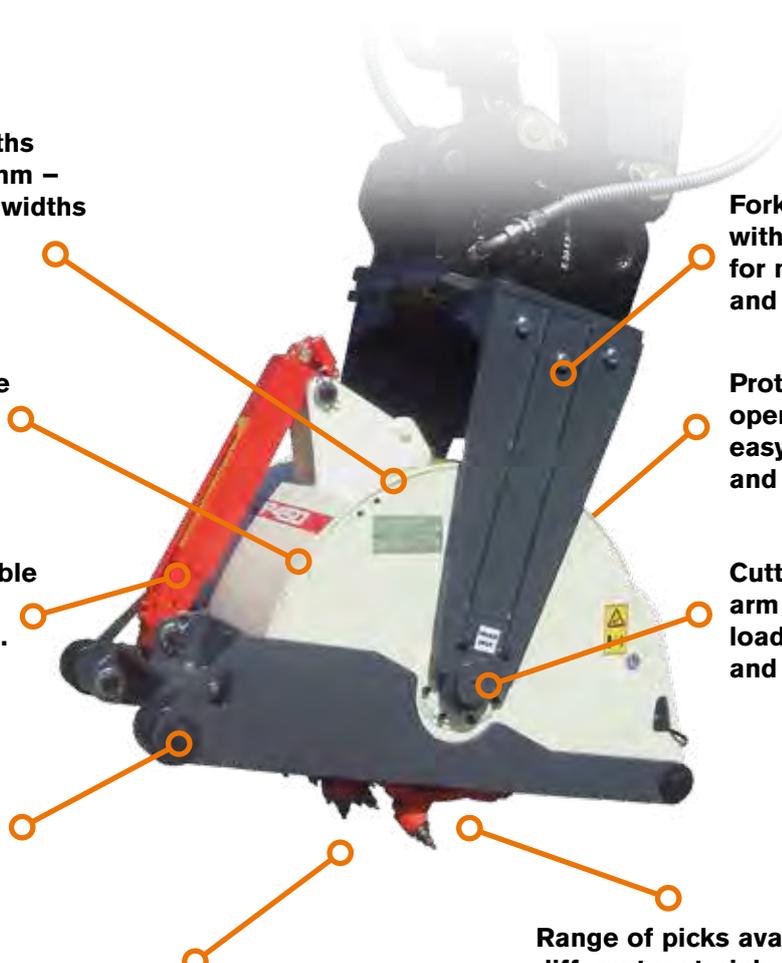
Cost-effective due to direct re-use of the cut material.

Forked suspension arm with large swivel range for maximum flexibility and stability.

Protective cover with opening on top for easy drum inspection and servicing.

Cutting drum and swivel arm bearing offer high load-carrying capacity and long service life.

Range of picks available for different materials, e.g. asphalt, rock or concrete.





What this means for you:

- 
 High productivity: work horizontally, vertically, at an incline or overhead.
- 
 Cost-effective due to direct re-use of the cut material.
- 
 Cutting drum and swivel arm bearing offer high load-carrying capacity and long service life.



CUTTING DEPTH CAN BE CONTINUOUSLY ADJUSTED



0 mm



50 mm



75 mm



100 mm



125 mm



CONFIGURE YOUR SOLUTION

Discover the benefits of our modular system – one basic unit with interchangeable tools for different applications. You configure your ideal cutting unit from our range of components.

DIFFERENT PICKS

The picks are specifically adapted to the job in hand for optimum cutting performance and low wear.

- 

▶ **Standard pick**
For soft to medium-hard rock, e.g. asphalt, salt, mudstone.
- 

▶ **Heavy-duty pick**
For medium-hard to very hard rock, e.g. limestone, concrete.
- 

▶ **Wear-resistant pick**
For very abrasive rock, e.g. sandstone, blast-furnace crushed rock.
- 

▶ **Wood pick**
For cutting tree stumps.

EVERY PICK – HIGHEST QUALITY

Every pick is made of high-alloy steel with soldered carbide tips. We offer a wide range of picks for different applications. To allow easy replacement, we use a standard pick holder. All picks are available worldwide from our extensive network of dealers.

DIFFERENT CUTTING HEADS

There is a special drum for each application.



▶ Excavating drum

- For soft to medium-hard rock.
- Allows deep pick penetration and a high productivity.



▶ Profiling drum

- For soft to medium-hard rock.
- High number of picks for accurate surfaces and reduced vibration.



▶ Demolition drum

- For medium-hard to hard rock and concrete.
- Wear-resistant spiral blade limits cutting depth and reduces vibration for quiet operation.

THERE'S NO SUCH WORD AS IMPOSSIBLE

You've got the challenge. We've got the solution.
Economical and made to measure.



Cutter with bucket attachment



Cutting unit with brush system



Trench cutting



Cutting unit for use in steel and aluminium plants



Water spray unit to damp down dust



Dedusting unit for use inside buildings



Soil mixing / conditioning



High cutting performance in the mining industry

SPECIFICATIONS AT A GLANCE



TRANSVERSE CUTTING UNITS

Attachment	Operating weight kg (lbs)	Hydraulic input power kW (hp)	Required hydraulic oil flow l/min (gpm)	Recommended excavator size t (US tons)
WS15N	280 (620)	18/22 (24/30)	30 - 65 (8 - 17)	2 - 8 (3 - 9)
WS30N	420 (930)	30 (40)	70 - 120 (18 - 31)	8 - 15 (8 - 19)
WS45N	850 (1900)	45 (60)	100 - 190 (27 - 50)	12 - 20 (13 - 22)
WS60N	1400 (3100)	60 (80)	120 - 210 (32 - 55)	18 - 30 (20 - 33)
WS90N	1460 (3200)	90 (120)	240 - 340 (63 - 90)	25 - 35 (27 - 39)
WS120N	2600 (5700)	120 (160)	250 - 500 (66 - 132)	30 - 45 (33 - 50)
WS150N	2800 (6200)	140 (190)	360 - 550 (95 - 145)	40 - 60 (44 - 66)

CUTTERS WITH ROTATOR

Attachment	Operating weight kg (lbs)	Hydraulic input power kW (hp)	Required hydraulic oil quantity l/min (gpm)	Recommended excavator size t (US tons)
WS15N + RT121	400 (880)	18/22 (24/30)	30 - 65 (8 - 17)	5 - 8 (5.5 - 9)
WS30N + RT121	580 (1300)	30 (40)	70 - 120 (18 - 31)	8 - 15 (8 - 19)
WS45N + RT201	1100 (2450)	45 (60)	100 - 190 (27 - 50)	12 - 20 (13 - 22)
WS60N + RT301	1800 (4000)	60 (80)	120 - 210 (32 - 55)	18 - 30 (20 - 33)
WS90N + RT301	1860 (4100)	90 (120)	240 - 340 (63 - 90)	25 - 35 (27 - 39)



CUTTER BUCKET

Attachment	Operating weight	Hydraulic input power kW (hp)	Required hydraulic oil flow l/min (gpm)	Bucket width	Recommended excavator size t (US tons)
	kg (lbs)			mm (in)	
WS15-FL450	480 (1050)	18/22 (24/30)	30 - 65 (8 - 17)	450 (17.5)	4 - 8 (4 - 9)
WS30-FL600	850 (1900)	30 (40)	60 - 120 (18 - 31)	600 (23.4)	8 - 15 (8 - 17)
WS45-FL650	1900 (4200)	45 (60)	100 - 190 (27 - 50)	650 (25.3)	14 - 20 (13 - 22)
WS60-FL800	2800 (6200)	60 (80)	120 - 210 (32 - 55)	820 (32.3)	18 - 30 (20 - 33)
WS90-FL800	2900 (6400)	90 (120)	240 - 340 (63 - 90)	820 (32.3)	25 - 35 (27 - 39)
WS120-FL1000	4300 (9500)	110 (148)	260 - 500 (66 - 132)	1000 (39)	35 - 45 (33 - 50)

PATCH PLANERS

Attachment	Operating weight	Min. required hydraulic power ² kW (hp)	Recommended hydraulic oil flow ¹ l/min (gpm)	Cutting width	Recommended excavator size t (US tons)
	kg (lbs)			mm (in)	
TPP300	450 (990)	18 (24)	60 - 90 (18 - 24)	300 (11.8)	5 - 8 (5 - 9)
TPP450	600 (1300)	30 (40)	90 - 125 (24 - 33)	450 (17.7)	8 - 14 (8 - 15)
TPP600	800 (1750)	36 (48)	120 - 190 (31 - 50)	600 (23.6)	12 - 18 (13 - 20)

(1) Operating pressure and oil flow proportionate to each other · (2) Min. required hydraulic power from excavator control circuit to cutter



DISTRIBUTED BY:

KAELBLE GmbH

CMT

HFM

Cylinders

Steel Fabrication

Daimler Straße 5-6,

D-74582 Gerabronn

Germany

T: +49(0)7952 606 60

E: info@kaelblegmbh.com

www.KaelbleGmbH.com

DISTRIBUTED BY:

ATLAS Maschinen GmbH

BAGGER

Atlasstrasse 6

27777 Ganderkesee, Germany

T: +49 (0) 4222 954 0

F: +49 (0) 4222 954 343

info@atlasgmbh.com

www.atlasgmbh.com