

smArt
Construction Machinery



smArt



i series



We present our new generation multifunctional construction machines to the service of our customers with zero fault and zero safety risk. Our machines may combine and execute the tasks of Excavator, Loader, Forklift. Thanks to SMART original boom design.



SMART series

MULTI FUNCTION

HIGH SPEED EXCAVATOR

NEW GENERATION MULTI FUNCTIONAL EXCAVATOR



New generation multi functional SMART excavators have been designed to eliminate the large crowd of machines in the construction yard. Just SMART excavator in place of an excavator, a loader, a compact loader, and a forklift.

Only one SMART, will be enough for your all needs



360°

MINIMUM ROTATION DIAMETER

IS - 2750mm

IS - 3000mm

110 - 3240mm

r- IS - 1488,87

IS - 1468,67

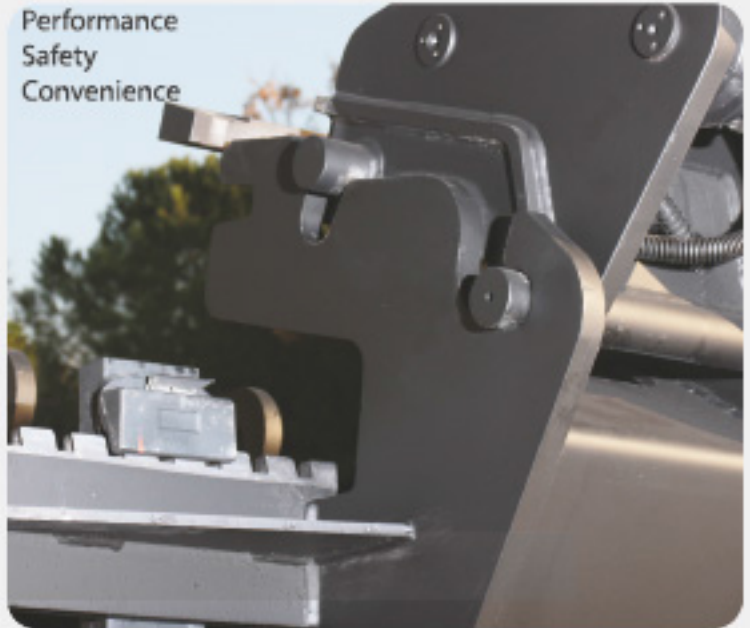
110 - 1868,55

**PERFECT VISUAL CAPABILITY
ALL OVER 360° RANGE**

Multi Functional Excavators



Lifting Control via the right joystick(boom cylinder)



QUICK ATTACHMENT CHANGE

HYDRAULIC QUICK COUPLER

Thanks to this quick coupler, the attachments (excavating bucket, loading bucket, forklift forks, hammer, all kind of hydraulic attachments, etc.) may be changed within a few seconds. Besides, it allows the usage of a broad range of hydraulic attachments, such as hammer, saw, drill, concrete mixer, etc. by means of its auxiliary hydraulic line.



ACCESSORY SERIES



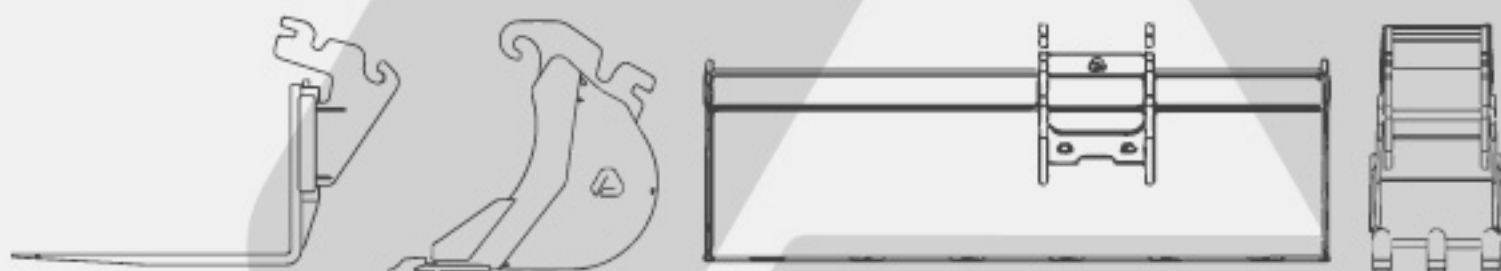
Digging Bucket

Loading Bucket

Multi Purpose 4x1 Bucket

Forklift Fork

Hydraulic Attachments



smart

10 High Speed
km/h

**MULTI FUNCTIONAL
SMART BOOM**

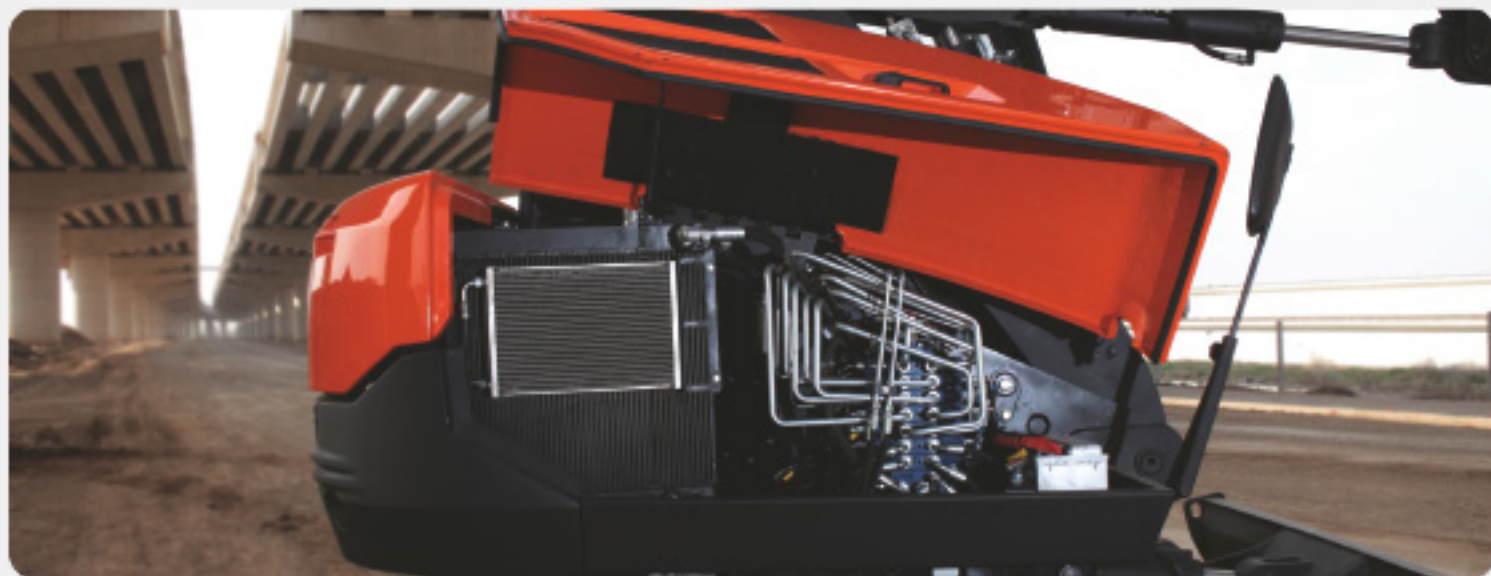
Compact

Stable

High Lifting Force



UNINTERRUPTED MOVEMENTS



By means of Flow Sharing and Load Sensing valve, there are no interruptions or stops during movements. BOOM could be opened or retracted even during rotation

PERFORMANCE

Only one SMART will be enough for all your works at the construction site. Compact Loader with a high speed of 10km/h. Excavator capable of making sensitive excavation thanks to its four pieces BOOM. Forklift capable of lifting 2 tons of weight. Backhoe Loader with 4 in 1 bucket. All kind of hydraulic attachments connected to the auxiliary hydraulic line.





OPERATOR COMFORT

The cabin has been designed by taking account the comfort of the operator; and inside, it accomodates standard equipments below :

- Digital Air Condition
- Loudspeakers
- Bluetooth Stereo Radio
- Panaromic windows
- Fully adjustable seat
- Front window openable
- Digital Operator Panel
- Refrigerator Unit cooled by Air Condition



UNIQUE DESIGN AND QUALITY

What we care of the most in designing SMART Excavator;

Operator Comfort: The largest cabin of its class

Safety: ROPS, FOPS approved operator cab

2 Different operating modes: Excavator and Loader

Easy Maintenance: Largest motor compartment of its class

Accessibility to all replaceable parts

The best quality materials have been used for SMART robustness

High strength St52 certified steel in all welded parts

Market leader YANMAR Engines are utilized in Compact Machines

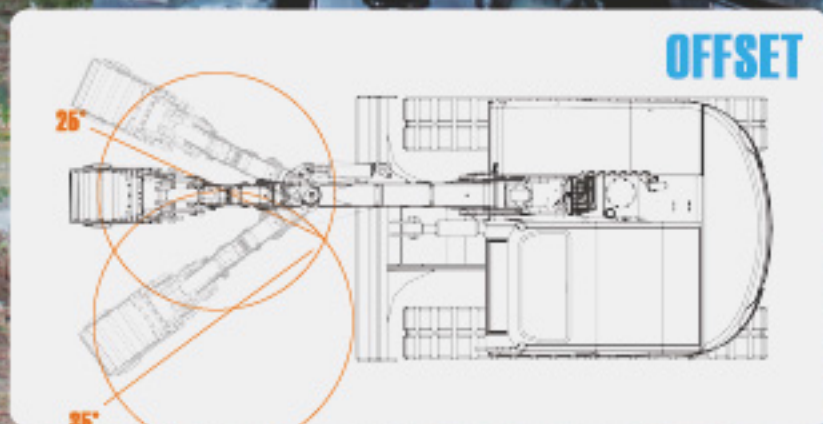
High quality hydraulic pumps and valves : REXROTH

Best driving and turret rotation motors : BONFIGLIOLI

smart
iş makinaları



smart



**“THE HIGHEST
THE FARTHEST
THE DEEPEST...”**



i6 - 6105,85 mm

i8 - 6584,85 mm

i10 - 7225 mm



i6 - 6088,88 mm

i8 - 6568,03 mm

i10 - 7208,18 mm

i6 - 3591,5 mm

i8 - 3794,04 mm

i10 - 4250,05 mm






TECHNICAL SPECIFICATIONS

	i6	i8	i10
Total weight	5900 kg	7200 kg	7800 kg

ENGINE

Intercooling, turbo charged motor

	TIER 3A TIER 4	TIER 5	TIER 5
Conformity	YANMAR	YANMAR	YANMAR
Brand	YANMAR	YANMAR	YANMAR
Type	4TNV98	4TNV98-CT	4TNV98-T
Diesel	4 cylinders	4 cylinders	4 cylinders
Horsepower	51,7kW 70hp	53,7kW 73hp	61,7kW 84hp
Motor RPM	2,500 rpm	2,500 rpm	2,500 rpm
Maximum torque	2410 Nm	2630 Nm	2810 Nm
Cylinder volume	3,319 cm ³	3,319 cm ³	4,400 cm ³
Cooling	Water	Water	Water
Air filter	Cyclonic, dry cartridge	Cyclonic, dry cartridge	Cyclonic, dry cartridge
Fuel consumption	4-6 liter/hour	4-6 liter/hour	6-8 liter/hour
Outdoor noise level	98 dB(A)	95 dB(A)	95 dB(A)

ELECTRICAL SYSTEM

Accus	12 V (110 A)	12 V (110 A)	12 V (110 A)
Voltage	12 V	12 V	12 V
Alternator	12 V (80 A)	12 V (80 A)	12 V (80 A)
Starter motor	12 V (2.3 kW)	12 V (2.3 kW)	12 V (2.3 kW)

UNDER CARRIAGE

Rubber tracks, width	400 mm	400 mm	450 mm
Height of the undercarriage	330 mm	330 mm	330 mm
Blade by one cylinder through a safety valve			
Width	2000 mm	2000 mm	2330 mm
Max height from the ground	312 mm	312 mm	400 mm

Closed system hydrostatic transmission

LOAD SENSING PUMP

MACHINE DIMENSIONS

	i6	i8	i10
Total length	2710mm	3140 mm	3388 mm
Total height	2720 mm	2870 mm	3010 mm
Cab height from the ground	2580 mm	2648 mm	2700 mm
Height of the rear hood	1575 mm	1667 mm	1780 mm
Width	2000 mm	2000 mm	2330 mm
Minimum working diameter	680 mm	680 mm	720 mm
Height of the middle gearbox from the ground	2750 mm	3000 mm	3240 mm

HYDRAULIC WALKING SYSTEM

1 double (tandem) Variable Displacement Pump; Automatic power regulation

Flow rate	2x90 L/min
Maximum Pressure	360 bar

Two stage driving motors with automatic brake

Foot pedal control during excavator mode

Control knob active during compact loader mode

	i6	i8	i10	
Tractive force	4100	5300	6600	daN
Driving speed Range I	5.0	5.0	5.0	km/h
Range II	10.0	10.0	10.0	km/h

ATTACHMENTS and TURRET SWING SYSTEM

	i6	i8	i10
Variable Displacement Pump	45 cm ³	45 cm ³	63 cm ³

ACTIVE CONTROL power control

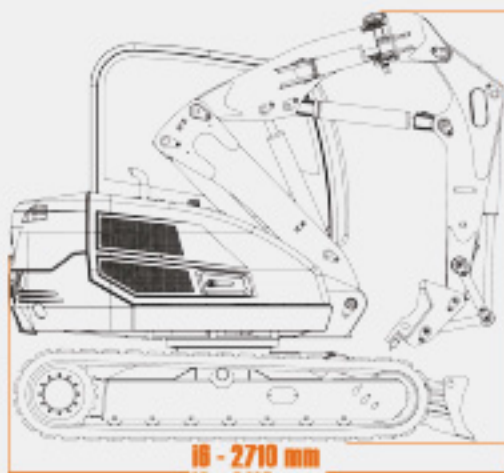
"Load Sensing – Flow Sharing" main control valve

Different functions simultaneously working

	i6	i8	i10
Maximum flow rate	90 L/dak	90 L/dak	126 L/dak
Maximum working pressure	280 bar	280 bar	300 bar

OTHER HYDRAULIC FUNCTIONS

Reversing the bucket movement through only one button.



i6 - 2720 mm
i8 - 2870 mm
i10 - 3010 mm

i6 - 2710 mm
i8 - 3110 mm
i10 - 3388 mm





ROTATING TURRET

Full rotation 360°

Rotation is accomplished by a hydraulic motor with automatic brake

Internal gearbox driven mechanism	i6	i8	i10
Rotation speed	10 d/d	10 d/d	10 d/d
Rotation torque	1350 daNm	1700 daNm	2130 daNm

CAPACITIES

Hydraulic oil tank	55L	65L	80L
Hydraulic circuit	95L	120L	145L
Fuel tank	65L	75L	90L
Cooling system	20L	20L	20L

BOOM STRUCTURE

SMART BOOM consists of 4 parts: The Boom itself, Intermediate boom, Offset lever and the Digging Stick Right and left offsets enabling the digging outside of the tracks

	i6	i8	i10
Left offset	35°	35°	35°
Right offset	25°	25°	25°

HYDRAULIC ATTACHMENT CHANGER (QUICK COUPLER)

Automatic mechanical locking and hydraulic locking

Hydraulic unlocking of the latch

PERFORMANCE

	i6	i8	i10
Performance in excavator mode			
Maximum penetration force	2600 daN	2700 daN	3400 daN
Maximum excavation force	4200 daN	4850 daN	5978 daN
Performance in compact loader mode			
Excavating force	2900 daN	3650 daN	4250 daN

BUCKET type (i series pack)

	Width	Capacity
Excavating Bucket	350mm	85L
	450mm	110L
	600mm	165L
	750mm	200L
	900mm	255L
Loading Bucket	2000mm	470L
	2000mm	470L

CABIN

- FOPS approved
- ROPS approved
- Extremely comfortable panoramic cabin
- Openable front window
- Adjustable seat according to operator height and weight
- Water heating system compliant with ISO 1026
- Fuel, heat and hydraulic oil temperature monitoring on the operator control panel
- Digital display
- 2x front worklamps (LED)
- 1x rear worklamp (LED)
- Digital air conditioning
- Bluetooth Stereo radio

HYDRAULIC LINE FOR ACCESSORIES

Variable flow rate between 20 and 140l/min (standard 90 l/min).

Pressure may be adjusted between 100 and 280 bar (standard 180 bar).

Controls are accomplished through a proportional button integrated to the right joystick.

OPERATING MODES

EXCAVATOR MODE

This mode enables the machine to function as an excavator:

Turret rotation and excavator lever control is accomplished through the left joystick.

The bucket and the intermediate boom, or the boom control is accomplished through the right joystick.

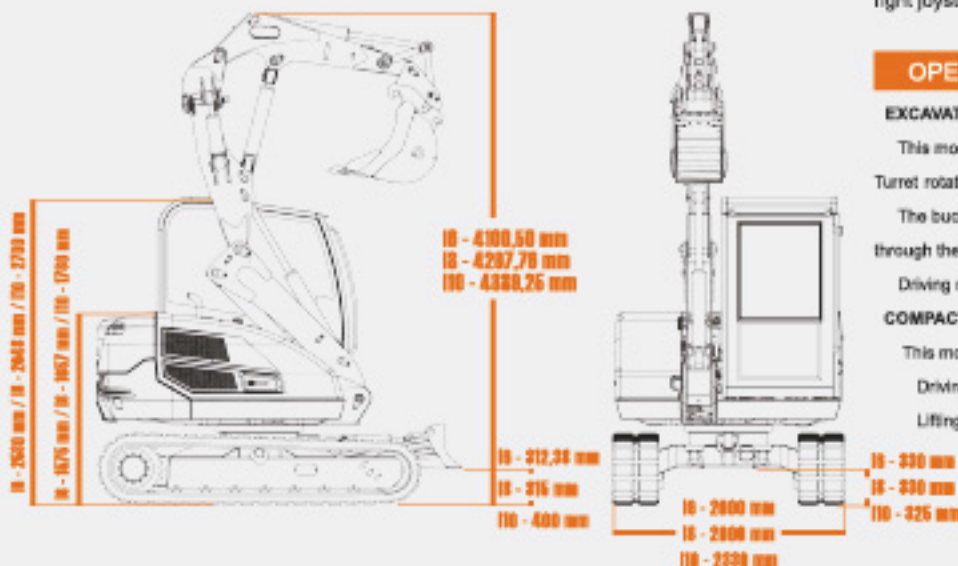
Driving movement control is accomplished through foot pedals.

COMPACT LOADER MODE

This mode enables the machine to function as compact loader with tracks:

Driving and turret rotation are accomplished through left joystick.

Lifting (intermediate boom) and bucket are controlled through right joystick.





ATTACHMENT CATALOGUE



BUCKET

Attachment Specs

Width	Capacity
350 mm	85 L
450 mm	110 L
600 mm	165 L
750 mm	200 L
900 mm	255 L

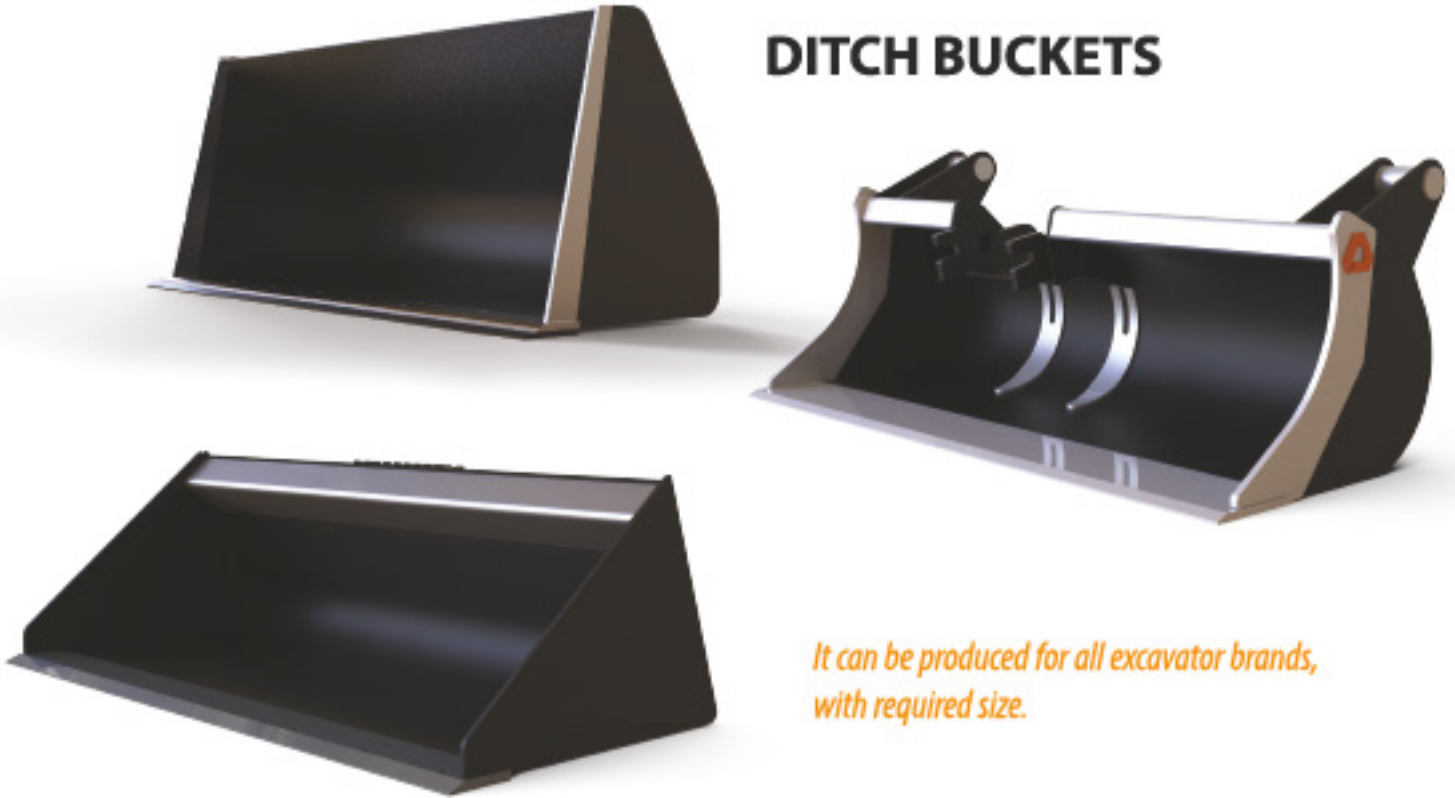
*It can be produced for all excavator brands,
with required size.*

DITCH BUCKETS



*It can be produced for all excavator brands,
with required size.*

DITCH BUCKETS



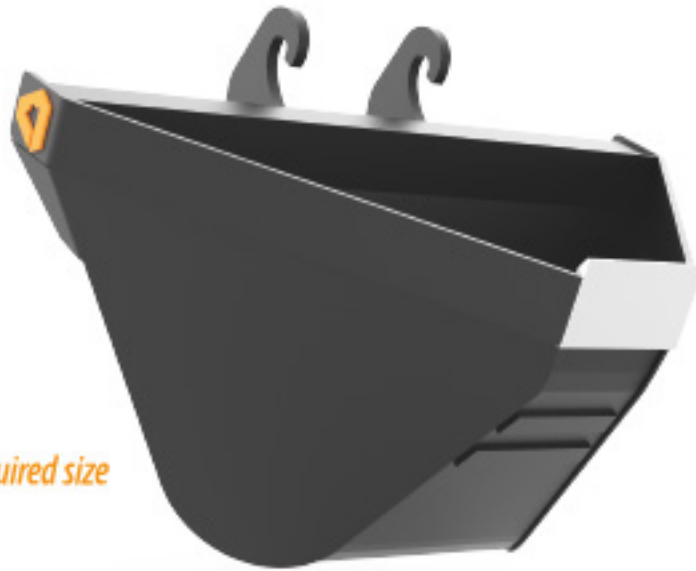
*It can be produced for all excavator brands,
with required size.*

GRADING BUCKETS

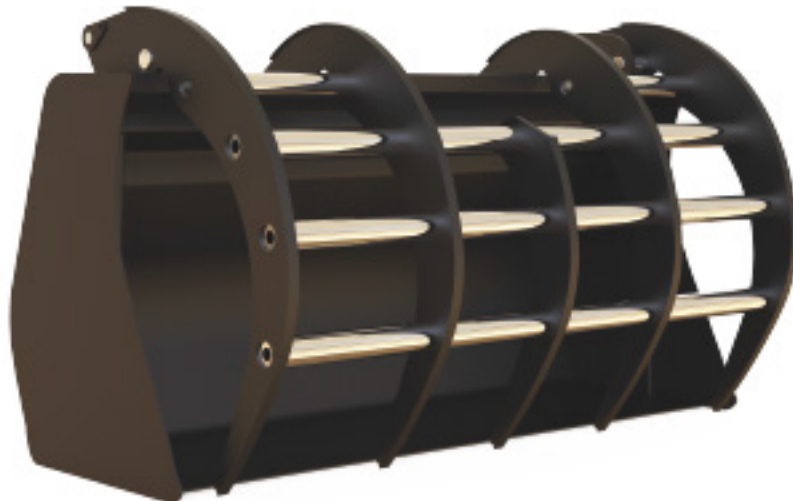


Can be manufactured as required size

SPECIAL DESIGN BUCKETS



Can be manufactured as required size



Can be manufactured as required size

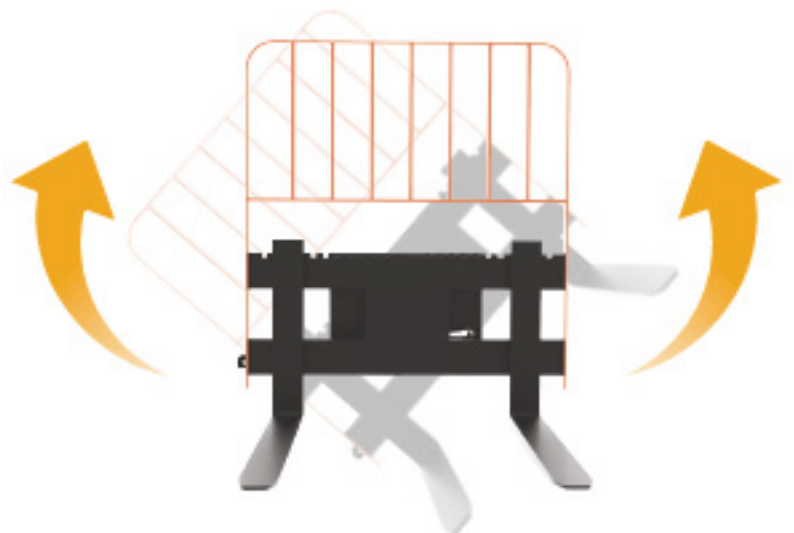
FORKLIFT ATTACHMENT

Attachment Specs

Fork Width **1300 - 2000 mm**
Load Capacity 3000 - 6000 kg



SMART FORK 180°



Can be adopted to any forklift brand. Attachment can be adjusted 90° each left and right. Forks can be manufactured as required.



BARRIER MOVER

Attachment Specs

Cutting Width **1600 mm**

Ability to operate both sides

This attachment used for cleaning wild grass under road barriers.



SNOWPLOW ATTACHMENT



Attachment Specs

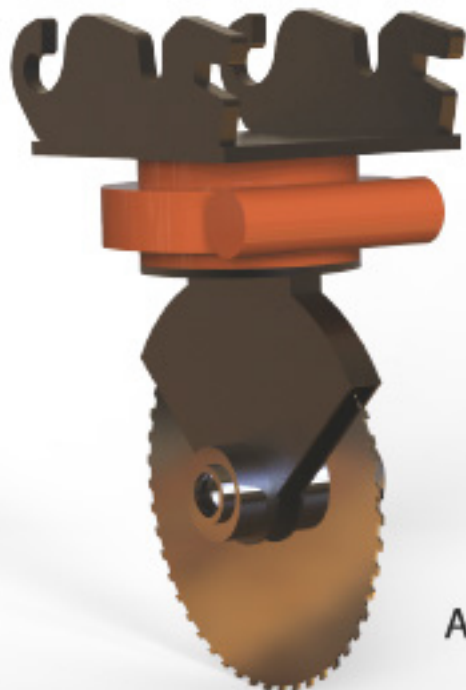
Blade Width **1300 - 2500 mm**

Operating Pressure **180 bar**

Total Weight **285 - 355 kg**

Turning Angle **+/-30°**

Can be manufactured as required size



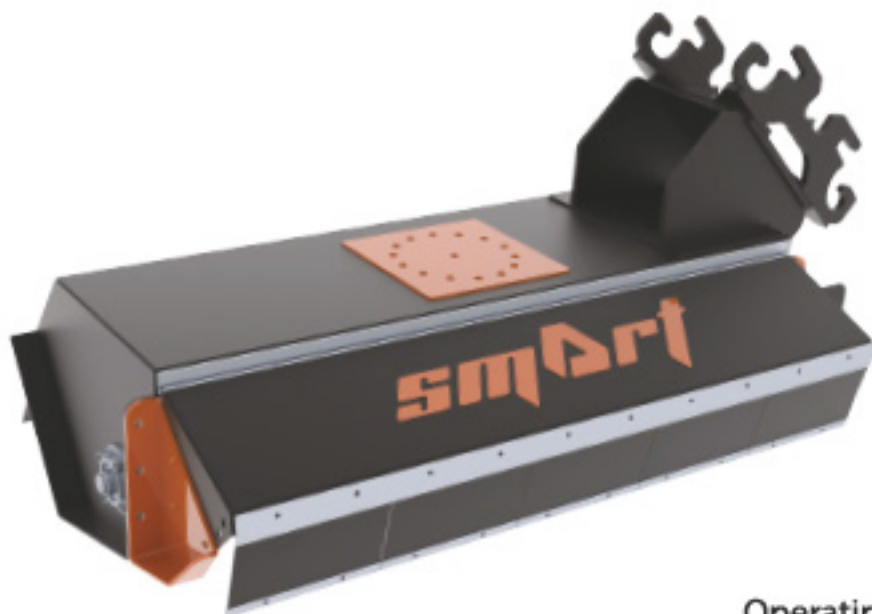
TREE TRIMMING SAW

Attachment Specs

Operating Pressure
Hydraulic Flow
Turning

230 bar
80 L/dak/min
360°

Ability to lay on left and right



MOWER ATTACHMENT

Attachment Specs

Operating Length 1000 - 2000 mm

Adjustable Cutting Height
Special Design Blades
Double Side Operation
Adjustable Front Cap Height

*It can be produced for all excavator brands,
with required size.*



POLYP - GRABS



Special design for required expanding size and loading capacity



DRILL ATTACHMENT

Attachment Specs

Drilling Diameter **300 mm - 900 mm**

Attachments for all kind of excavator and mini loaders

BORDER ATTACHMENT



Attachment Specs

Max Opening	1400 mm
Max Closing	500 mm
Lifting Capacity	400 kg
Total Weight	70 kg
Turning Ability	360°

It can be produced for all excavator brands, with required size.



ROAD SWEEPER ATTACHMENT



Attachment Specs

Sweeping Width	1555 mm
Sweeper Diameter	600 mm
Height	723 mm
Length	1776 mm
Weight	450 kg
Maximum Flow	160 L/min
Operating Pressure	160 bar



ROTOVATOR



Attachment Specs

Operating Width	1300 mm
Operating Depth	25-150 mm
Weight	400 kg
Hydraulic Flow	40-80 L/min
Operating Pressure	140-230 bar



HEAVY DUTY TREE TRIMMER



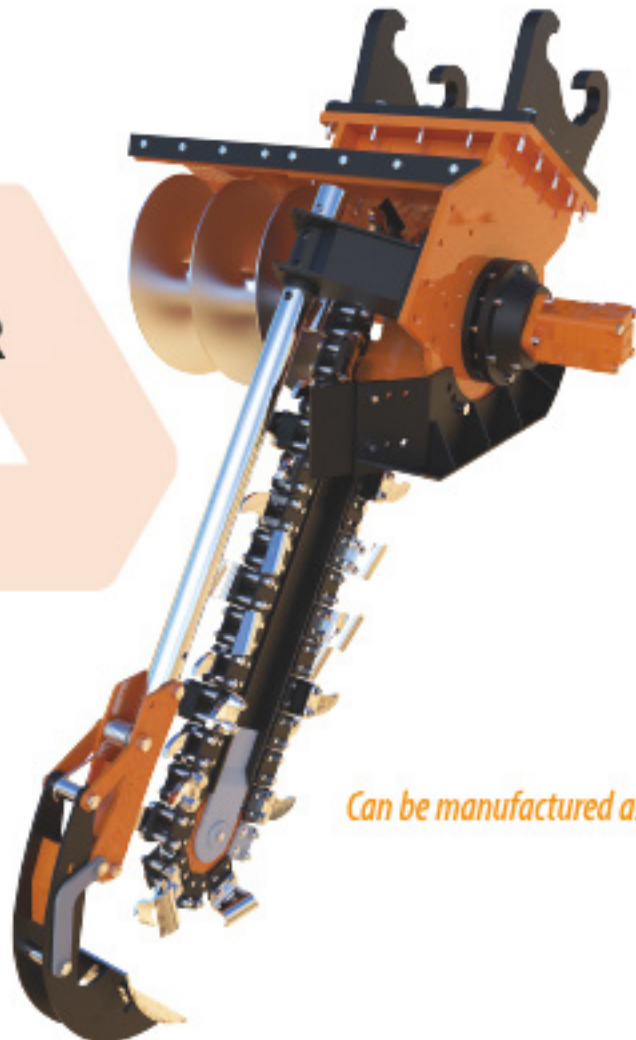
Can be manufactured as required size



ROOT SHREDDER

Can be manufactured as required size

TRENCHER



Can be manufactured as required size



TILT ROTATOR

∞ Rotation
±40° tilt

ampArt
Construction Machinery

ROTAVATOR

Earth Hoe Attachment



Can be manufactured as required size



TRIMMER



SMART TRAILER



This trailer can be produced to carry any kind of machine and attachment.

NOTES:





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