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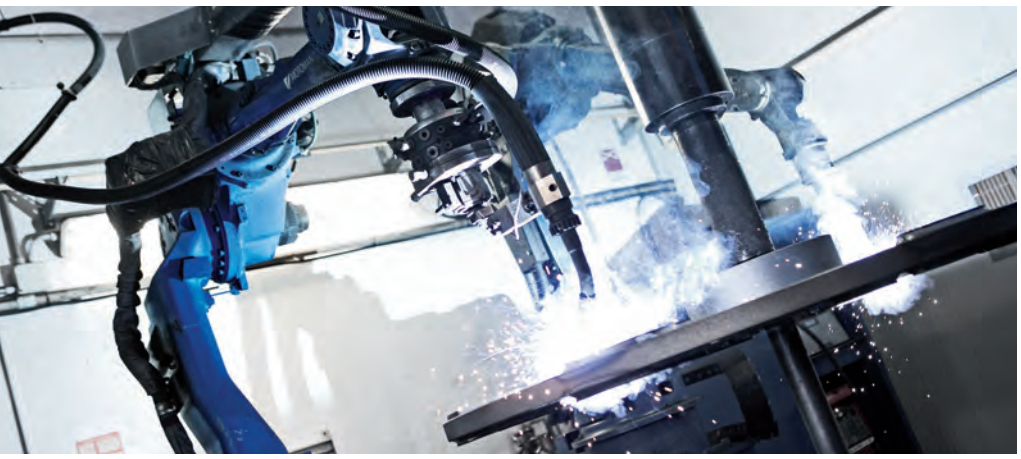
Product Catalogue




your business, our passion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SXNC093A16

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TF

CUTTER HEADS

PATENT SIMEX

Double drum cutter heads.

■ Simex TF cutter heads are ideal for trenching, profiling and resurfacing rock and cement walls, tunneling, quarrying, demolitions, dredging and finishing operations.

■ **They are highly effective** where conventional excavation systems are too weak and percussion systems have little effect.

■ **Their quiet operation** allows them to be put to work in sensitive or populated areas (near schools, hospitals, bridges and infrastructure).

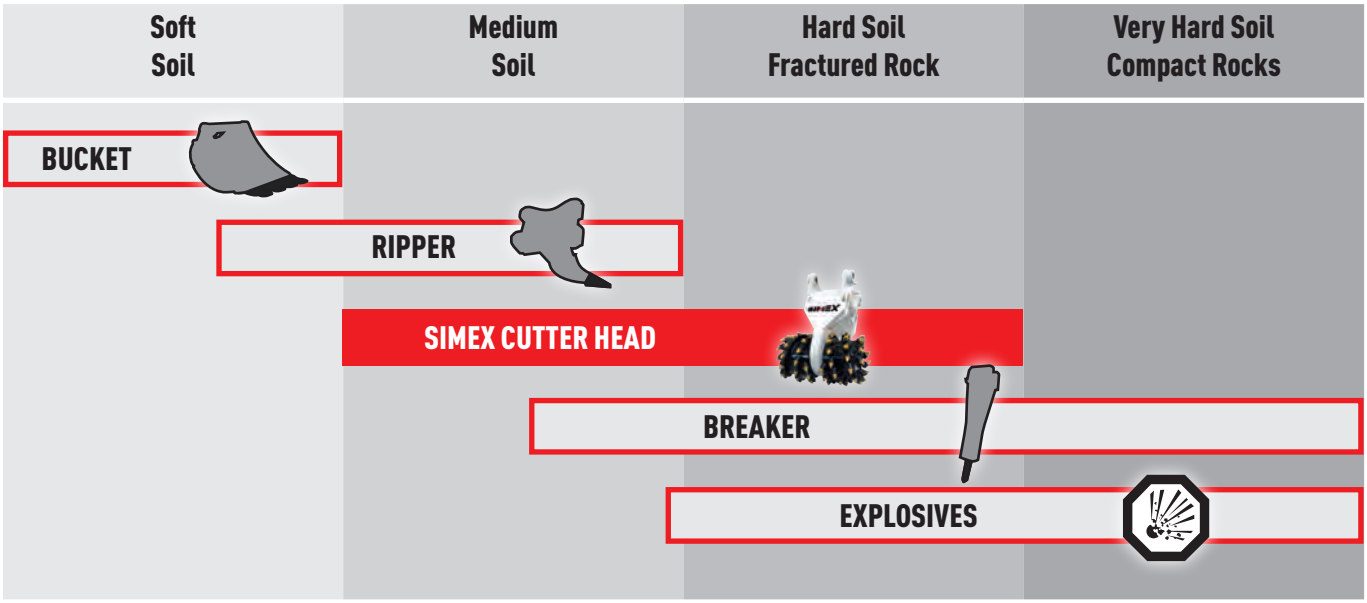
■ They are especially effective for finishing operations requiring **maximum precision, minimum intrusion** and an optimum aesthetic result.

■ FIELDS OF APPLICATION.

- Trenching
- Tunneling
- Stripping and reclamation
- Underwater works
- Quarrying
- Demolition
- Wall profiling

ADVANTAGES FOR YOUR BUSINESS

- Precision cutting
- Low vibrations
- High performance
- Low noise output
- Narrow, deep trenching
- Underwater works
- Maintenance-free
- Milled material usable on site



PATENT SIMEX

■ **High torque and high performance** guaranteed by integrated high displacement hydraulic piston motor. Shaft transmits motion only and bears no load thanks to double support bearings for each drum.

■ **Milled material is discharged from the trench without getting stuck in the frame** due to special shape, which also allows hoses to be hooked up at sides and front.

■ **Easy mounting on excavators,** which require a high oil flow at low pressure to deliver efficient hydraulic power.
Oil flow limiting valve avoids risk of hydraulic motor over revving.

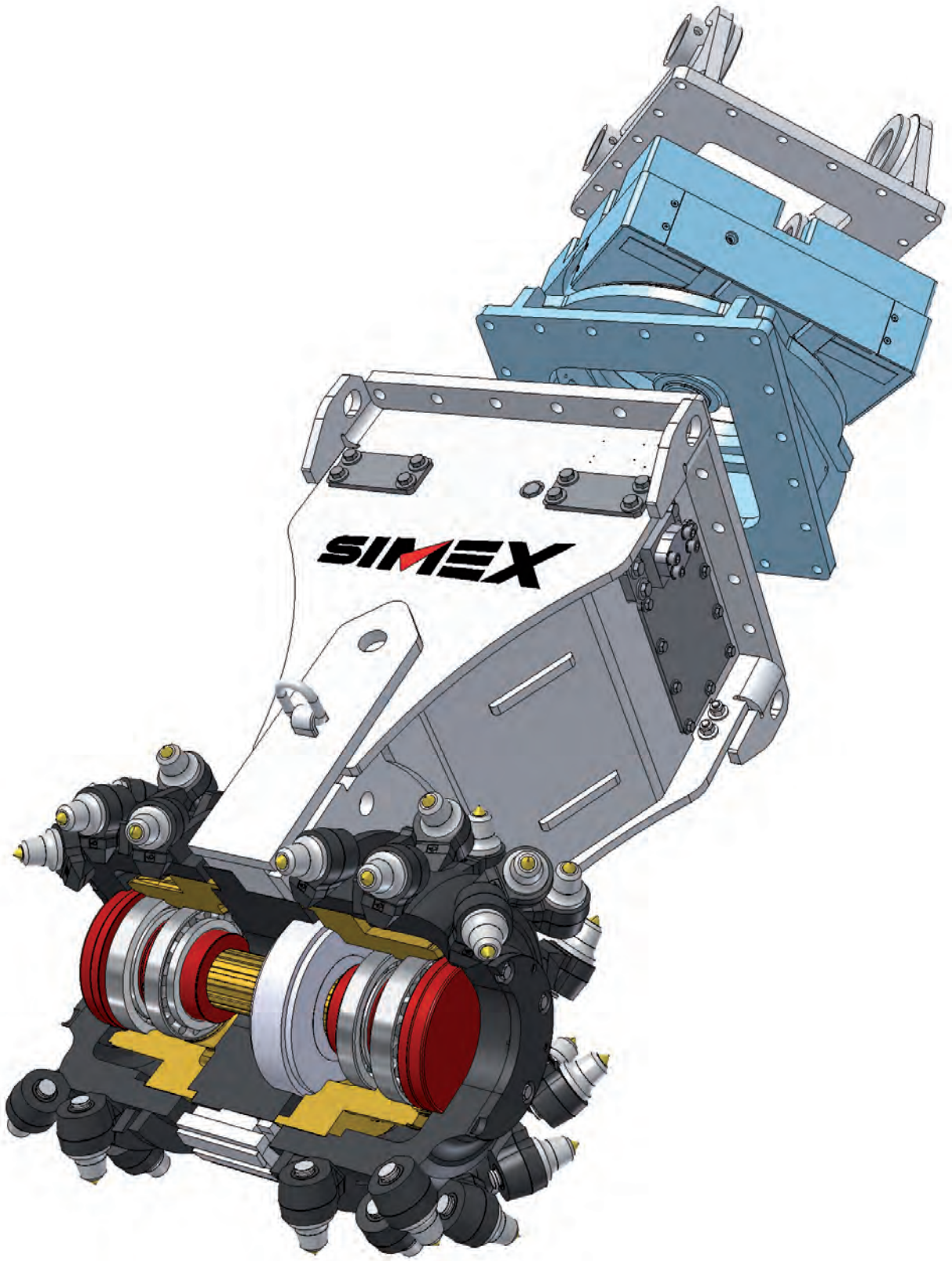
■ **Replaceable anti-wear plates.**

■ **Cutter head can be rotated 90°** thanks to square holes of coupling plate.

■ **Filter on feed line prevents impurities from entering the motor,** for example when hoses are being connected to the excavator.

■ **Gaskets fitted on drums seal against dust** also when attachment is submerged into the ground, even in muddy conditions.

■ **Shaft transmits motion only and bears no load** thanks to double support bearings for each drum.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Quarrying

Trenching

Wall profiling

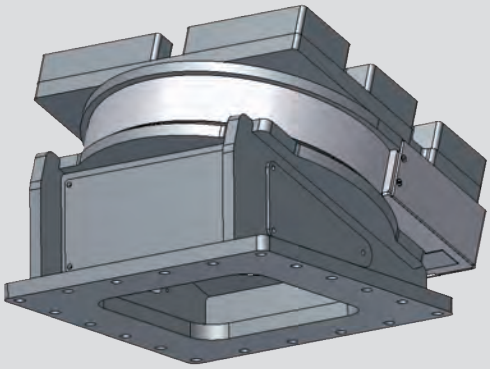
Stripping and reclamation

Tunneling

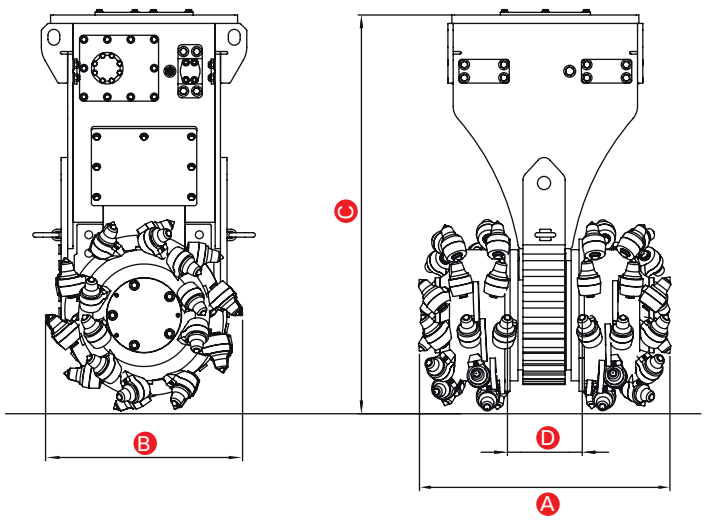
Underwater works

Cuts for rib installation

360° Hydraulic Rotation (optional)



- Hydraulic rotation allows operator to find the ideal working position.
- Increased productivity.
- Maximum precision.



Drums and teeth for any application.

Designed to achieve higher efficiency of the demanded application.

HP Drum (standard)

Thanks to special layout of teeth and reduced width, penetrates deep even into hard materials.

GP Drum (optional)

Larger width drum recommended for wall profiling and various types of jobs.

WP Drum (optional)

Special drum for finishing and profiling.

Multiple tooth geometries available for milling different materials.

Standard tooth for mixed materials

Tooth for milling very hard materials

Tooth for wood

TECHNICAL SPECIFICATIONS

	TF 200	TF 400	TF 600	TF 850	TF 1100	TF 2100	TF 2500	TF 3100	
Recommended excavator weight	2.5 - 7	6 - 12	9 - 16	14 - 22	20 - 34	28 - 45	40 - 55	50 - 70	ton
Standard drum width (HP) A	565	625	700	800	850	950	1000	1250	mm
Drum width (GP) - optional A	-	-	-	900	1000	1100	1150	1350	mm
Drum width (WP) - optional A	650	750	850	1000	1200	-	-	-	mm
Weight without bracket (1)	300	470	640	1140	1465	2410	2700	3650	kg
Hydraulic motor power	27 (37)	37 (50)	50 (68)	61 (83)	87 (118)	112 (152)	140 (190)	175 (238)	kW (hp)
Torque	2.5	4.6	6.9	10.6	17.5	22.7	31.7	42.5	kNm
Cutting force	13.5	20.3	27.6	35.2	53.4	64.3	83.7	114.5	kN
Max. pressure (2)	350	350	350	350	350	380	380	380	BAR
Required oil flow (3)	45 - 80	65 - 120	90 - 150	130 - 190	170 - 250	240 - 340	280 - 400	350 - 500	l/min
Drum diameter - HP B	380	450	500	595	660	750	750	750	mm
Height without bracket C	770	900	960	1250	1310	1575	1675	1770	mm
Drum distance D	110	130	130	150	160	175	250	300	mm
Tooth holder diameter	20	22	22	38/30	38/30	38/30	38/30	38/30	mm

1) User is responsible for ensuring that the equipment meets the excavator's specifications and weight requirements.
2) Torque and cutting force decrease with lowered operating pressure.
3) RPM and cutting speed decrease with lowered oil flow.

PLB
PHD

PLANERS FOR EXCAVATORS

PATENT SIMEX

For planing asphalt and cement in pre-set depths.

- Designed for **removing the entire layer of asphalt or cement** in preparation for trenching or for **milling deteriorated sections** for later resurfacing.

- Designed to mill fixed sections on **hard and compact surfaces** such as asphalt and cement.

- Simex PLB planers for excavator mounting allow the possibility to **reuse milled material for backfilling trenches.**

- They perform milling or cutting on any surface, whether **horizontal, vertical or sloped.**

PERFORMER PATENT SIMEX

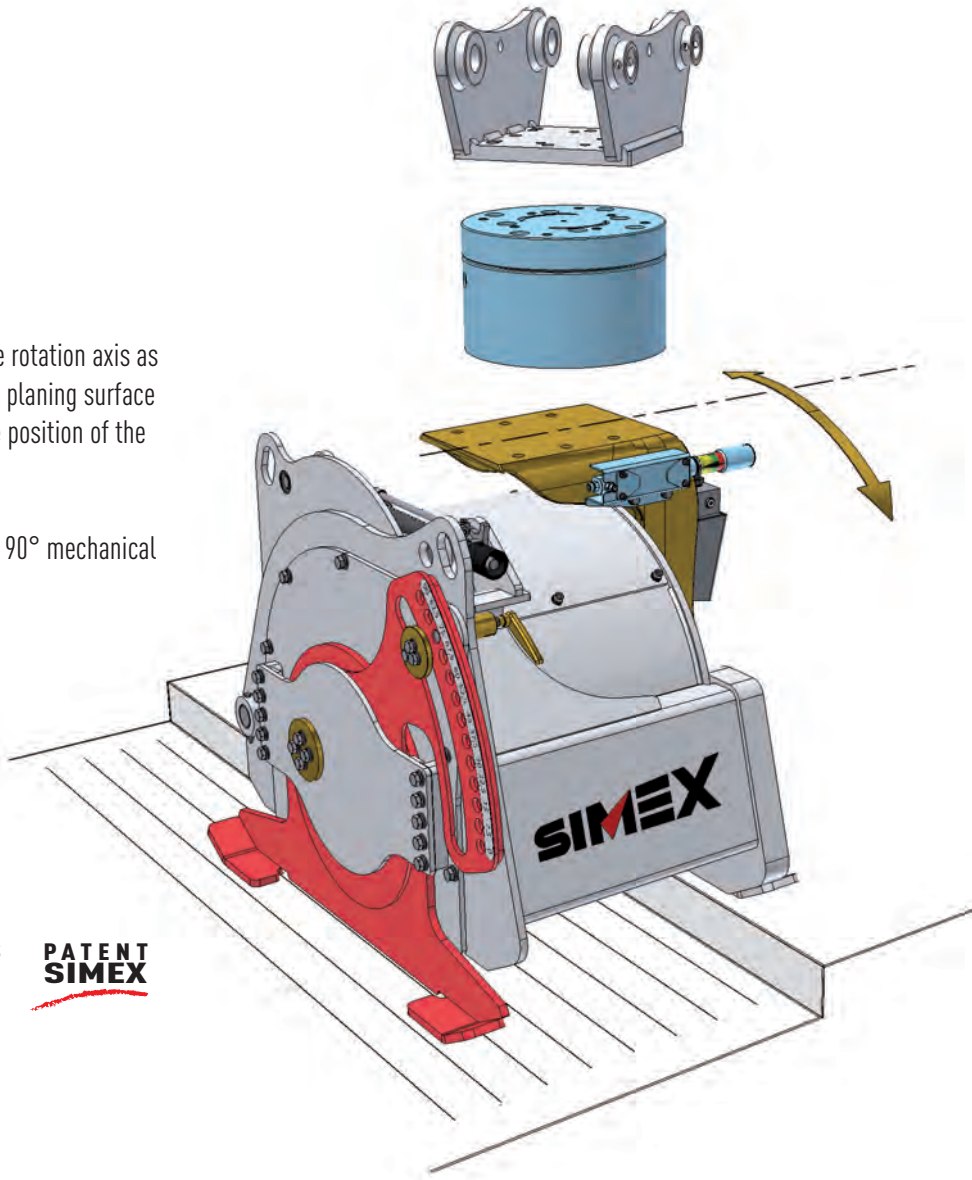
Performer, the performance optimizer.
Signals operator how to work with Simex attachments to maximize power and performance (optional).

TECHNICAL SPECIFICATIONS

	PLB 200	PLB 300	PLB 350	PLB 450	PHD 450	PLB 600	PHD 600	
Recommended excavator weight (1)	2 - 4	3 - 6	5 - 9	7 - 13	10 - 16	14 - 18	16 - 24	ton
Standard drum								
Width	200	300	350	450	450	600	600	mm
Depth	0 - 70	0 - 100	0 - 120	0 - 150	0 - 180	0 - 150	0 - 200	mm
Special drums on request								
Width	50 - 250	50 - 300	50 - 350	75 - 450	75 - 450	75 - 600	75 - 600	mm
Max. depth	125	130	150	200	220	170	250	mm
LH-RH independent depth adjustment	-	-	standard	-	standard	-	-	
Min. distance from curb	40 (20*)	50 (25*)	50 (27*)	60 (30*)	75 (40*)	65 (35*)	75 (40*)	mm
Swinging support rotation angle	120°	127°	118°	120°	102°	112°	105°	
Operating weight	185	390	530	710	900	985	1150	kg
Required oil flow	30 - 50	45 - 75	55 - 90	75 - 140	90 - 140	100 - 200	120 - 200	l/min
Required oil pressure (2)	250 - 180	300 - 180	300 - 180	300 - 180	300 - 180	300 - 180	300 - 180	BAR

(1) User is responsible for ensuring that the equipment meets the excavator's specifications and weight requirements.
(2) Pressure must be inversely proportional to the flow rate available and vice versa. Varies according to the hydraulic motor installed.
(*) On request.

PATENT SIMEX



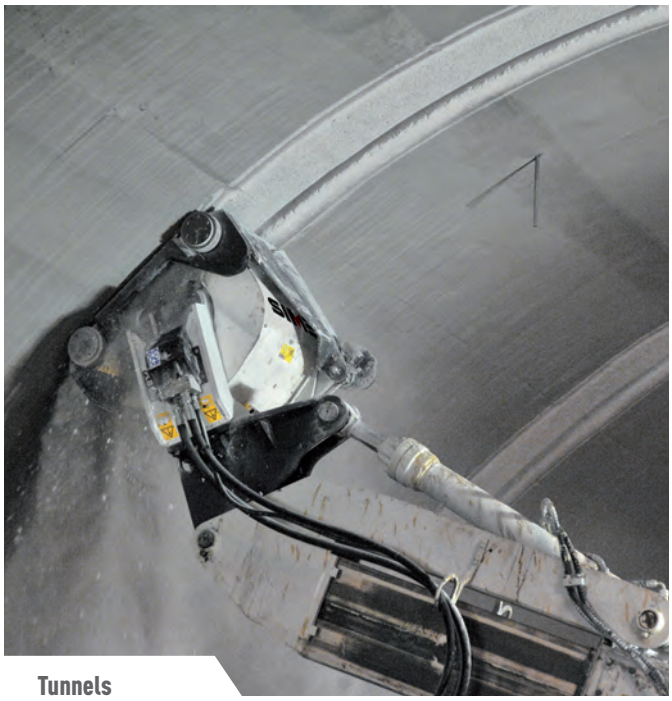
Constant planing depth
Thanks to the swinging support pivoted on the same rotation axis as the cutter drum, the attachment maintains a perfect planing surface in any condition, regardless of ground contour or the position of the attachment with respect to the prime mover.

Rotation Unit: planer quickly positions itself via 90° mechanical rotation with hydraulic locking.

Independent RH-LH depth adjustment allows the slide on the opposite side of the motor to be height-adjusted independently, resulting in perfect surfaces with side-by-side planing.

PATENT SIMEX

Walls



Tunnels

Asphalt

Canal walls and embankments

CBE

CRUSHER BUCKETS

PATENT SIMEX

For reducing the volume of aggregates.

- Designed to **reduce the volume of aggregates** directly on site.

- **Rotor system enables ideal performance in the presence of iron, rock, earth, deformable parts or wet or humid material.**
Excellent for crushing reinforced concrete and demolition waste.

- **Lightweight structure won't transmit vibrations to the prime mover or operator.**

- **Low noise output.**

- **Easy loading.**
Wide mouth, shaped as standard bucket.
Can operate with back or front loading.

Front loading

TECHNICAL SPECIFICATIONS

	CBE 10	CBE 20	CBE 30	CBE 40	CBE 50	
Recommended excavator weight(1)(2)	8 - 12	10 - 18	16 - 25	24 - 40	38 - 55	ton
Mouth width	1050	1250	1500	1710	2200	mm
Total width	1250	1485	1700	1960	2440	mm
Rotor width	720	735	915	960	1290	mm
Bucket capacity (SAE)	0,40	0,60	0,80	1,00	1,80	m^3
Number of teeth	5	5	6	7	10	n°
Max. cutting force	80	95	125	152	190	kN
Bucket weight empty (3)	880	1320	2170	2900	4640	kg
Required oil flow	80 - 160	100 - 190	150 - 250	200 - 350	300 - 550	l/min
Required oil pressure	350 - 230	350 - 230	350 - 230	350 - 230	350 - 230	BAR

(1)The maximum operating load permitted for the excavator, when added to the weight of the standard bucket, must match or exceed the weight of the crusher bucket at full load.
(2)User is responsible for ensuring that the equipment meets the excavator's specifications and weight requirements.
(3)Without mounting bracket

- **Exceptional cutting force enables crushing of any material** thanks to rotor system with teeth driven by hydraulic piston motors in direct drive.

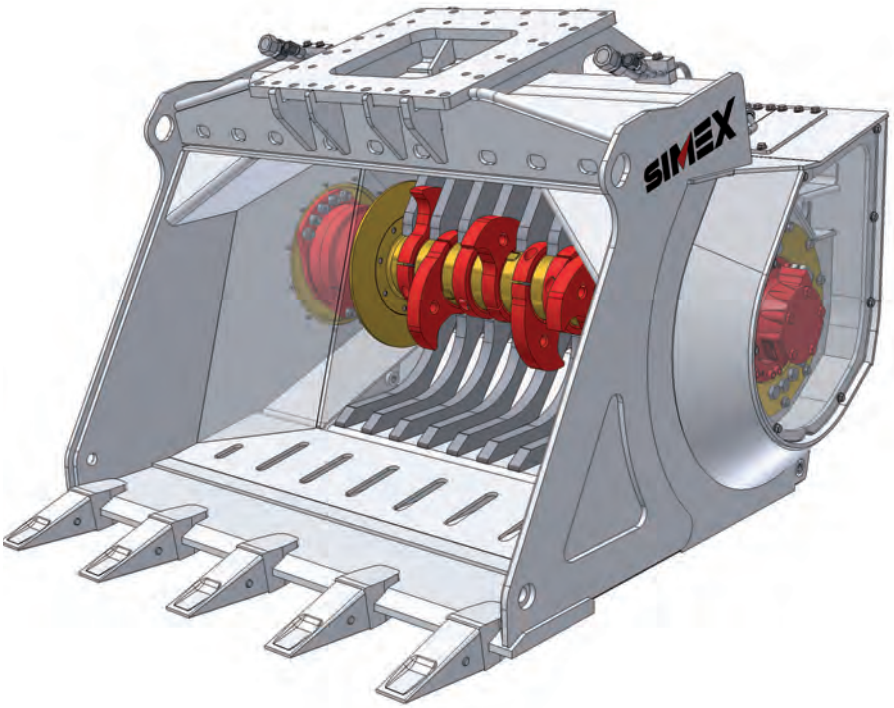
- **Operating speed and efficiency** thanks to drum design and wide mouth.

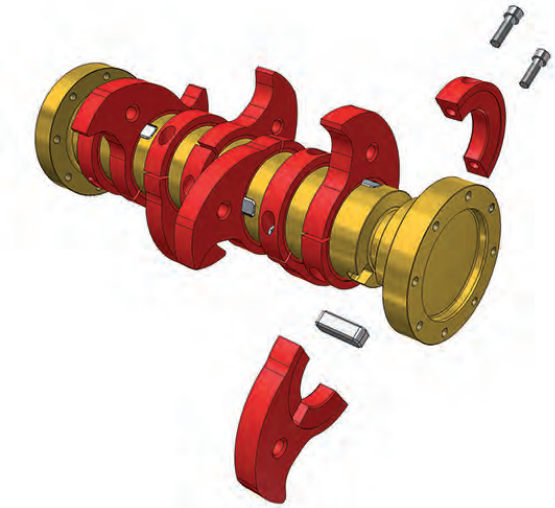
- **Down time on the site is eliminated** thanks to valve permitting continuous rotor rotation without operator intervention.

- **Increased protection and working life** thanks to teeth with large anti-wear surface.

- **Crushable materials:** bricks, reinforced concrete, natural aggregates, concrete, glass, tiles and asphalt slabs. Not affected by the presence of earth, wet or humid material, or iron rods.

- **Simple, quick teeth replacement.**



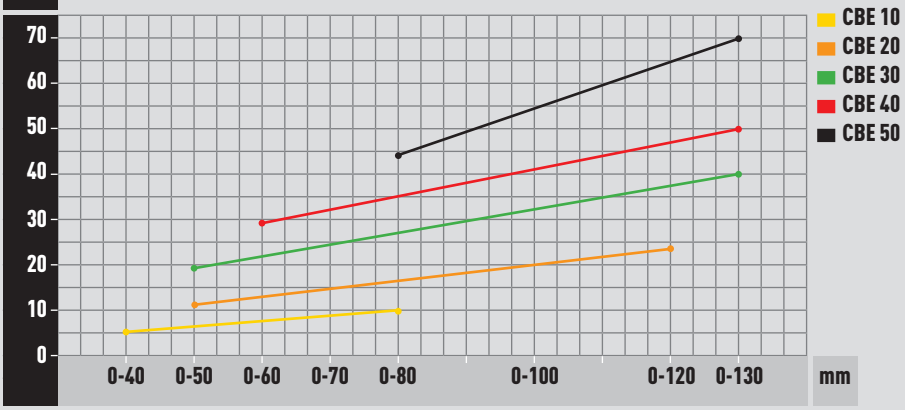


Size of crushed material

mm	CBE 10	CBE 20	CBE 30	CBE 40	CBE 50
0-40	■				
0-50	■	■	■		
0-60	○	■	■	■	
0-70	■	○	○	○	
0-80	■	■	■	■	○
0-100		■	■	■	■
0-120		■	■	■	■
0-130				■	■

○ Standard ■ On request

CBE production table (in optimum working conditions)



VSE

SCREENING BUCKETS

PATENT SIMEX

Screening bucket with adjustable output size.

- Designed for **separating different-sized materials** on the work site.

- **Big increase in productivity:** PATENT SIMEX
Drums are composed of elements with varying-sized disks, whose differentiated peripheral speed produces an intense whirling of the material to be screened.

Easy loading. Wide mouth, shaped as standard bucket.

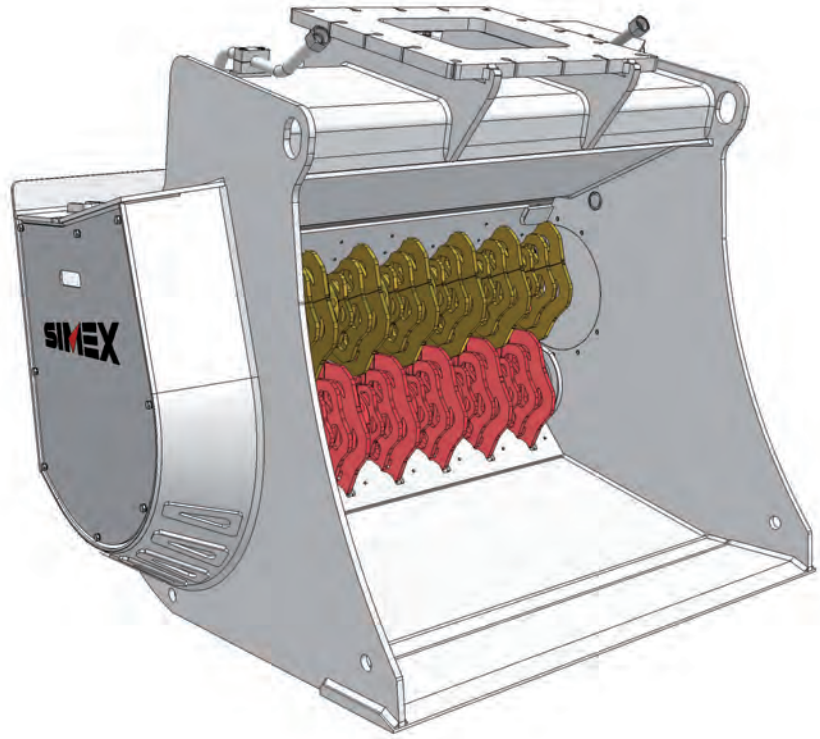
Extremely easy operation.

TECHNICAL SPECIFICATIONS

	VSE 20	VSE 30	VSE 40	
Recommended excavator weight (1)(2)	12 - 18	16 - 30	25 - 40	ton
Outlet width	1100	1260	1100	mm
Total width	1485	1650	1600	mm
Bucket capacity (SAE)	0,60	0,85	1,40	m^3
Screening area	0,80	0,95	1,20	m^2
Shaft travel	40	40	30	mm
Number screening shafts	2	2	3	n°
Operating weight (3)	1280	1790	2400	kg
Required oil flow	80 - 130	150 - 200	170 - 220	l/min
Required oil pressure	250 - 200	250 - 200	250 - 200	BAR

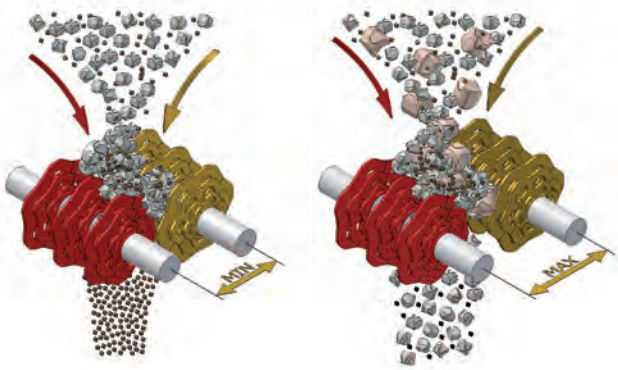
(1)The maximum operating load permitted for the excavator, when added to the weight of the standard bucket, must match or exceed the weight of the crusher bucket at full load.
(2)User is responsible for ensuring that the equipment meets the excavator's specifications and weight requirements.
(3) Without mounting bracket.

PATENT SIMEX



■ **Quick adjustment of output size.**

The Simex-patented mechanism allows the screening bucket drums to be distanced or closed by means of a hydraulic system. This feature makes it possible to vary the output size of the screened material in only seconds via an operator control directly in the cabin.

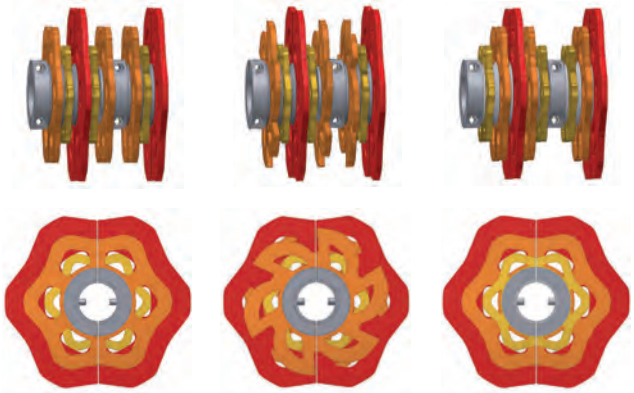


■ Also available in version with mechanical adjustment.

■ **Adjustment of output size from operator's seat.**

■ **Easily replaceable screening elements.**

Different screening element designs available for a a variety of materials.
Tool replacement is quick and does not require shaft disassembly.



PV

VIBRATING PLATE COMPACTORS

For a perfectly compacted surface.

■ Designed to compact any surface, Simex PV vibrating plate compactors are an excellent solution for achieving a permanently firm, even and well compacted bed.

■ **Extremely precise and versatile.**
Possibility to mount the rotation device allows compaction in any position and in the most difficult-to-reach spots.

■ **No routine maintenance necessary.**
The hydraulic oil provides for internal lubrication.

Hydraulic rotation

TECHNICAL SPECIFICATIONS

	PV 300	PV 450	PV 600	PV 700	PV 850	
Recommended excavator weight	1,5 - 4	4 - 10	6 - 12	9 - 22	20 - 40	ton
Plate dimensions	290x710	440x710	550x890	710x1160	860x1110	mm
Vibration frequencY	2100	2100	2100	2100	2100	n/min
Compaction force	15	27	34	68	93	kN
Weight without mounting bracket (1)	190	300	410	875	1040	kg
Oil pressure	160	160	160	160	160	BAR
Required oil flow	30	57	75	110	155	l/min

(1) User is responsible for ensuring that the equipment meets the excavator's specifications and weight requirements.

CT

VIBRATING WHEEL COMPACTORS

For compacting trench beds.

- Designed for **compacting trench beds,** Simex CT vibrating wheel compactors guarantee a permanently firm, even and well compacted bed and ensure maximum road safety.

- **Perfect insulation from prime mover** thanks to reverse-rotation, vibrating twin shaft positioned at center of the wheel; vertical forces are added up and horizontal forces are countered for increased operator comfort.

- Wheel width can be adjusted via bolted sectors that are easily changed on site.

- **Extremely precise and versatile.**
Possibility to mount the rotation device allows compaction in any position and in the most difficult-to-reach spots.

TECHNICAL SPECIFICATIONS

	CT 2.8 BOOM-MOUNTED	
Recommended excavator weight (1)(2)	5 - 12	ton
Standard wheel		
Width of bolted sectors	200-250-300-350-400	mm
Working depth	0 - 700	mm
Special wheels		
Wheel widths (3)	50-100-150	mm
Working depth	0 - 350	mm
Vibration frequency	30-40	Hz
Max. vertical force	42	kN
Operating weight (4)	530 - 585	kg
Required oil flow	40 - 50	l/min
Oil pressure	150 - 200	BAR

(1) The maximum operating load permitted for the excavator, when added to the weight of the standard bucket, must match or exceed the weight of the crusher bucket at full load.
(2) User is responsible for ensuring that the equipment meets the excavator's specifications and weight requirements.
(3) Widths different from those indicated are available on request.
(4) Without mounting bracket.

MP

CUTTER HEAD FOR PROFILING

Precision finishing.

- Mounted on excavator booms, the Simex MP cutter head for profiling guarantees precision finishing in applications such as: resurfacing tunnel roofs, restoring deteriorated surfaces, cement banks of canals, industrial flooring, etc.

- **Constant milling depth in any working condition** thanks to use of wheels or lateral slides.

- Excellent for materials such as asphalt, cement and rock, and for milling on horizontal, vertical or sloped surfaces.

- Ideal for wall profiling. Assures constant milling depth.

TECHNICAL SPECIFICATIONS

	MP 1000	
Recommended excavator weight (1)	22 - 40	ton
Milling width	1000	mm
Max. working depth	100	mm
Cutting force	32	kN
Operating weight (2)	2300	kg
Required oil flow	180 - 300	l/min
Oil pressure (3)	350 - 200	BAR

(1) User is responsible for ensuring that the equipment meets the excavator's specifications and weight requirements.
(2) Without mounting bracket.
(3) Pressure must be inversely proportional to the flow rate available and vice versa.