



44° 41' 13" N  
11° 20' 17" E

FOR TRADITION  
ONE STEP AHEAD

EXCAVATORS

[WWW.ORSIGROUP.IT](http://WWW.ORSIGROUP.IT)



# HEADQUARTER

MASCARINO DI CASTELLO D'ARGILE (BO) ITALY





# OUR DISTRIBUTION WORLD WIDE



OVER  
**40**  
**YEARS**  
OF EXPERIENCE

OVER  
**530**  
**DEALERS**  
WORLDWIDE

MORE THAN  
**129.000**  
**MACHINES**  
SOLD WORLDWIDE

# CERTIFICATIONS



CERTIFICATO

ISO 9001:2015

ORSI GROUP S.p.A.

Il presente certificato attesta che il Sistema di Gestione per la Qualità di ORSI GROUP S.p.A. è conforme ai requisiti della Norma ISO 9001:2015.

*[Signature]*

Il presente certificato è valido per i prodotti e i servizi di ORSI GROUP S.p.A. e per i processi di produzione e di distribuzione.

ORSI GROUP S.p.A.  
Sede Legale:  
Sede Operativa: Sede di Direzione



9001/01/2015

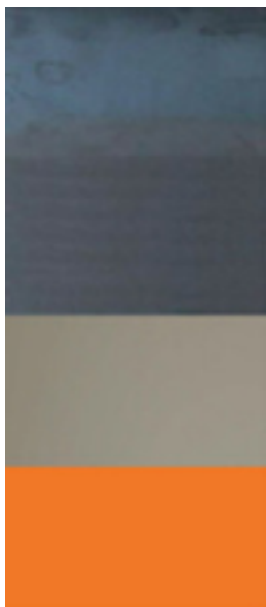




# ANTICORROSIVE TREATMENT

## ANTICORROSIVE POWDER TREATMENT

- Shot Blasting SA Ø 2,5
- Primer application in zinc phosphate epoxy powder thickness 60-80 µm
- EXTRA polyurethane finishing powder (UV-resistant) thickness 60-80 µm polymerization at 180° for 20'
- Final dry thickness 120-160
- Orange colour RAL 2011
- Corrosivity class c5-i following DIN55633 and DIN EN ISO 12944-6 norms
- Salt spray resistance 2000h



RAW SHEET

GRITTED SHEET

SHEET COVERED WITH  
POLYURETHANE ENAMEL

SURFACE COVERED WITH  
ORANGE RAL 2011

## ANTICORROSIVE LIQUID TREATMENT FOR MECHANICAL AND HYDRAULIC COMPONENTS

### HIGH STRENGTH CYCLE

- Shot Blasting sa Ø 2,5
- Epoxy bi-component primer application in zinc CT90
- Expoprimer application CT113 grey 7035
- EXTRA bi-component polyurethane enamel application (UV-resistant)
- Final dry thickness 350-400 µm

### STANDARD CYCLE

- Shot Blasting sa Ø 2,5
- Expoprimer application CT113 grey 7035
- EXTRA bi-component polyurethane enamel application (UV-resistant)
- Final dry thickness 180-200 µm

**“WHY AN EXCELLENT  
PAINTING IS IMPORTANT”  
BECAUSE IT KEEPS THE PRICE  
OF THE MACHINE ON THE  
SECOND-HAND MARKET.**

**N.B. These cycles are applied on all our equipment.**











## WHY WE USE HARDOX?

Hardox® 450

The most popular abrasion-resistant steel with excellent structural properties.

Hardox® 450 is an abrasion-resistant steel with a nominal hardness of 450 HBW. Hardox® 450 combines good bendability and weldability with an option for guaranteed impact toughness (Hardox® 450 Tuf).

The products can be used in many different components and structures that are subject to wear. Hardox® 450, with an extra 50 Brinell hardness over our 400 grade, provides better dent and abrasion resistance as well as longer wear life, so you can achieve even greater savings.



## WHY WE USE STRENX?

Superior properties

Strenx® steel has extremely consistent properties, ensuring precision and efficiency in the workshop.

If you think all steel is basically the same, Strenx® performance steel will change your thinking. Strong and reliable from surface to core, Strenx® steel features exceptional surface quality as well as impressive thickness and flatness tolerances verified by the Strenx® guarantees. The steel's properties - yield and tensile strength, bending performance, impact toughness - are carefully tested to ensure reliability and consistency in every delivery.



# TECHNICAL INFORMATION



## ORSI V3.1

Compact valve group proportioned to the oil flows necessary to the machineries. Just projected by ORSI's technical dept. to satisfy the needs of machineries attached to excavators. Anticavitation valve, max valve and flow divider; exhaust drainage collector and only 2 hoses for connection to the excavator (ingoing oil and direct return to the tank).



## HYDRAULIC GEAR MOTOR

Hydraulic gear motor in cast iron. Designed to have excellent mechanical characteristics with a rigid and compact structure that guarantees excellent reliability and high volumetric performance even at high working pressures. Max 250 BAR.



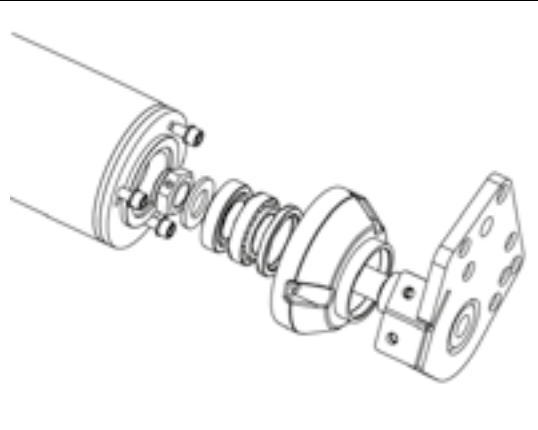
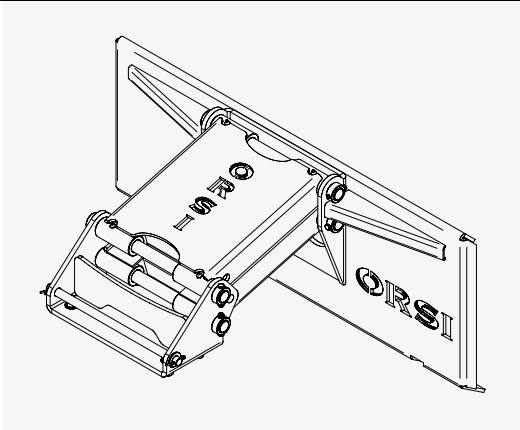
## REXROTH HYDRAULIC PISTON ENGINE

Constant displacement hydraulic motors with rotating assembly with axial conical pistons and inclined cylinder block. Very high quality, very high performance. Variable displacement hydraulic motors with rotating assembly with axial conical pistons and inclined cylinder block. By adjusting the inclined cylinder block, it is possible to modify the torque and the displacement continuously.



## ASPORTABLE OSCILLATING PLATE

Autolevelling system specially bolted to the chassis with the same saddle attack drill. Possibility to remove it quickly for a greater accuracy and better operation in the profiling of the hedges. Also equipped with a locking pin in case of occasional use in the vertical profiles.



## OSCILLATING HITCH WITH HYDRAULIC SIDE SHIFTA

Universal hitch plate for miniskids with integrated floating system, for a better adherence of the shredder to the working plane. Fixed to the shredder by means of a bolted stirrup for maximum flexibility over time.

## PROFESSIONAL ROLLER

Professional support roller Ø 140 mm with 4 opposed tapered roller bearings. Interchangeable central body.

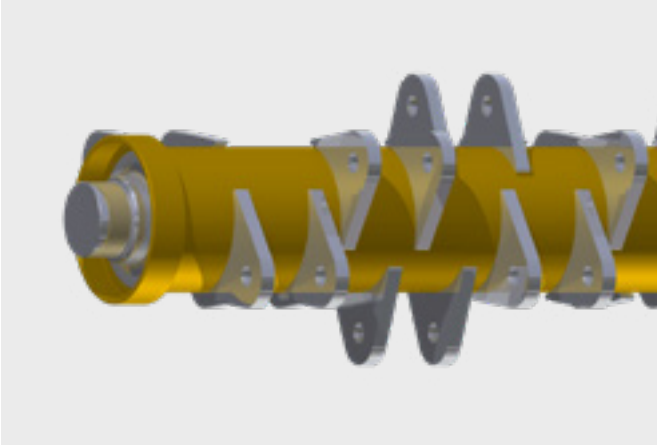
## MOUNTING BRACKETS

Attachment bracket for excavator supplied on request (without pins).

## ADAPTERS

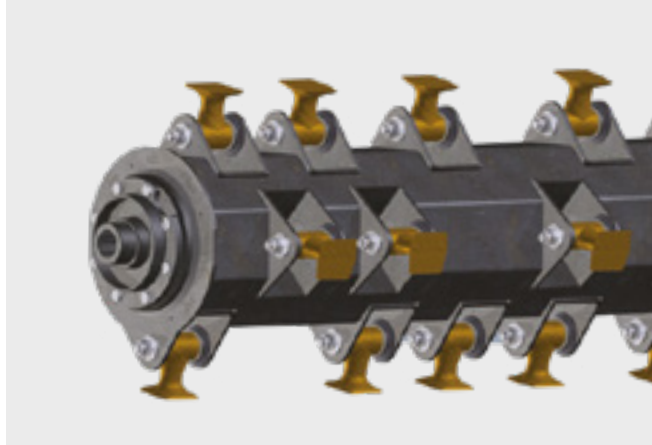


# ROTOR



## HELICOCUT

Rotor with helical cutting system design with 6 rows of tools, designed to reduce the efforts and give more homogeneity to the cut and therefore better performance. Possibility to change 4 or 5 types of tools on the same rotor to always have the more suited tool for the type of work to deal with. More efficiently with less effort.



## SEMIFOREST WITH ROTARY HAMMERS

Rotor with retractable rotating hammers specially designed to make more efficient the normal flail heads in the hard work of deforest. Designed by ORSI to allow small excavators, spiders and all those machines able to climb the huge slopes of the high mountains, to clean small spaces. Mountable as standard or as a spare part at a later time, it becomes the ideal friend when the going gets tough and the spaces are narrow and cramped.



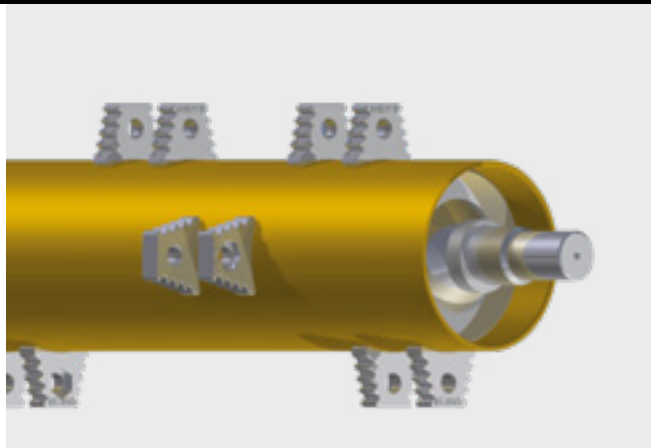
## FOREST ROTOR WITH ROTATING HAMMERS

Professional forest rotor for deforestation. Suitable for aggressive work of plants abatement up to 12 cm in diameter. It is also ideal for cleaning the floor. Using the tool in both working directions will be created a clean surface and free from dangerous protrusion.



## FOREST ROTOR WITH FIXED TEETH

Professional FOREST rotor for big deforestation. Born with helicoidal system and two spirals, it uses interchangeable tools in tungsten. Maximum aggression and excellent performance make this rotor the most powerful tool for heavier works.



## “VENTILATOR” ROTOR

Electronically balanced. Forest type tool holders moulded in boron steel



## ROTOR WITH “FLANGES TOOL LIMITER” (FTL) TECHNOLOGY

Excellent performance and speed with less power requested.

The working depth of the tools is limited by steel flanges, reducing the requested power and still guaranteeing high performances.





1,2 ÷ 2,5 ton.



max Ø 2,5 cm

A mulcher for mini excavators, equipped with a hammers or knives rotor.




The smallest mulcher in our construction range, designed for cleaning bushes and shrubs.

The mulcher can be equipped with either a standard 8 cc motor or with an 11 cc or 16 cc one, and it is intended to be used on 1.2 to 2.5 t excavators.

## BASIC 80

### HYDRAULIC CUTTING HEAD



	RPM		
8 c.c.	2.500 - 3.000	20÷25 lt/min	220 max BAR
11 c.c.	2.500 - 3.000	28÷33 lt/min	220 max BAR
16 c.c.	2.500 - 3.000	40÷48 lt/min	220 max BAR

#### STRENGTH POINTS



REMOVABLE OSCILLATING PLATE



ORSI V3.1





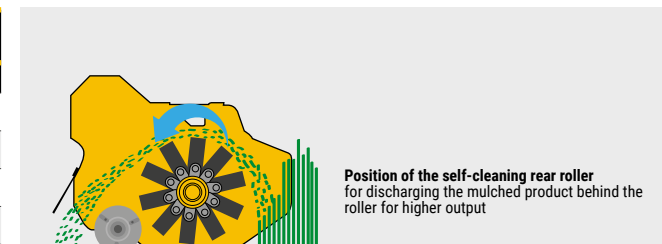
DOUBLE-ROW SELF-ALIGNING  
BALL BEARINGS



# BASIC 80

## PROFESSIONAL SERIES

BASIC 80		A	B
TECHNICAL SPECIFICATIONS			
Working width		80 cm	80 cm
Overall width		95 cm	95 cm
Machine weight*		75÷100 kg	75÷100 kg
Direct transmission		✓	✓
tools	 Knives A max Ø 1,5cm	*variable weight based on the layout N° 40	-
	 Hammers B max Ø 2,5 cm	-	N° 20



BASIC 80		A	B
MACHINE			
Rear roller Ø 100 cm adjustable in height		✓	✓
Replaceable skids		✓	✓
Removable oscillating plate		✓	✓
Standard mounting brackets (no pins)		•	•
Adapters		•	•
TRANSMISSION			
VARISEAL engine with external drainage		✓	✓
Rotor with possibility of use 2 types of tools		✓	✓
Double-row self-aligning ball bearings		✓	✓
Unidirectional rotor rotation		✓	✓
HYDRAULIC SYSTEM			
One way valve on return		✓	✓
ORSI V3 1-1/2: valve of max. pressure + anticavitation valve + flux regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 12 BAR		✓	✓







2,5 ÷ 7 ton.



max Ø 5 cm




A mulcher that can be equipped with either a 16 cc motor or with a 22 cc or 27 cc one, and it is intended to be used on excavators from 2.5 to 7 t. This mulcher is designed for cleaning bushes and shrubs up to 5 cm in size, and it has a wide range of tools.

The "BELT" version comes with a pulley transmission instead of a direct motor.



## INDUSTRIAL

### HYDRAULIC CUTTING HEAD

	RPM		
16 c.c.	2.500 - 3.000	40÷48 lt/min	220 max BAR
22 c.c.	2.500 - 3.000	55÷65 lt/min	220 max BAR
27 c.c.	2.500 - 3.000	68÷81 lt/min	220 max BAR

#### STRENGTH POINTS



REMOVABLE OSCILLATING PLATE



**REAR ROLLER PROF Ø 140 mm**  
with 4 bearings with tapered rollers, mud scraper  
and interchangeable central part.








ORSI V3.1



**DOUBLE-ROW SELF-ALIGNING  
BALL BEARINGS**

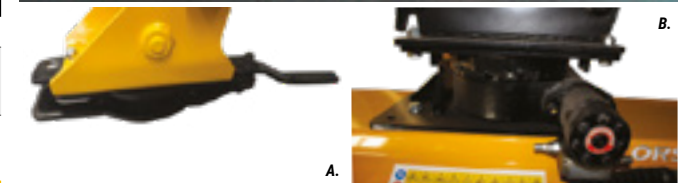


INDUSTRIAL			80	105	125	105 BELT	125 BELT
TECHNICAL SPECIFICATIONS							
Working width			80 cm	105 cm	125 cm	105 cm	125 cm
Overall width total			105 cm	130 cm	150 cm	125 cm	145 cm
Machine weight*			250÷300 kg	270÷320 kg	300÷350 kg	270÷320 kg	300÷350 kg
Direct transmission			✓	✓	✓	-	-
Belts transmission			-	-	-	2 cinghie	2 cinghie
tools		<b>D</b> max Ø 3 cm	N° 32	N° 40	N° 48	N° 40	N° 48
		<b>O</b> max Ø 3 cm	N° 32	N° 40	N° 48	N° 40	N° 48
		<b>E</b> max Ø 4 cm	N° 16	N° 20	N° 24	N° 20	N° 24
		<b>F</b> max Ø 4 cm	N° 16	N° 20	N° 24	N° 20	N° 24
		<b>H</b> max Ø 5 cm	N° 16	N° 20	N° 24	N° 20	N° 24

INDUSTRIAL			80	105	125	105 BELT	125 BELT
MACHINE							
Rear roller Ø 140 mm with 4 tapered roller bearings and interchangeable central body thickness 6 mm, adjustable in height			✓	✓	✓	✓	✓
Replaceable skids			✓	✓	✓	✓	✓
Blade cutting system			✓	✓	✓	✓	✓
Front and rear protection rubber			✓	✓	✓	✓	✓
Removable oscillating plate			✓	✓	✓	✓	✓
Mechanical rotation 180° (A.)			•	•	•	•	•
Hydraulic rotation 180° (n°2 hydraulic hoses) (B.)			•	•	•	•	•
Standard mounting brackets (no pins)			•	•	•	•	•
Adapters			•	•	•	•	•
Selflevelling "universal" skid coupler			•	•	•	•	•
Coupler for loaders/ telescopic lifters/ backhoes			•	•	•	•	•
TRANSMISSION							
VARISEAL engine with external drainage			✓	✓	✓	✓	✓
"Helicocut" rotor			✓	✓	✓	✓	✓
Double-row self-aligning ball bearings			✓	✓	✓	✓	✓
Unidirectional rotor rotation			✓	✓	✓	✓	✓
HYDRAULIC SYSTEM							
One way valve on return			✓	✓	✓	✓	✓
ORSI V3.1-1/2: valve of max. pressure + anticavitation valve + flux regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 12 BAR with engine 16-22 cc.			✓	✓	✓	✓	✓
ORSI V3.1-3/4: valve of max. pressure + anticavitation valve + flux regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 12 BAR with engine 27 cc.			✓	✓	✓	✓	✓

# INDUSTRIAL

## PROFESSIONAL SERIES










5 ÷ 12 ton.



max Ø 8/10 cm

A HARDOX machine that can be equipped with a 22 cc, 27 cc or 38 cc motor, and it is intended to be used on excavators from 5 to 12 t.

Designed for cleaning bushes, shrubs and wood up to 10 cm in size, with a wide range of tools and also the possibility to equip a semi-forestry rotor.

	RPM		
22 c.c.	2.500 - 3.000	55÷65 lt/min	250 max BAR
27 c.c.	2.500 - 3.000	68÷81 lt/min	250 max BAR
38 c.c.	2.500 - 3.000	95÷115 lt/min	250 max BAR

# **PROFESSIONAL** HYDRAULIC CUTTING HEAD



## STRENGTH POINTS



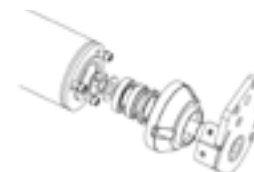
REMOVABLE OSCILLATING PLATE



INTERNAL DOUBLE FRAME  
+ STATIC KNIVES IN HARDOX



HELICOIDAL ROTOR "HELICOCUT"







REAR ROLLER PROF Ø 140 mm  
with 4 bearings with tapered rollers, mud scraper  
and interchangeable central part.



ORSI V3.1



DOUBLE-ROW SELF-ALIGNING  
BALL BEARINGS

PROFESSIONAL	105	125	150	105	125	125	125	180
	 C G B M			 P Q		 V	 T	

TECHNICAL SPECIFICATIONS								
Working width	105 cm	125 cm	150 cm	105 cm	125 cm	125 cm	125 cm	180 cm
Overall width total	135 cm	155 cm	180 cm	135 cm	155 cm	155 cm	155 cm	210 cm
Machine weight*	380÷430 kg	420÷490 kg	480÷530 kg	380÷430 kg	420÷490 kg	420÷490 kg	420÷490 kg	540÷590 kg
Direct transmission	✓	✓	✓	✓	✓	✓	✓	✓
tools	C max Ø 3 cm	N° 32	N° 48	N° 72	-	-	-	-
	G max Ø 4 cm	N° 16	N° 24	N° 36	-	-	-	-
	B max Ø 4 cm	N° 16	N° 24	N° 36	-	-	-	-
	M max Ø 6 cm	N° 16	N° 24	N° 36	-	-	-	-
	P max Ø 5 cm	-	-	-	N° 32	N° 40	-	-
	Q max Ø 5 cm	-	-	-	N° 32+16	N° 40+20	-	-
	V max Ø 8 cm	-	-	-	-	-	N° 24	-
	T max Ø 8/10 cm	-	-	-	-	-	N° 20	N° 32

PROFESSIONAL	105	125	150	180
MACHINE				
Steel frame with internal counter-frame (double frame)	✓	✓	✓	✓
Static knife in Hardox and blade cutting system	✓	✓	✓	✓
Rear roller Ø 140 mm with 4 tapered roller bearings and interchangeable central body thickness 6 mm, adjustable in height	✓	✓	✓	✓
Replaceable skids	✓	✓	✓	✓
Front and rear protection rubber	✓	✓	✓	✓
Removable oscillating plate	✓	✓	✓	✓
Mechanical rotation 180° (A.)	•	•	•	•
Hydraulic rotation 180° (n°2 hydraulic hoses) (B.)	•	•	•	•
Standard mounting brackets (no pins)	•	•	•	•
Adapters	•	•	•	•
Selflevelling "universal" skid coupler	•	•	•	•
CCoupler for loaders/ telescopic lifters/ backhoes	•	•	•	•
Hydraulic openable bonnet with machine already set up	•	•	•	•
TRANSMISSION				
VARISEAL engine with external drainage	✓	✓	✓	✓
"Helicocut" rotor	✓	✓	✓	✓
Double-row self-aligning ball bearings	✓	✓	✓	✓
Unidirectional rotor rotation	✓	✓	✓	✓
HYDRAULIC SYSTEM				
One way valve on return	✓	✓	✓	✓
ORSI V3.1-3/4: valve of max. pressure + anticavitation valve + flux regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 12 BAR	✓	✓	✓	✓

# PROFESSIONAL

## PROFESSIONAL SERIES



C G B M  
MULTI-KNIFE ROTOR  
A: Ø 115 x 14.5 mm



P Q  
ROTOR WITH Y KNIVES  
AND/OR 3-KNIVES  
A: Ø 127 x 14.5 mm



V  
FLANGED ROTOR WITH HAMMERS  
DOUBLE EDGE  
A: Ø 115 x 10 mm



T  
SEMI-FOREST ROTOR WITH  
RETRACTABLE HAMMERS  
A: Ø 235 x 5 mm



\*variable weight based on the layout








8 ÷ 15 ton.



max Ø 8/10 cm

A HARDOX machine that can be equipped with either a 22 cc or with a 27 cc or 38 cc motor, and it is intended to be used on excavators from 5 to 12 t.

Designed for cleaning bushes, shrubs and wood up to 10 cm in size, with a wide range of tools and also the possibility to equip a semi-forestry rotor. This version comes with a pulley transmission for a greater strength of the rotor during the work.

	RPM		
22 c.c.	2.500 - 3.000	55÷65 lt/min	250 max BAR
27 c.c.	2.500 - 3.000	68÷81 lt/min	250 max BAR
38 c.c.	2.500 - 3.000	95÷115 lt/min	250 max BAR

## PROFESSIONAL *BELT*

HYDRAULIC CUTTING HEAD



### STRENGTH POINTS



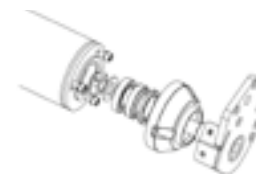
REMOVABLE OSCILLATING PLATE



INTERNAL DOUBLE FRAME  
+ STATIC KNIVES IN HARDOX



HELICOIDAL ROTOR "HELICOCUT"




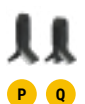


REAR ROLLER PROF Ø 140 mm  
with 4 bearings with tapered rollers, mud scraper  
and interchangeable central part.



ORSI V3.1



DOUBLE-ROW SELF-ALIGNING  
BALL BEARINGS

PROFESSIONAL <i>BELT</i>	105	125	150	105	125	125	125	180
	 C G B M			 P Q		 V	 T	

TECHNICAL SPECIFICATIONS								
Working width	105 cm	125 cm	150 cm	105 cm	125 cm	125 cm	125 cm	180 cm
Overall width total	135 cm	145 cm	170 cm	135 cm	145 cm	135 cm	145 cm	200 cm
Machine weight*	390÷440 kg	430÷500 kg	490÷540 kg	390÷440 kg	430÷500 kg	490÷540 kg	430÷500 kg	550÷600 kg
Belts transmission	3 belts	3 belts	3 belts	3 belts	3 belts	3 belts	3 belts	3 belts
tools	C max Ø 3 cm	N° 32	N° 48	N° 72	-	-	-	-
	G max Ø 4 cm	N° 16	N° 24	N° 36	-	-	-	-
	B max Ø 4 cm	N° 16	N° 24	N° 36	-	-	-	-
	M max Ø 6 cm	N° 16	N° 24	N° 36	-	-	-	-
	P max Ø 5 cm	-	-	-	N° 32	N° 40	-	-
	Q max Ø 5 cm	-	-	-	N° 32+16	N° 40+20	-	-
	V max Ø 8 cm	-	-	-	-	-	N° 24	-
	T max Ø 8/10 cm	-	-	-	-	-	N° 20	N° 32

PROFESSIONAL <i>BELT</i>	105	125	150	180
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MACHINE				
Steel frame with internal counter-frame (double frame)	✓	✓	✓	✓
Static knife in Hardox and blade cutting system	✓	✓	✓	✓
Rear roller Ø 140 mm with 4 tapered roller bearings and interchangeable central body thickness 6 mm, adjustable in height	✓	✓	✓	✓
Replaceable skids	✓	✓	✓	✓
Front and rear protection rubber	✓	✓	✓	✓
Removable oscillating plate	✓	✓	✓	✓
Mechanical rotation 180° (A.)	•	•	•	•
Hydraulic rotation 180° (n°2 hydraulic hoses) (B.)	•	•	•	•
Standard mounting brackets (no pins)	•	•	•	•
Adapters	•	•	•	•
Selflevelling "universal" skid coupler	•	•	•	•
CCoupler for loaders/ telescopic lifters/ backhoes	•	•	•	•
Hydraulic openable bonnet with machine already set up	•	•	•	•

TRANSMISSION				
VARISEAL engine with external drainage	✓	✓	✓	✓
"Helicocut" rotor	✓	✓	✓	✓
Trasmissione a cinghie	✓	✓	✓	✓
Double-row self-aligning ball bearings	✓	✓	✓	✓
Unidirectional rotor rotation	✓	✓	✓	✓

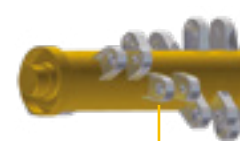
HYDRAULIC SYSTEM				
One way valve on return	✓	✓	✓	✓
ORSI V3.1-3/4: valve of max. pressure + anticavitation valve + flux regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 12 BAR	✓	✓	✓	✓

# PROFESSIONAL *BELT*

## PROFESSIONAL SERIES



C G B M  
**MULTI-KNIFE ROTOR**  
A: Ø 115 x 14.5 mm



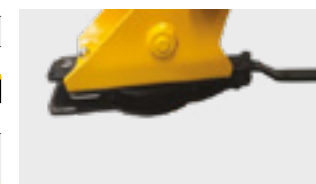
P Q  
**ROTOR WITH Y KNIVES  
AND/OR 3-KNIVES**  
A: Ø 127 x 14.5 mm



V  
**FLANGED ROTOR WITH HAMMERS  
DOUBLE EDGE**  
A: Ø 115 x 10 mm



T  
**SEMI-FOREST ROTOR WITH  
RETRACTABLE HAMMERS**  
A: Ø 235 x 5 mm










8 ÷ 15 ton.



max Ø 10 cm

A HARDOX machine equipped with either a 35 cc or a 44 cc axial piston motor, and it is intended to be used on excavators from 8 to 15 t.

Designed for cleaning bushes, shrubs and wood up to 10 cm in size, with a wide range of tools and also the possibility to equip a semi-forestry rotor.

	RPM		
35 c.c.	2.500 - 3.000	85÷100 lt/min	350 max BAR
44 c.c.	2.500 - 3.000	110÷120 lt/min	350 max BAR

# PROFESSIONAL *PISTON*

HYDRAULIC CUTTING HEAD



## STRENGTH POINTS



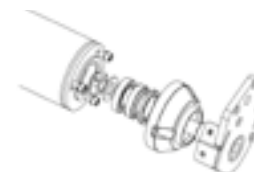
REMOVABLE OSCILLATING PLATE



INTERNAL DOUBLE FRAME  
+ STATIC KNIVES IN HARDOX



HELICOIDAL ROTOR "HELICOCUT"




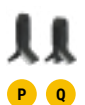


REAR ROLLER PROF Ø 140 mm  
with 4 bearings with tapered rollers, mud scraper  
and interchangeable central part.



ORSI V3.1



DOUBLE-ROW SELF-ALIGNING  
BALL BEARINGS

PROFESSIONAL <i>PISTON</i>	105	125	150	105	125	125	125	180
								

TECHNICAL SPECIFICATIONS								
Working width	105 cm	125 cm	150 cm	105 cm	125 cm	125 cm	125 cm	180 cm
Overall width total	125 cm	145 cm	170 cm	125 cm	145 cm	145 cm	145 cm	200 cm
Machine weight*	390÷440 kg	430÷500 kg	490÷540 kg	390÷440 kg	430÷500 kg	430÷500 kg	430÷500 kg	550÷600 kg
Belts transmission	1 belt	1 belt	1 belt	1 belt	1 belt	1 belt	1 belt	1 belt
tools	<b>C</b> max Ø 3 cm	N° 32	N° 48	N° 72	-	-	-	-
	<b>G</b> max Ø 4 cm	N° 16	N° 24	N° 36	-	-	-	-
	<b>B</b> max Ø 4 cm	N° 16	N° 24	N° 36	-	-	-	-
	<b>M</b> max Ø 6 cm	N° 16	N° 24	N° 36	-	-	-	-
	<b>P</b> max Ø 5 cm	-	-	-	N° 32	N° 40	-	-
	<b>Q</b> max Ø 5 cm	-	-	-	N° 32+16	N° 40+20	-	-
	<b>V</b> max Ø 8 cm	-	-	-	-	-	N° 24	-
	<b>T</b> max Ø 8/10 cm	-	-	-	-	-	N° 20	N° 32

PROFESSIONAL <i>PISTON</i>	105	125	150	180
----------------------------	-----	-----	-----	-----

MACHINE				
Steel frame with internal counter-frame (double frame)	✓	✓	✓	✓
Static knife in Hardox and blade cutting system	✓	✓	✓	✓
Rear roller Ø 140 mm with 4 tapered roller bearings and interchangeable central body thickness 6 mm, adjustable in height	✓	✓	✓	✓
Replaceable skids	✓	✓	✓	✓
Front and rear protection rubber	✓	✓	✓	✓
Removable oscillating plate	✓	✓	✓	✓
Mechanical rotation 180° (A.)	•	•	•	•
Hydraulic rotation 180° (n°2 hydraulic hoses) (B.)	•	•	•	•
Standard mounting brackets (no pins)	•	•	•	•
Adapters	•	•	•	•
Selflevelling "universal" skid coupler	•	•	•	•
Coupler for loaders/ telescopic lifters/ backhoes	•	•	•	•
Hydraulic openable bonnet with machine already set up	•	•	•	•

TRANSMISSION				
Unidirectional engine at axial pistons with external drainage	✓	✓	✓	✓
"Helicocut" rotor	✓	✓	✓	✓
Transmission with toothed belt in kevlar on toothed pulleys	✓	✓	✓	✓
Double-row self-aligning ball bearings	✓	✓	✓	✓
Unidirectional rotor rotation	✓	✓	✓	✓

HYDRAULIC SYSTEM				
One way valve on return	✓	✓	✓	✓
ORSI V3.1-3/4 which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR	✓	✓	✓	✓

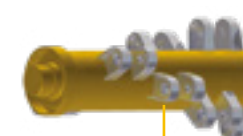
✓ STANDARD EQUIPMENT | • OPTIONAL EQUIPMENT | - NOT AVAILABLE

# PROFESSIONAL *PISTON*

## PROFESSIONAL SERIES



**C G B M**  
MULTI-KNIFE ROTOR  
A: Ø 115 x 14.5 mm



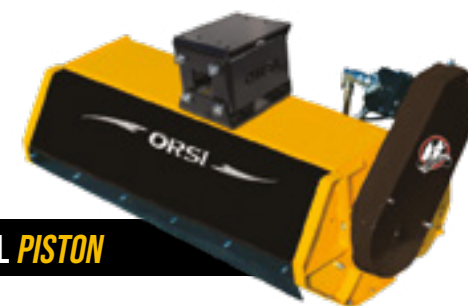
**P Q**  
ROTOR WITH Y KNIVES  
AND/OR 3-KNIVES  
A: Ø 127 x 14.5 mm



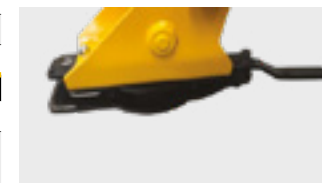
**V**  
FLANGED ROTOR WITH HAMMERS  
DOUBLE EDGE  
A: Ø 115 x 10 mm



**T**  
SEMI-FOREST ROTOR WITH  
RETRACTABLE HAMMERS  
A: Ø 235 x 5 mm



PROFESSIONAL *PISTON*



A.



B.

\*variable weight based on the layout





10 ÷ 20 ton.



max Ø 10 cm

A HARDOX machine with axial piston motor that can be equipped with either a 35 cc or 44 cc motor, and it is intended to be used on excavators from 10 to 20 t.

Designed for cleaning bushes, shrubs and wood up to 10 cm in size, with a wide range of tools and also the possibility to equip a semi-forestry rotor.

## TP HARDOX PISTON

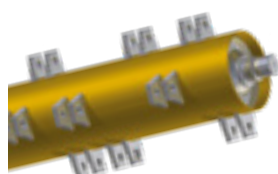
### HYDRAULIC CUTTING HEAD



#### STRENGTH POINTS



**INTERNAL FRAME +DOUBLE  
COUNTER KNIVES IN HARDOX**






**"VENTILATOR" ROTOR Ø 194x10 mm**  
electronically balanced. Forest type tool holders  
moulded in boron steel








**ORSI V3.1**



**DOUBLE-ROW SELF-ALIGNING  
BALL BEARINGS**

		RPM		
	PISTON			
L	35 c.c.	2.150 - 2.600	85÷95 lt/min	350 max BAR
	44 c.c.	2.150 - 2.700	105÷115 lt/min	350 max BAR
C G B M P Q V T	35 c.c.	2.600 - 3.000	91÷105 lt/min	350 max BAR
	44 c.c.	2.600 - 3.000	115÷120 lt/min	350 max BAR

NEW TP HARDOX PISTON	125	125	125	125	125 FORREST
					
	C G B M	P Q	V	L	T

#### TECHNICAL SPECIFICATIONS

Working width	125 cm	125 cm	125 cm	125 cm	125 cm
Overall width total	155 cm	155 cm	155 cm	155 cm	155 cm
Machine weight*	470÷540 kg	430÷480 kg	470÷540 kg	490÷550 kg	470÷540 kg
Belts transmission	1 toothed belt	1 toothed belt	1 toothed belt	1 toothed belt	1 toothed belt
tools	C max Ø 3 cm	N° 48	-	-	-
	G max Ø 4 cm	N° 24	-	-	-
	B max Ø 4 cm	N° 24	-	-	-
	M max Ø 6 cm	N° 24	-	-	-
	P max Ø 5 cm	-	N° 40	-	-
	Q max Ø 5 cm	-	N° 40+20	-	-
	V max Ø 8 cm	-	-	N° 24	-
	L max Ø 8/10 cm	-	-	-	N° 12
	T max Ø 8/10 cm	-	-	-	N° 20

#### NEW TP HARDOX PISTON

#### MACHINE

Reinforced monocoque frame th. 5 mm in Hardox	✓	✓
Reinforced sides th. 6 mm	✓	✓
2 bars of counter - knife for fine shredding	✓	✓
Replaceable skids with adjustable and replaceable pads	✓	✓
Professional rear roller Ø 195 mm with 4 taper roller bearings and central body interchangeable	✓	✓
Removable oscillating plate	✓	✓
Mechanical rotation 180° (A.)	•	•
Hydraulic rotation 180° (n°2 hydraulic hoses) (B.)	•	•
Standard mounting brackets (no pins)	•	•
Adapters	•	•
Selflevelling "universal" skid coupler	•	•
Coupler for loaders/ telescopic lifters/ backhoes	•	•
Hydraulic openable bonnet with machine already set up	•	•

#### TRANSMISSION

Unidirectional engine at axial pistons with external drainage	✓	✓
Double-row self-aligning ball bearings	✓	✓
"Helicocut" rotor	✓	-
Semi-forest rotor with rotating hammers with tool "T"	-	✓

#### HYDRAULIC SYSTEM

One way valve on return	✓	✓
ORSI V3.1-3/4 which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR	✓	✓

## TP HARDOX PISTON

### PROFESSIONAL SERIES



C G B M  
MULTI-KNIFE ROTOR  
A: Ø 115 x 14.5 mm



P Q  
ROTOR WITH Y KNIVES  
AND/OR 3-KNIVES  
A: Ø 127 x 14.5 mm



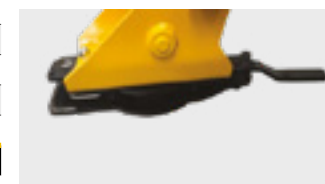
V  
FLANGED ROTOR WITH HAMMERS  
DOUBLE EDGE  
A: Ø 115 x 10 mm



T  
SEMI-FOREST ROTOR WITH  
RETRACTABLE HAMMERS  
A: Ø 235 x 5mm



L  
ROTOR VENTILATOR  
A: Ø 194 x 10mm



A.



B.





10 ÷ 20 ton.






max Ø 5 cm

A HARDOX machine with pulley transmission that can be equipped with either 27 cc, 38 cc, 51 cc or 61 cc motor, which is intended to be used on excavators from 10 to 20 t. Designed for cleaning bushes, shrubs and wood up to 6 cm in size, equipped with a hammers or knives rotor.



## WT BELTS

### HYDRAULIC CUTTING HEAD

	RPM		
27 c.c.	2.300 - 2.500	43÷50 lt/min	250 max BAR
38 c.c.	2.300 - 2.500	60÷70 lt/min	250 max BAR
51 c.c.	2.300 - 2.500	80÷90 lt/min	250 max BAR
61 c.c.	2.100 - 2.350	90÷100 lt/min	250 max BAR

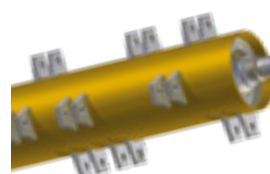
#### STRENGTH POINTS



REMOVABLE OSCILLATING PLATE



INTERNAL DOUBLE FRAME  
+ STATIC KNIVES IN HARDOX



"VENTILATOR" ROTOR  
electronically balanced. Forest type tool holders  
moulded in boron steel



REAR ROLLER PROF Ø 140 mm  
with 4 bearings with tapered rollers, mud scraper  
and interchangeable central part.



ORSI V3.1

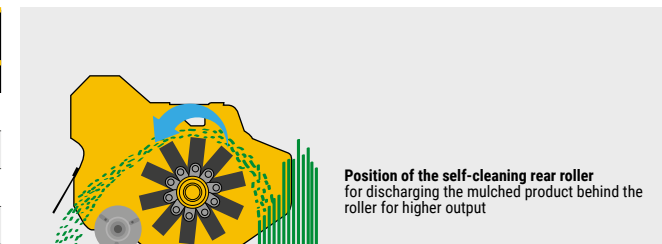


DOUBLE-ROW SELF-ALIGNING  
ROLLER BEARINGS

# WT BELTS

## PROFESSIONAL SERIES

WT BELTS		135	165	180	200	220
TECHNICAL SPECIFICATIONS						
Working width		135 cm	162 cm	181 cm	201 cm	221 cm
Overall width		155 cm	180 cm	200 cm	220 cm	240 cm
Machine weight*		560÷660 kg	600÷700 kg	640÷740 kg	680÷780 kg	750÷850 kg
Belts transmission		4 belts	4 belts	4 belts	4 belts	4 belts
tools	 Knives A max Ø 3 cm	N° 36	N° 36	N° 48	N° 48	N° 48
	 Hammers B max Ø 5/6 cm	N° 12	N° 12	N° 16	N° 16	N° 16



WT BELTS		135	165	180	200	220
MACHINE						
Steel frame with internal Hardox frame (double frame)		✓	✓	✓	✓	✓
Static knife in Hardox and blade cutting system		✓	✓	✓	✓	✓
Rear roller Ø 140 mm with 4 tapered roller bearings and interchangeable central body thickness 6 mm, adjustable in height		✓	✓	✓	✓	✓
Front protection flaps		✓	✓	✓	✓	✓
Removable oscillating plate		✓	✓	✓	✓	✓
Protection chains		•	•	•	•	•
Replaceable skids		•	•	•	•	•
Hydraulic rotation 180° (n°2 hydraulic hoses)		•	•	•	•	•
Standard mounting brackets (no pins)		•	•	•	•	•
Adapters		•	•	•	•	•
TRANSMISSION						
VARISEAL engine with external drainage		✓	✓	✓	✓	✓
Ventilator rotor		✓	✓	✓	✓	✓
Transmission with toothed belt		✓	✓	✓	✓	✓
Double-row self-aligning roller bearings		✓	✓	✓	✓	✓
Automatic belt tensioner		✓	✓	✓	✓	✓
Unidirectional rotor rotation		✓	✓	✓	✓	✓
HYDRAULIC SYSTEM						
One way valve on return		✓	✓	✓	✓	✓
ORSI V3.1-3/4 which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil outgoing = 12 BAR		✓	✓	✓	✓	✓







10 ÷ 20 ton.



max Ø 5 cm

A HARDOX machine equipped with a 35 cc or a 44 cc axial piston motor, intended to be used on excavators from 10 to 20 t.

Designed for cleaning bushes, shrubs and wood up to 6 cm in size.

**HARDOX**  
IN MY BODY



## WT PISTON

### HYDRAULIC CUTTING HEAD

	RPM		
35 c.c.	2.300 - 2.500	56÷65 lt/min	350 max BAR
44 c.c.	2.300 - 2.500	70÷80 lt/min	350 max BAR

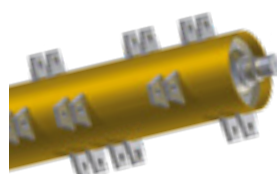
#### STRENGTH POINTS



REMOVABLE OSCILLATING PLATE



INTERNAL DOUBLE FRAME  
+ STATIC KNIVES IN HARDOX



"VENTILATOR" ROTOR  
electronically balanced. Forest type tool holders  
moulded in boron steel



REAR ROLLER PROF Ø 140 mm  
with 4 bearings with tapered rollers, mud scraper and  
interchangeable central part.





ORSI V3.1

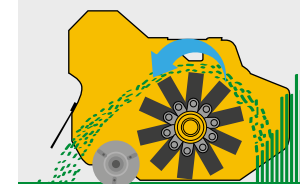


DOUBLE-ROW SELF-ALIGNING  
ROLLER BEARINGS

# WT PISTON

## PROFESSIONAL SERIES

WT PISTON		135	165	180	200	220	NEW 255
TECHNICAL SPECIFICATIONS							
Working width		135 cm	162 cm	181 cm	201 cm	221 cm	253 cm
Overall width		155 cm	180 cm	200 cm	220 cm	240 cm	268 cm
Machine weight*		560÷660 kg	600÷700 kg	640÷740 kg	680÷780 kg	750÷850 kg	790÷890 kg
Belts transmission		4 belts	4 belts	4 belts	4 belts	4 belts	4 belts
utensili	 Knifes A max Ø 3 cm	N° 36	N° 36	N° 48	N° 48	N° 48	N° 60
	 Hammers B max Ø 5/6 cm	N° 12	N° 12	N° 16	N° 16	N° 16	N° 20



Position of the self-cleaning rear roller for discharging the mulched product behind the roller for higher output



WT PISTON	135	165	180	200	220	NEW 255
MACHINE						
Steel frame with internal Hardox frame (double frame)	✓	✓	✓	✓	✓	✓
Static knife in Hardox and blade cutting system	✓	✓	✓	✓	✓	✓
Rear roller Ø 140 mm with 4 tapered roller bearings and interchangeable central body thickness 6 mm, adjustable in height	✓	✓	✓	✓	✓	✓
Front protection flaps	✓	✓	✓	✓	✓	✓
Removable oscillating plate	✓	✓	✓	✓	✓	✓
Protection chains	•	•	•	•	•	•
Replaceable skids	•	•	•	•	•	•
Hydraulic rotation 180° (n°2 hydraulic hoses)	•	•	•	•	•	•
Standard mounting brackets (no pins)	•	•	•	•	•	•
Adapters	•	•	•	•	•	•
TRANSMISSION						
Unidirectional engine at axial pistons with external drainage	✓	✓	✓	✓	✓	✓
Ventilator rotor	✓	✓	✓	✓	✓	✓
Belt transmission	✓	✓	✓	✓	✓	✓
Double-row self-aligning roller bearings	✓	✓	✓	✓	✓	✓
Automatic belt tensioner	✓	✓	✓	✓	✓	✓
Unidirectional rotor rotation	✓	✓	✓	✓	✓	✓
HYDRAULIC SYSTEM						
One way valve on return	✓	✓	✓	✓	✓	✓
ORSI V3.1-34 which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR	✓	✓	✓	✓	✓	✓








3,5 ÷ 7 ton.



max Ø 8 cm

New SEMI FORREST IND line, a mulcher for excavators, also available with our "Flanges Tool Limiter" technology, with special steel profiles that limit the tools' depth of action, reducing the power demand and ensuring working speed and exceptional performance. A machine designed for cleaning bushes, shrubs and wood up to 8 cm in size, with a wide range of tools.

Available with a motor of 16 cc, 22 cc or 27 cc, for medium-sized excavators from 3.5 to 7 t.

	RPM		
16 c.c.	2.500 - 3.000	40÷48 lt/min	250 max BAR
22 c.c.	2.500 - 3.000	55÷65 lt/min	250 max BAR
27 c.c.	2.500 - 3.000	68÷81 lt/min	250 max BAR

## SEMI FORREST *IND*

### FOREST HYDRAULIC CUTTING HEAD



#### STRENGTH POINTS



INTERNAL DOUBLE FRAME  
+ STATIC KNIVES IN HARDOX



HELICOIDAL ROTOR "HELICOCUT"





ROTOR WITH "FLANGES  
TOOL LIMITER" (FTL) TECHNOLOGY




ORSI V3.1



DOUBLE-ROW SELF-ALIGNING  
BALL BEARINGS

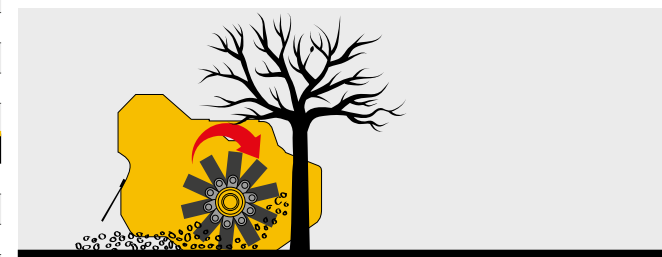
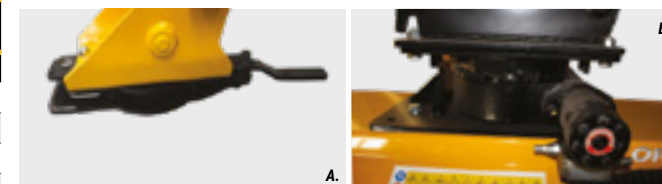
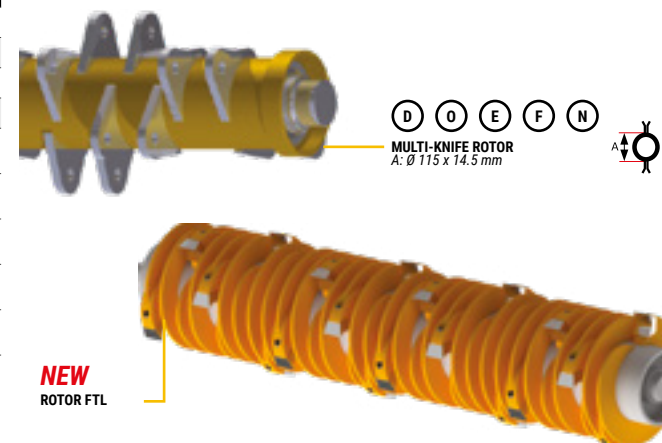
SEMI FORREST <i>IND</i>	80	105	<i>NEW</i> 80 FTL	<i>NEW</i> 105 FTL
				

TECHNICAL SPECIFICATIONS				
Working width	80 cm	105 cm	80 cm	105 cm
Overall width total	133 cm	133 cm	133 cm	133 cm
Machine weight*	250÷300 kg	320÷380 kg	280÷330 kg	350÷410 kg
Direct transmission	✓	✓	✓	✓
tools	<b>D</b> max Ø 3 cm	N° 32	N° 40	-
	<b>O</b> max Ø 3 cm	N° 32	N° 40	-
	<b>E</b> max Ø 4 cm	N° 16	N° 20	-
	<b>F</b> max Ø 4 cm	N° 16	N° 20	-
	<b>N</b> max Ø 6 cm	N° 16	N° 20	-
	 max Ø 8 cm	-	-	N° 22

SEMI FORREST <i>IND</i>	80 / <i>NEW</i> 80 FTL	105 / <i>NEW</i> 105 FTL
MACHINE		
Steel frame with internal Hardox frame (double frame)	✓	✓
Static knife in Hardox and blade cutting system	✓	✓
Replaceable skids with adjustable and replaceable pads	✓	✓
Front and rear protection chains	✓	✓
Mechanical rotation 180° <b>(A.)</b>	•	•
Hydraulic rotation 180° (n°2 hydraulic hoses) <b>(B.)</b>	•	•
Standard mounting brackets (no pins)	•	•
Adapters	•	•
TRANSMISSION		
VARISEAL engine with external drainage	✓	✓
"Helicocut" rotor	✓	✓
Double-row self-aligning ball bearings	✓	✓
Unidirectional rotor rotation	✓	✓
HYDRAULIC SYSTEM		
One way valve on return	✓	✓
ORSI V3.1-1/2: valve of max. pressure + anticavitation valve + flux regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 12 BAR with engine 16-22 cc	✓	✓
ORSI V3.1-3/4: engine 27 cc valve of max. pressure + anticavitation valve + flux regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 12 BAR with engine 27 cc	✓	✓

# SEMI FORREST *IND*

## PROFESSIONAL SERIES







5 ÷ 12 ton.






max Ø 8/10 cm

New SEMI FORREST PROF line, a mulcher for excavators, also available with "Flanges Tool Limiter" technology, with special steel profiles that limit the tools' depth of action, reducing the power demand and ensuring working speed and exceptional performance. A machine designed for cleaning bushes, shrubs and wood up to 8 cm in size, with a wide range of tools.

This machine comes with a pulley transmission, for higher performances.

Available with motors of 22 cc, 27 cc or 38 cc, ideal for excavators from 5 to 12 t.

	RPM		
22 c.c.	2.500 - 3.000	55÷65 lt/min	250 max BAR
27 c.c.	2.500 - 3.000	68÷81 lt/min	250 max BAR
38 c.c.	2.500 - 3.000	95÷115 lt/min	250 max BAR

## SEMI FORREST *PROF*

FOREST HYDRAULIC CUTTING HEAD



### STRENGTH POINTS



INTERNAL DOUBLE FRAME  
+ STATIC KNIVES IN HARDOX



HELICOIDAL ROTOR "HELICOCUT"





















ROTOR WITH "FLANGES  
TOOL LIMITER" (FTL) TECHNOLOGY



ORSI V3.1



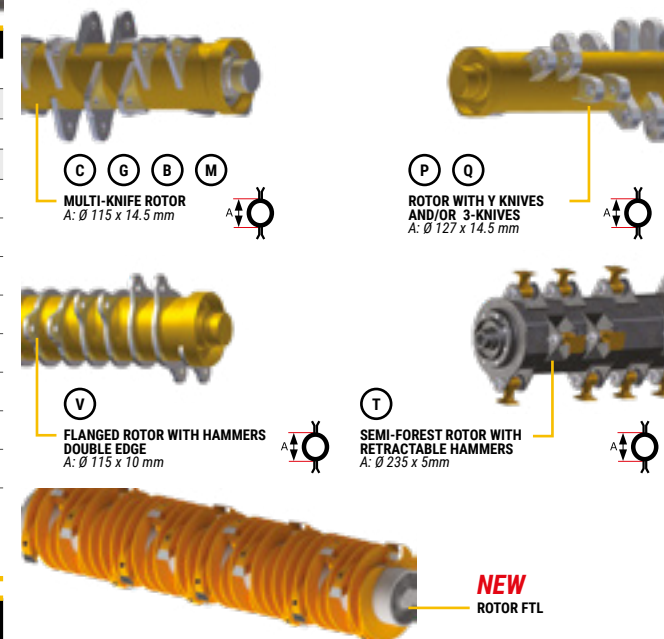
DOUBLE-ROW SELF-ALIGNING  
BALL BEARINGS

SEMI FORREST <i>PROF</i>		125				NEW 125 FTL
		   	 			
		C G B M	P Q	V	T	
TECHNICAL SPECIFICATIONS						
Working width		125 cm	125 cm	125 cm	125 cm	125 cm
Overall width total		145 cm	145 cm	145 cm	145 cm	145 cm
Machine weight*		495÷515 kg	495÷515 kg	495÷515 kg	525÷545 kg	530÷550 kg
Belts transmission		3 belts	3 belts	3 belts	3 belts	3 belts
tools	 <b>C</b> max Ø 3 cm	N° 48	-	-	-	-
	 <b>G</b> max Ø 4 cm	N° 24	-	-	-	-
	 <b>B</b> max Ø 4 cm	N° 24	-	-	-	-
	 <b>M</b> max Ø 6 cm	N° 24	-	-	-	-
	 <b>P</b> max Ø 5 cm	-	N° 40	-	-	-
	 <b>Q</b> max Ø 5 cm	-	N° 40+20	-	-	-
	 <b>V</b> max Ø 8 cm	-	-	N° 24	-	-
	 <b>T</b> max Ø 8/10 cm	-	-	-	N° 20	-
	 max Ø 8/10 cm	-	-	-	-	N° 26

SEMI FORREST <i>PROF</i>	125 / NEW 125 FTL
MACHINE	
Steel frame with internal Hardox frame (double frame)	✓
Static knife in Hardox and blade cutting system	✓
Replaceable skids with adjustable and replaceable pads	✓
Front and rear protection chains	✓
Mechanical rotation 180°	•
Hydraulic rotation 180° (n°2 hydraulic hoses)	•
Standard mounting brackets (no pins)	•
Adapters	•
TRANSMISSION	
VARISEAL engine with external drainage	✓
Belt transmission	✓
"Helicocut" rotor	✓
Double-row self-aligning ball bearings	✓
Unidirectional rotor rotation	✓
HYDRAULIC SYSTEM	
One way valve on return	✓
ORSI V3.1-3/4 which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 12 BAR	✓

# SEMI FORREST *PROF*

## PROFESSIONAL SERIES







8 ÷ 14 ton.






max Ø 10/12 cm

FORREST PROF, a mulcher for excavators, also available with "Flanges Tool Limiter" technology, with special steel profiles that limit the tools' depth of action, reducing the power demand and ensuring working speed and exceptional performance. A machine designed for cleaning bushes, shrubs and wood up to 12 cm in size, with a wide range of tools.

Equipped with an axial piston motor, for high working performance.

Available with a 35 cc or 44 cc motor, ideal for excavators from 8 to 14 t.

	RPM		
PISTON			
35 c.c.	2.500 - 3.000	85÷100 lt/min	350 max BAR
44 c.c.	2.500 - 3.000	110÷120 lt/min	350 max BAR

## FORREST PROF

### FOREST HYDRAULIC CUTTING HEAD



#### STRENGTH POINTS



INTERNAL DOUBLE FRAME  
+ STATIC KNIVES IN HARDOX



SEMIFORESTAL ROTOR WITH  
ROTATING HAMMERS












ROTOR WITH "FLANGES  
TOOL LIMITER" (FTL) TECHNOLOGY




ORSI V3.1



DOUBLE-ROW SELF-ALIGNING  
BALL BEARINGS

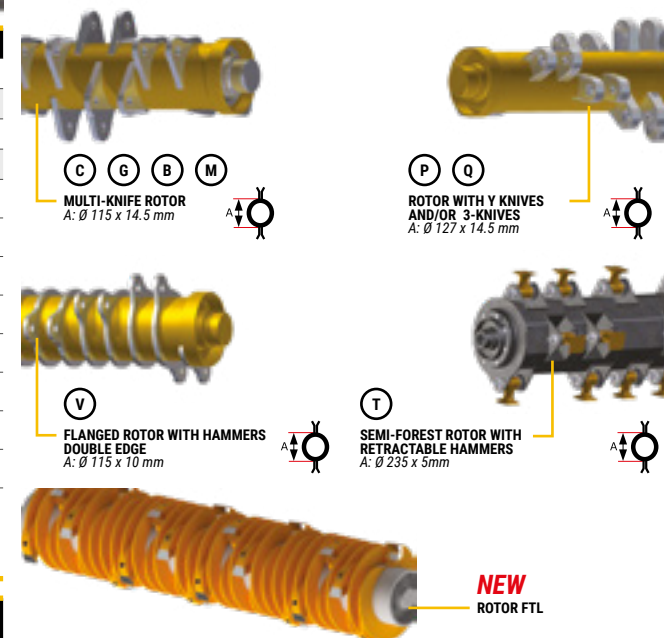
FORREST PROF	125				NEW 125 FTL
	   	 			
	C G B M	P Q	V	T	

TECHNICAL SPECIFICATIONS					
Working width	125 cm	125 cm	125 cm	125 cm	125 cm
Overall width total	145 cm	145 cm	145 cm	145 cm	145 cm
Machine weight*	515÷535 kg	515÷535 kg	515÷535 kg	545÷565 kg	550÷570 kg
Belts transmission	1 toothed belt	1 toothed belt	1 toothed belt	1 toothed belt	1 toothed belt
tools	<b>C</b> max Ø 3 cm	N° 48	-	-	-
	<b>G</b> max Ø 4 cm	N° 24	-	-	-
	<b>B</b> max Ø 4 cm	N° 24	-	-	-
	<b>M</b> max Ø 6 cm	N° 24	-	-	-
	<b>P</b> max Ø 5 cm	-	N° 40	-	-
	<b>Q</b> max Ø 5 cm	-	N° 40+20	-	-
	<b>V</b> max Ø 8 cm	-	-	N° 24	-
	<b>T</b> max Ø 10/12 cm	-	-	-	N° 20
	 max Ø 10/12 cm	-	-	-	N° 26

FORREST PROF	125 / NEW 125 FTL
MACHINE	
Steel frame with internal Hardox frame (double frame)	✓
Static knife in Hardox and blade cutting system	✓
Replaceable skids with adjustable and replaceable pads	✓
Front and rear protection chains	✓
Mechanical rotation 180°	•
Hydraulic rotation 180° (n°2 hydraulic hoses)	•
Standard mounting brackets (no pins)	•
Adapters	•
TRANSMISSION	
Unidirectional engine at axial pistons with external drainage	✓
Semiforestral rotor with rotating hammers with tool "T"	✓
Double-row self-aligning ball bearings	✓
Unidirectional rotor rotation	✓
Transmission with toothed belt	✓
HYDRAULIC SYSTEM	
One way valve on return	✓
ORSI V3.1-3/4 which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR	✓

# FORREST PROF

## PROFESSIONAL SERIES







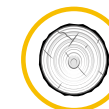
**HARDOX**  
IN MY BODY

# EMR PISTON

## FOREST HYDRAULIC CUTTING HEAD






10 ÷ 18 ton.



max Ø 20 cm

EMR Piston, designed for excavators from 10 to 18 tons, able to shred logs up to 20 cm in diameter, available in two working widths: 110 and 140 cm. It mounts a rotor with retractable hammers, and an axial piston motor, making it a professional and high-performance machine.

	RPM		
<b>PISTON CIL. FISSA</b>			
45 c.c.	1.800 - 2.200	80÷100 lt/min	350 max BAR
56 c.c.	1.800 - 2.200	100÷125 lt/min	350 max BAR
63 c.c.	1.800 - 2.200	110÷140 lt/min	350 max BAR
<b>PISTON CIL. VARIABILE (optional)</b>			
56/80 c.c.	1.800 - 2.200	110÷130 lt/min	350 max BAR

### STRENGTH POINTS



FRAME COMPLETELY  
IN HARDOX STEEL



REXROTH AXIAL PISTONS  
ENGINE INCLINED AXIS



FORESTRY OCTAGONAL ROTOR WITH  
RETRACTABLE ROTATING HAMMERS




ORSI V3.1 INTEGRATED



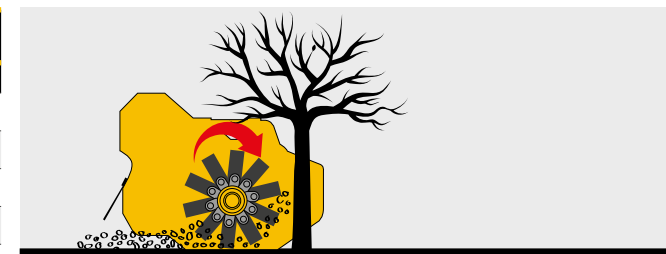
DOUBLE-ROW SELF-ALIGNING  
ROLLER BEARINGS

# EMR *PISTON*

## PROFESSIONAL SERIES

EMR <i>PISTON</i>		110	145
TECHNICAL SPECIFICATIONS			
Working width		110 cm	140 cm
Overall width total		136 cm	166 cm
Machine weight*		650÷750 kg	730÷830 kg
Belts transmission		5 belts	6 belts
tools		N° 16	N° 24

EMR <i>PISTON</i>		110	145
MACHINE			
Frame in Hardox		✓	✓
Counter knife and blade cutting system		✓	✓
Replaceable skids with adjustable and replaceable pads		✓	✓
Protection chains		✓	✓
Standard mounting brackets (no pins)		•	•
Adapters		•	•
TRANSMISSION			
Fixed displacement piston engine REXROTH with external		✓	✓
Octagonal rotor Ø 450 mm with retractable rotating hammers		✓	✓
Double-row self-aligning roller bearings		✓	✓
Belts transmission		✓	✓
Unidirectional rotor rotation		✓	✓
Rexroth axial piston motor with variable displacement cc 56/80		•	•
HYDRAULIC SYSTEM			
One way valve on return		✓	✓
ORSI V3.1-3/4 (V3.1 - 1" with engine 80cc) which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR		✓	✓



FORESTRY ROTOR  
WITH RETRACTABLE  
ROTATING HAMMERS  
A: Ø 355 x 6 mm







10 ÷ 18 ton.



max Ø 25 cm




EMF Piston, designed for excavators from 10 to 18 tons, able to shred logs up to 25 cm in diameter, available in two working widths: 110 and 140 cm. It mounts a rotor with fixed hammers with tungsten inserts, and an axial piston motor, making it a professional and high-performance machine.



## EMF PISTON

### FOREST HYDRAULIC CUTTING HEAD



	RPM		
<b>PISTON CIL. FISSA</b>			
45 c.c.	1.800 - 2.200	80÷100 lt/min	350 max BAR
56 c.c.	1.800 - 2.200	100÷125 lt/min	350 max BAR
63 c.c.	1.800 - 2.200	110÷140 lt/min	350 max BAR
<b>PISTON CIL. VARIABILE (optional)</b>			
56/80 c.c.	1.800 - 2.200	110÷130 lt/min	350 max BAR

#### STRENGTH POINTS



FRAME COMPLETELY  
IN HARDOX STEEL



REXROTH AXIAL PISTONS  
ENGINE INCLINED AXIS



HELICOIDAL ROTOR "HELICOCUT" Ø 450 mm



ORSI V3.1 INTEGRATED



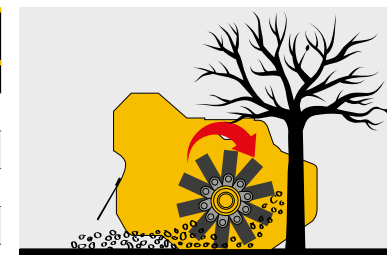
DOUBLE-ROW SELF-ALIGNING  
ROLLER BEARINGS

# EMF PISTON

## PROFESSIONAL SERIES

EMF PISTON	110	145
<b>TECHNICAL SPECIFICATIONS</b>		
Working width	110 cm	140 cm
Overall width total	136 cm	166 cm
Machine weight*	650÷750 kg	730÷830 kg
Belts transmission	5 belts	6 belts
tools	N° 28	N° 32

EMF PISTON	110	145
<b>MACHINE</b>		
Frame in Hardox	✓	✓
Counter knife and blade cutting system	✓	✓
Replaceable skids with adjustable and replaceable pads	✓	✓
Protection chains	✓	✓
Standard mounting brackets (no pins)	•	•
Adapters	•	•
<b>TRANSMISSION</b>		
Fixed displacement piston engine REXROTH with external	✓	✓
Ø 450 mm helical rotor with fixed tungsten tools	✓	✓
Double-row self-aligning roller bearings	✓	✓
Belts transmission	✓	✓
Unidirectional rotor rotation	✓	✓
Rexroth axial piston motor with variable displacement cc 56/80	•	•
<b>HYDRAULIC SYSTEM</b>		
One way valve on return	✓	✓
ORSI V3.1-34 (V3.1 - 1" with engine 80cc) which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR	✓	✓



TUNGSTEN CARBIDE  
FIXED TOOLS







14 ÷ 30 ton.



max Ø 30 cm




TMF Piston, designed for large excavators from 14 to 30 tons, able to shred logs up to 30 cm in diameter, available in two working widths: 140 and 170 cm.

It mounts a rotor with retractable hammers, and an axial piston motor, making it a professional and high-performance machine.

## TMF PISTON

### FOREST HYDRAULIC CUTTING HEAD



	RPM		
<b>PISTON CIL. FISSA</b>			
56 c.c.	1.800 - 2.200	100÷125 lt/min	350 max BAR
63 c.c.	1.800 - 2.200	110÷140 lt/min	350 max BAR
80 c.c.	1.800 - 2.200	144÷175 lt/min	350 max BAR
107 c.c.	1.800 - 2.200	190÷235 lt/min	350 max BAR
<b>PISTON CIL. VARIABILE (optional)</b>			
56/80 c.c.	1.800 - 2.200	110÷130 lt/min	350 max BAR

#### STRENGTH POINTS



FRAME BUILT  
COMPLETELY IN STRENX



INTERNAL DOUBLE FRAME  
IN HARDOX



REXROTH AXIAL PISTONS  
ENGINE INCLINED AXIS



FORESTRY OCTAGONAL ROTOR  
Ø 450 mm




ORSI V3.1 INTEGRATED



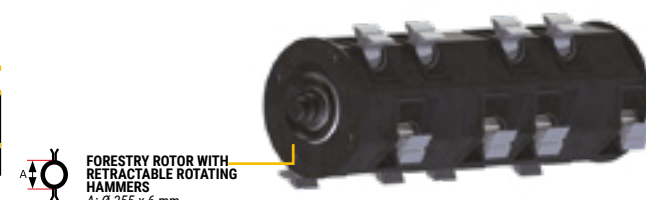
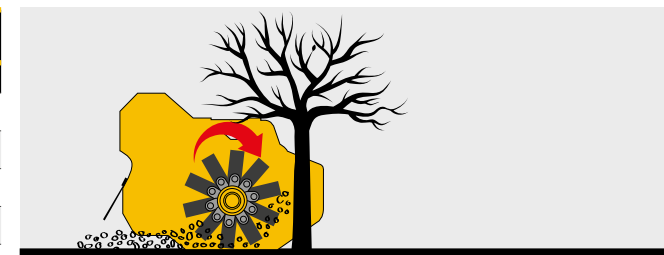
DOUBLE-ROW SELF-ALIGNING  
ROLLER BEARINGS

# TMF PISTON

## PROFESSIONAL SERIES

TMF PISTON		140	170
TECHNICAL SPECIFICATIONS			
Working width		140 cm	170 cm
Overall width total		177 cm	207 cm
Machine weight*		1070÷1270 kg	1150÷1350 kg
Belts transmission		6 belts	6 belts
tools		N° 24	N° 28

TMF PISTON		140	170
MACHINE			
Weldox 700 frame and internal Hardox frame (double frame)		✓	✓
Double counter knife in Hardox		✓	✓
Replaceable skids with adjustable and replaceable pads		✓	✓
Protection chains		✓	✓
Standard mounting brackets (no pins)		•	•
Adapters		•	•
TRANSMISSION			
Fixed displacement piston engine REXROTH with external		✓	✓
Octagonal rotor Ø 450 mm with retractable rotating hammers		✓	✓
Double-row self-aligning roller bearings		✓	✓
Belts transmission		✓	✓
Unidirectional rotor rotation		✓	✓
Rexroth axial piston motor with variable displacement cc 56/80		•	•
HYDRAULIC SYSTEM			
One way valve on return		✓	✓
ORSI V3.1-3/4 (V3.1 - 1" with engine over 63 cc) which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR		✓	✓







14 ÷ 30 ton.



max Ø 30 cm




TPF Piston designed for large excavators from 14 to 30 tons, able to shred logs up to 30 cm in diameter, available in two working widths: 140 and 170 cm.

It mounts a rotor with fixed hammers and tungsten inserts, and also an axial piston motor, making it a professional and high-performance machine.

## TPF PISTON

### FOREST HYDRAULIC CUTTING HEAD



	RPM		
<b>PISTON CIL. FISSA</b>			
56 c.c.	1.800 - 2.200	100÷125 lt/min	350 max BAR
63 c.c.	1.800 - 2.200	110÷140 lt/min	350 max BAR
80 c.c.	1.800 - 2.200	144÷175 lt/min	350 max BAR
107 c.c.	1.800 - 2.200	190÷235 lt/min	350 max BAR
<b>PISTON CIL. VARIABILE (optional)</b>			
56/80 c.c.	1.800 - 2.200	110÷130 lt/min	350 max BAR

#### STRENGTH POINTS



FRAME BUILT  
COMPLETELY IN STRENX



INTERNAL DOUBLE FRAME  
IN HARDOX



REXROTH AXIAL PISTONS  
ENGINE INCLINED AXIS



HELICOIDAL ROTOR "HELICOCUT"  
Ø 450 mm with static tungsten tools



ORSI V3.1 INTEGRATED



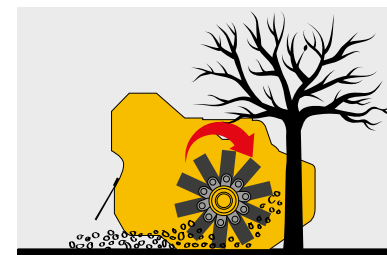
DOUBLE-ROW SELF-ALIGNING  
ROLLER BEARINGS

# TPF PISTON

## PROFESSIONAL SERIES

TPF PISTON	140	170
<b>TECHNICAL SPECIFICATIONS</b>		
Working width	140 cm	170 cm
Overall width total	177 cm	207 cm
Machine weight*	1100÷1300 kg	1210÷1410 kg
Belts transmission	6 belts	6 belts
tools	N° 32	N° 36

TPF PISTON	140	170
<b>MACHINE</b>		
Weldox 700 frame and internal Hardox frame (double frame)	✓	✓
Double counter knife in Hardox	✓	✓
Replaceable skids with adjustable and replaceable pads	✓	✓
Protection chains	✓	✓
Standard mounting brackets (no pins)	•	•
Adapters	•	•
<b>TRANSMISSION</b>		
Fixed displacement piston engine REXROTH with external	✓	✓
Ø 450 mm helical rotor with fixed tungsten tools	✓	✓
Double-row self-aligning roller bearings	✓	✓
Belts transmission	✓	✓
Unidirectional rotor rotation	✓	✓
Rexroth axial piston motor with variable displacement cc 56/80	•	•
<b>HYDRAULIC SYSTEM</b>		
One way valve on return	✓	✓
ORSI V3.1-34 (V3.1 - 1" with engine over 63 cc) which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR	✓	✓



TUNGSTEN CARBIDE  
FIXED TOOLS



FOREST ROTOR WITH  
FIXED TEETH  
A: Ø 219 x 20 mm







8 ÷ 15 ton.



max Ø 15 cm

PFC 1350 Professional Hardox mowing plate, ideal for excavators from 8 to 15 t, cutting width up to 15 cm, ideal for shrubs and woody material.

Available with blades or with chains, if you have to work in stony areas, motor with axial pistons for high working performance.

# PFC 1350

MOWING PLATE WITH CHAINS - BLADES



## STRENGTH POINTS



FRAME COMPLETELY  
IN HARDOX STEEL



REXROTH AXIAL PISTONS  
ENGINE INCLINED AXIS



ORSI V3.1



73c.c.

**PISTON**

63 c.c.



110 ÷ 120 lt/min

100 ÷ 110 lt/min




250 max BAR

350 max BAR

# PFC 1350

## PROFESSIONAL SERIES

PFC 1350	CHAINS	PISTON CHAINS	BLADES	PISTON BLADES
<b>TECHNICAL SPECIFICATIONS</b>				
Working width	135 cm	135 cm	135 cm	135 cm
Overall width total	150 cm	150 cm	150 cm	150 cm
Machine weight*	515÷585 kg	525÷595 kg	515÷585 kg	525÷595 kg
 Maximum cutting thickness	3 cm	5 cm	8 cm	15 cm
Rpm Pto	1500-1640	1575-1740	1500-1640	1575-1740

PFC	1350
<b>MACHINE</b>	
Frame in Hardox 500	✓
Adjustable support slides	✓
Bonnet adjustable in two positions	✓
Front and rear rubber and chain protections	✓
Chain cut tool (CT) or Hardox blades (LM)	✓
Standard mounting brackets (no pins)	•
Adapters	•
<b>TRANSMISSION</b>	
Vertical axis engine with gears or axial pistons	✓
<b>HYDRAULIC SYSTEM</b>	
Flow regulator and one way valve on return	✓
ORSI V3.1-3/4 which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR	✓







1,5 ÷ 13 ton.



10 ton.

FC, a compact stump cutter, for the shredding of single stumps in woods, parks, on the sides of roads or rivers. Its small size makes it particularly handy and suitable for excavators from 1.5 to 13 t. The piston motor makes it a very professional machine with high performance. Available with different sizes of the cutting disc, from 400 to 540 cm.

# FC - GRIND STUMPS

PROFESSIONAL SERIES



## STRENGTH POINTS






SPHERICAL ROLLER BEARINGS  
ON DOUBLE ROLLERS ROW



AXIAL PISTONS ENGINE  
INCLINED AXIS




INTERCHANGEABLE  
TUNGSTEN TEETH

		RPM		
<b>FC 20</b>	12 c.c	1.700 - 2.900	20÷35 lt/min	350 max BAR
<b>FC 40</b>	18 c.c.	1.700 - 2.800	30÷50 lt/min	350 max BAR
<b>FC 90</b>	32 c.c.	1.600 - 2.200	50÷70 lt/min	350 max BAR
<b>FC 130</b>	41 c.c.	1.600 - 2.200	65÷90 lt/min	350 max BAR

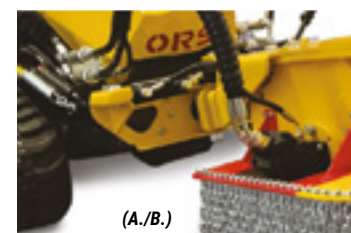
# FC - GRIND STUMPS

## PROFESSIONAL SERIES

FC - GRIND STUMPS	20	40	90	130
<b>TECHNICAL SPECIFICATIONS</b>				
Machine weight*	80÷120 kg	80÷130 kg	210÷300 kg	210÷350 kg
 Diameter of the cutting disc Ø mm	400 cm	400 cm	540 cm	540 cm
N° tools	12	12	16	16

FC - GRIND STUMPS	20	40	90	130
<b>MACHINE</b>				
Steel frame, compact but strong	✓	✓	✓	✓
Front and side chain protection	✓	✓	✓	✓
Cutting disc with interchangeable teeth with tungsten insert	✓	✓	✓	✓
Side bearings	✓	✓	✓	✓
Upper plate for mounting brackets	✓	✓	✓	✓
Standard mounting brackets (no pins)	•	•	•	•
Adapters	•	•	•	•
Connection for hydraulic rotation for skid "universal type" <b>(A.)</b>	•	•	•	•
Connection for hydraulic rotation for blades (not universal) <b>(B.)</b>	•	•	•	•
<b>TRANSMISSION</b>				
Hydraulic piston motor for high performance	✓	✓	✓	✓
<b>HYDRAULIC SYSTEM</b>				
By-pass valve on hydraulic motor	✓	✓	✓	✓
3 connection hoses (delivery, return and drainage) MAX back pressure on oil drainage = 2 BAR	✓	✓	✓	✓

### GRIND STUMPS



(A./B.)





# DISC HEDGE CUTTER

## PROFESSIONAL SERIES



### STRENGTH POINTS



ORSI V3.1



A.



B. optional



Discs bar with undirectional gear engine with external drainage (3 hoses: ingoing, outgoing and drainage with max backpressure 5 bar)

	
35 lt/min	150 max BAR
40 lt/min	150 max BAR

DISC HEDGE CUTTER	165
TECHNICAL SPECIFICATIONS	A
Thickness of cutting knives	2 cm
N° knives	8
Disc cutting thickness	4 cm
N° disc for wood Ø 500 cm	4 <i>optional (B.)</i>
Min power request	kW 14,5 - 20 HP
Working temperature	-15° C ÷ +80° C
Advised working speed	1000 m/h
Width	165 cm
OPTIONAL	165
Standard mounting brackets (no pins)	•
Adapters	•
ORSI V3.1 - 1/2	•
Toothed discs for wood "B" (n.4 pieces)	•





# DISC HEDGE CUTTER *PROF*



## PROFESSIONAL SERIES



### STRENGTH POINTS

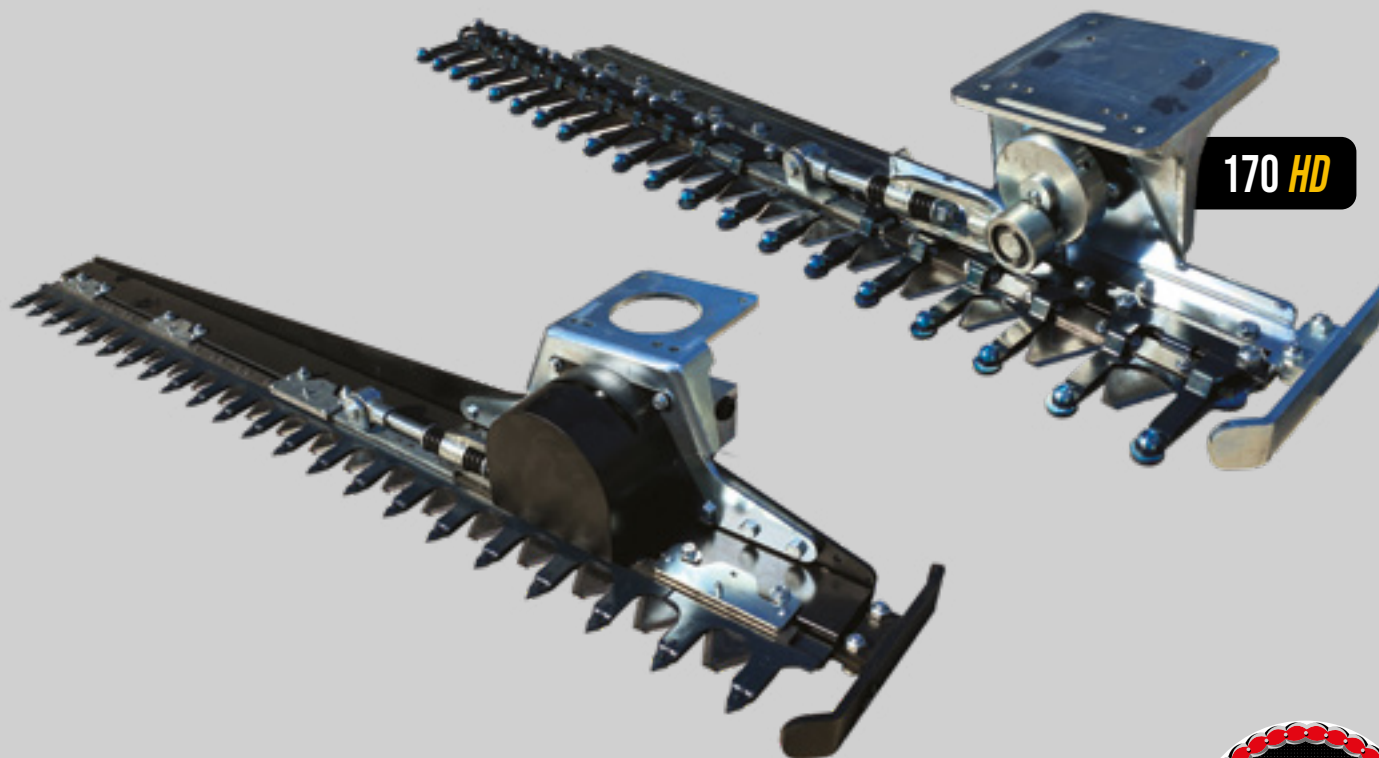


ORSI V3.1

	
80 lt/min	150 max BAR

DISC HEDGE CUTTER <i>PROF</i>	200
TECHNICAL SPECIFICATIONS	
Cutting thickness dimensions	15 cm
N° disc for wood Ø 650 mm	4
Min power request	kW 14,5 - 20 HP
Working temperature	-15° C ÷ +80° C
Advised working speed	1000 m/h
OPTIONAL	165
Standard mounting brackets (no pins)	•
Adapters	•
ORSI V3.1 - 1/2	•





**170 HD**

## HEDGE BAR

### PROFESSIONAL SERIES






#### STRENGTH POINTS



ORSI V3.1 INTEGRATED

Cutter bar designed for profiling of hedges.  
Ideal to be installed on the arms of the mini excavators, presents a huge versatility of work.  
Maximum cut, branches of 3 cm.

				
35÷55 lt/min				
				
120 max BAR				
HEDGE BAR	125	166	200	170 HD
TECHNICAL SPECIFICATIONS				
Min power request	kw 14,5 20 HP	kw 14,5 20 HP	kw 14,5 20 HP	kw 14,5 20 HP
Working temperature	-15° C ÷ +80° C	-15° C ÷ +80° C	-15° C ÷ +80° C	-15° C ÷ +80° C
Advised working speed	2000 m/h	2000 m/h	2000 m/h	2000 m/h
Min. - Max. Frequency	200 - 300 cycles/min	200 - 300 cycles/min	200 - 300 cycles/min	200 - 300 cycles/min
Width	125 cm	166 cm	200 cm	170 cm
Weight	46 kg	58 kg	68 kg	68 kg
 Maximum cutting thickness	3 cm	3 cm	3 cm	5 cm
	125	166	200	170 HD
Unidirectional orbital engine with internal drainage (2 hoses)	✓	✓	✓	✓
Supporto per fissaggio sella di attacco	✓	✓	✓	✓
ORSI V3.1 - integrated	✓	✓	✓	✓
Standard mounting brackets (no pins)	•	•	•	•
Adapters	•	•	•	•




# BRANCH CUTTER

## PROFESSIONAL SERIES



Branches bar with inverter and automatic pressure relief valve, for branches up to 12 cm in diameter.

	
35÷55 lt/min	120 max BAR

BRANCH CUTTER	155 HARDOX	225 HARDOX
TECHNICAL SPECIFICATIONS	A	
Min power request	kW 19 - 25 HP	kW 19 - 25 HP
Working temperature	-5° C ÷ +70° C	-5° C ÷ +70° C
Advised working speed	0 - 800 m/h	0 - 800 m/h
Min. - Max. Frequency	50 - 65 cycles/min	50 - 65 cycles/min
Width	155 cm	225 cm
Weight	200 kg	230 kg
 Maximum cutting thickness	10 cm	10 cm
	155 HARDOX	225 HARDOX
Automatic anti-jam inverter	✓	✓
Maximum pressure valve and flow divider	✓	✓
Standard mounting brackets (no pins)	•	•
Adapters	•	•







# DITCH CLEANER


## PROFESSIONAL SERIES



For ditches cleaning with unidirectional orbital engine with external drainage (3 hoses: ingoing - outgoing and drainage with back pressure max 5 bar)

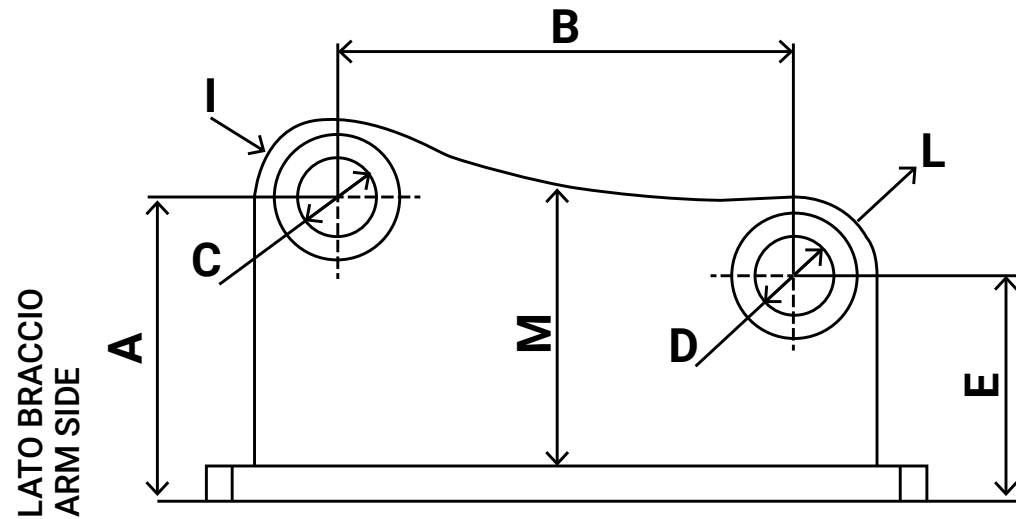


	
90÷120 lt/min	250 max BAR

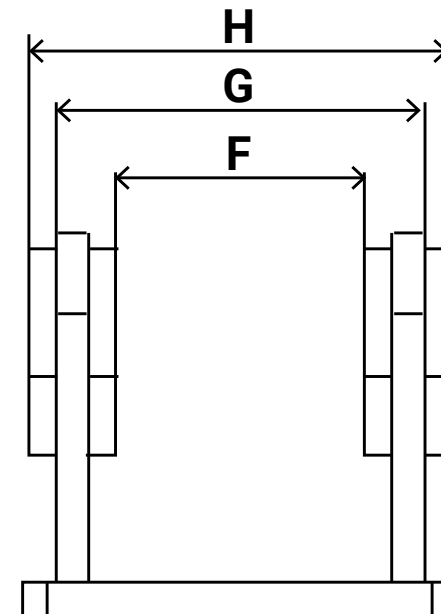
DITCH CLEANER	Ø 50	Ø 65	Ø 80	Ø 100
TECHNICAL SPECIFICATIONS				
Weight	130 kg	190 kg	230 kg	270 kg
Ø cm	50 cm	65 cm	80 cm	100 cm
	Ø 50	Ø 65	Ø 80	Ø 100
Unidirectional orbital engine with external drainage (3 hoses: ingoing-outgoing and drainage with back pressure max 5 BAR)	✓	✓	✓	✓
Standard mounting brackets (no pins)	•	•	•	•
Adapters	•	•	•	•
 Flux regulator 150 ÷ 90 lt/min	•	•	•	•

# FIXING PLATE

## SELLA DI ATTACCO STANDARD STANDARD HITCH SADDLE



LATO BIELLA  
ROD SIDE










1,2 ÷ 15 ton.



max Ø 5 cm

Hydraulic shredder for miniskids, loaders and telescopes up to 15 ton.  
Designed for machines to cut grass, brambles, bushes and reeds.

	RPM		
27 c.c.	2.300 - 2.500	38÷46 lt/min	250 max BAR
38 c.c.	2.300 - 2.500	55÷65 lt/min	250 max BAR
51 c.c.	2.300 - 2.500	75÷87 lt/min	250 max BAR
61 c.c.	2.200 - 2.400	90÷100 lt/min	250 max BAR

## TECNIK *HYDRO*

### HYDRAULIC SHREDDER



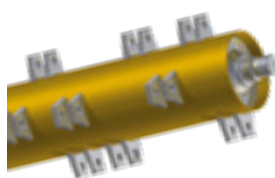
#### STRENGTH POINTS



**INTERNAL DOUBLE FRAME  
+ STATIC KNIVES IN HARDOX**



**AUTOMATIC BELT TENSIONER**



**ROTORE "VENTILATOR"**  
electronically balanced Forest tool supports  
tools casted in Boron steel



**REAR ROLLER PROF Ø 140 mm**  
with 4 bearings with tapered rollers, mud scraper and  
interchangeable central part.





**ORSI V3.1**

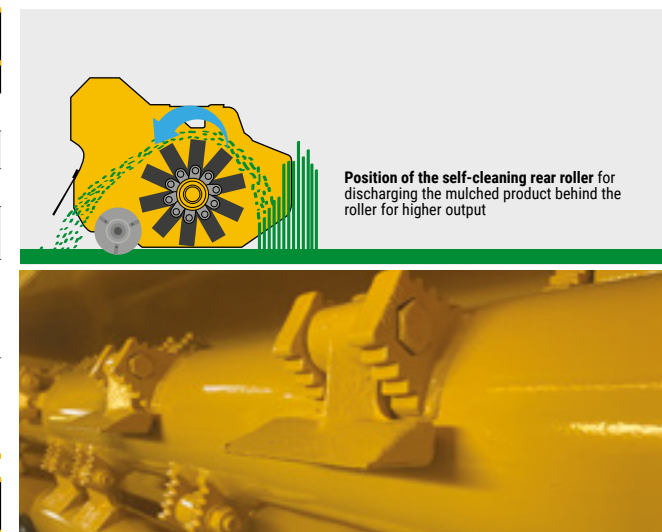


**DOUBLE-ROW SELF-ALIGNING  
ROLLER BEARINGS**

# TECNIK *HYDRO*

## PROFESSIONAL SERIES

TECNIK <i>HYDRO</i>		135	165	180	200	220	255
TECHNICAL SPECIFICATIONS							
Working width		135 cm	162 cm	181 cm	201 cm	221 cm	253 cm
Overall width		155 cm	180 cm	200 cm	220 cm	240 cm	275 cm
Machine weight*		610 kg	650 kg	690 kg	730 kg	800 kg	910 kg
Belts transmission		4 belts <i>quad power</i>	4 belts <i>quad power</i>	4 belts <i>quad power</i>	4 belts <i>quad power</i>	4 belts <i>quad power</i>	4 belts <i>quad power</i>
tools	 Knives A <i>max Ø 3 cm</i>	N° 36	N° 36	N° 48	N° 48	N° 60	N° 60
	 Hammers B <i>max Ø 5 cm</i>	N° 12	N° 12	N° 16	N° 16	N° 20	N° 20



TECNIK <i>HYDRO</i>		135	165	180	200	220	255
MACHINE							
Steel frame with internal Hardox frame (double frame)		✓	✓	✓	✓	✓	✓
Static knife in Hardox and blade cutting system		✓	✓	✓	✓	✓	✓
Rear roller Ø 140 mm with 4 tapered roller bearings and interchangeable central body thickness 6 mm, adjustable in height		✓	✓	✓	✓	✓	✓
Front protection flaps		✓	✓	✓	✓	✓	✓
Automatic belt tensioner		✓	✓	✓	✓	✓	✓
Swinging coupler for skid steer loader universal type		✓	✓	✓	✓	✓	✓
Protection chains		•	•	•	•	•	•
Hydraulic side shift with machine already set up		•	•	•	•	•	•
Hydraulic side shift with 6 - way solenoid valve 12 Volt		•	•	•	•	•	•
Replaceable skids		•	•	•	•	•	•
Extra cost for non-universal blade attachment		•	•	•	•	•	•
TRANSMISSION							
VARISEAL engine with external drainage		✓	✓	✓	✓	✓	✓
Belt transmission		✓	✓	✓	✓	✓	✓
Ventilator rotor		✓	✓	✓	✓	✓	✓
Double-row self-aligning roller bearings		✓	✓	✓	✓	✓	✓
Unidirectional rotor rotation		✓	✓	✓	✓	✓	✓
HYDRAULIC SYSTEM							
One way valve on return		✓	✓	✓	✓	✓	✓
ORSI V3.1-3/4 (V3.1 - 1" with engine 61cc 150÷170lt/min) which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR		✓	✓	✓	✓	✓	✓










1,2 ÷ 15 ton.



max Ø 5 cm

Hydraulic shredder for miniskids, loaders and telescopic up to 15 ton.  
Designed for machines to cut grass, brambles, bushes and reeds.

	RPM		
35 c.c.	2.300 - 2.500	50÷60 lt/min	350 max BAR
44 c.c.	2.300 - 2.500	65÷75 lt/min	350 max BAR

## TECNIK *PISTON*

### HYDRAULIC SHREDDER



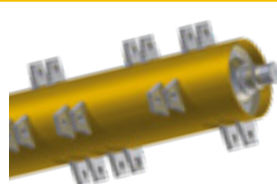
#### PUNTI DI FORZA



**INTERNAL DOUBLE FRAME  
+ STATIC KNIVES IN HARDOX**



**DOUBLE-ROW SELF-ALIGNING  
ROLLER BEARINGS**



**ROTORE "VENTILATOR"**  
electronically balanced Forest tool supports  
tools casted in Boron steel



**REAR ROLLER PROF Ø 140 mm**  
with 4 bearings with tapered rollers, mud scraper and  
interchangeable central part.





**ORSI V3.1**

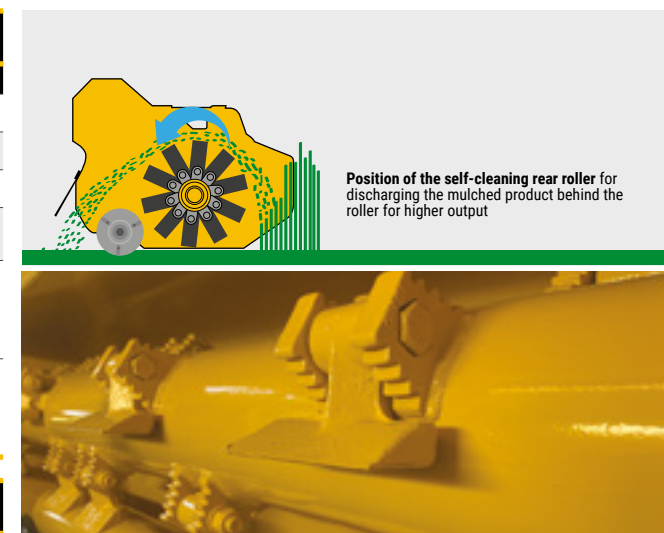


**AUTOMATIC BELT TENSIONER**

# TECNIK *PISTON*

## PROFESSIONAL SERIES

TECNIK <i>PISTON</i>		135	165	180	200	220	255
TECHNICAL SPECIFICATIONS							
Working width		135 cm	162 cm	181 cm	201 cm	221 cm	253 cm
Overall width		155 cm	180 cm	200 cm	220 cm	240 cm	275 cm
Machine weight*		610 kg	650 kg	690 kg	730 kg	800 kg	910 kg
Belts transmission		4 correas <i>quad power</i>	4 correas <i>quad power</i>	4 correas <i>quad power</i>	4 correas <i>quad power</i>	4 correas <i>quad power</i>	4 correas <i>quad power</i>
tools	 Knifes A <i>max Ø 3 cm</i>	N° 36	N° 36	N° 48	N° 48	N° 60	N° 60
	 Hammers B <i>max Ø 5 cm</i>	N° 12	N° 12	N° 16	N° 16	N° 20	N° 20



TECNIK <i>PISTON</i>		135	165	180	200	220	255
MACHINE							
Steel frame with internal Hardox frame (double frame)		✓	✓	✓	✓	✓	✓
Static knife in Hardox and blade cutting system		✓	✓	✓	✓	✓	✓
Rear roller Ø 140 mm with 4 tapered roller bearings and interchangeable central body thickness 6 mm, adjustable in height		✓	✓	✓	✓	✓	✓
Front protection flaps		✓	✓	✓	✓	✓	✓
Automatic belt tensioner		✓	✓	✓	✓	✓	✓
Swinging coupler for skid steer loader universal type		✓	✓	✓	✓	✓	✓
Protection chains		•	•	•	•	•	•
Hydraulic side shift with machine already set up		•	•	•	•	•	•
Hydraulic side shift with 6 - way solenoid valve 12 Volt		•	•	•	•	•	•
Replaceable skids		•	•	•	•	•	•
Extra cost for non-universal blade attachment		•	•	•	•	•	•
TRASMISSIONE							
VARISEAL engine with external drainage		✓	✓	✓	✓	✓	✓
Toothed belt transmission		✓	✓	✓	✓	✓	✓
Ventilator rotor		✓	✓	✓	✓	✓	✓
Double-row self-aligning roller bearings		✓	✓	✓	✓	✓	✓
Unidirectional rotor rotation		✓	✓	✓	✓	✓	✓
HYDRAULIC SYSTEM							
One way valve on return		✓	✓	✓	✓	✓	✓
ORSI V3.1-3/4 which includes valve of max. pressure + anticavitation valve + flow regulator. 3 connecting hoses to the machine. Max backpressure on oil drainage = 2 BAR		✓	✓	✓	✓	✓	✓







# BEARS FORREST *PISTON*

**FORESTRY SERIES**

**HARDOX®**  
IN MY BODY





# SUPER COMPACT SKID




Mulcher designed for Skid-Steer loaders, with specially reinforced frame to withstand the axial loads caused by the specific movement styles of this group of vehicles hard conditions. Mulchers designed for all shredding operations of bushes, branches, and trees up to a maximum diameter of 18/20 cm depending on the condition of the product to be shredded. Octagonal forest type rotor with retractable forged hammers. A machine equipped with screw adjustable and interchangeable side skids, with two rows of counter-knives that guarantee a fine and homogeneous shredding. The hood is hydraulic adjustable by a protected and integrated cylinder within the double HARDOX® frame, completely closed / dustproof.

Double row of front protection chains, with screwed plates that limit the escape of shredded material, protecting the operator and the tractor/cabin at the same time. Mechanical arch for pushing down branches whilst protecting the tractor, helping convey the material to the rotor for better shredding. Double-edged tools allow them to be reversed when worn and therefore take advantage of the other side extending their life. Very sturdy and compact, BEARS FORREST PISTON stands out for its ergonomic design that guarantees excellent visibility for the operator during the various operations.

It can be used with any brand of Skid Steer Loader on the market thanks to our "SMARTFIT" Universal hitch. Fitted with a REXROTH® AXIAL PISTON hydraulic motor or optionally available with a VARIABLE DISPLACEMENT PISTON HYDRAULIC MOTOR (REXROTH® a Bosch Company®) with automatic variable flow rate, which allows increased productivity and at the same time reduced consumption. Dustproof chassis with reinforced side to withstand the axial load of skid steers, with hydraulic opening and closing of the hood.

Standard with the ORSI developed '3 in 1' hydraulic circuit valve giving this machine the advantage that it can be easily used on all models of different Skid Steer Loader brands.



	RPM		
<b>PISTON CIL. FISSA</b>			
45 c.c.	1.800 - 2.200	65÷80 lt/min	350 max BAR
56 c.c.	1.800 - 2.200	80÷100 lt/min	350 max BAR
63 c.c.	1.800 - 2.200	90÷100 lt/min	350 max BAR
80 c.c.	1.800 - 2.200	110÷140 lt/min	350 max BAR
<b>PISTON CIL. VARIABLE (optional)</b>			
56/80 c.c.	1.800 - 2.200	85÷110 lt/min	350 max BAR

# BEARS FORREST *PISTON*

## FORESTRY SERIES

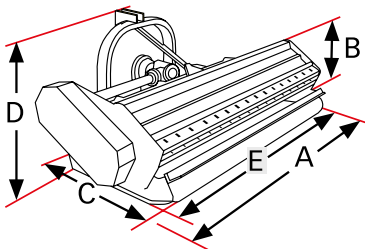


25 ton.



max Ø 18/20 cm

OVERGROWN VEGETATION,  
BRANCHES, SHRUBS



BEARS FORREST <i>PISTON</i>	A cm	B cm	C cm	D cm	E cm
170	202	53	118	113	170
210	224	53	118	113	192
255	252	53	118	113	223

### STRENGTH POINTS



INTERNAL DOUBLE FRAME  
IN HARDOX



REXROTH AXIAL PISTONS  
ENGINE INCLINED AXIS



FORESTRY OCTAGONAL  
ROTOR Ø 450 mm





ORSI V3.1



DOUBLE-ROW SELF-ALIGNING  
ROLLER BEARINGS



BEARS FORREST <i>PISTON</i>		170	210	250
TECHNICAL SPECIFICATIONS				
Working width		170 cm   66,9"	192 cm   75,6"	223 cm   87,8"
Machine weight*		1180 kg   2607 lbs	1370 kg   3020 lbs	1550 kg   3417 lbs
tools	 hammers <b>kg 1,75</b>	N° 28	N° 32	N° 40
	A	350x8 mm   13,8"x0,32"	350x8 mm   13,8"x0,32"	350x8 mm   13,8"x0,32"
	B	450 mm   17,7"	450 mm   17,7"	450 mm   17,7"
N° belts		6	6	6

BEARS FORREST <i>PISTON</i>		170	210	250
MACHINE				
Double frame in Hardox		✓	✓	✓
Hardox counter-knives		✓	✓	✓
Hydraulic rear tailgate		✓	✓	✓
Bonnet with a double row of protective chains		✓	✓	✓
Adjustable height skids in Hardox steel		✓	✓	✓
Completely closed and dustproof frame		✓	✓	✓
Double row of protective chains with screwed flaps		✓	✓	✓
Reflectors		✓	✓	✓
Swinging coupler for skid steer loader universal type		✓	✓	✓
Mechanically adjustable arch for pushing down branches		✓	✓	✓
Hydraulically adjustable arch for pushing down branches		•	•	•
A. 6 way solenoid valve 12 Volt for machine not set up for command bonnet opening		•	•	•
B. Extra cost for non-universal blade attachment		•	•	•
TRANSMISSION				
Unidirectional motor with external axial piston drainage		✓	✓	✓
Lateral transmission with 6 belts		✓	✓	✓
Octagonal rotor Ø 450 mm with retractable forged hammers		✓	✓	✓
Double-row self-aligning roller bearings		✓	✓	✓
Automatic belt tensioner		✓	✓	✓
Rexroth axial piston motor with variable displacement cc 56/80		-	•	•
HYDRAULIC SYSTEM				
One way valve on return		✓	✓	✓
ORSI V3.1-1 which includes valve of max. pressure + anticavitation valve + flow regulator MAX back pressure on oil drainage = 2 BAR		✓	✓	✓

\*variable weight based on the layout

# BEARS FORREST *PISTON*

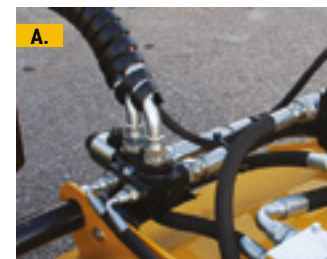
## PROFESSIONAL SERIES



DOUBLE-EDGE REINFORCED HAMMER



FORESTRY OCTAGONAL ROTOR  
A: Ø 355 x 6 mm



SWINGING COUPLER FOR SKID STEER LOADER UNIVERSAL TYPE







# HULK FORREST *PISTON*

**FORESTRY SERIES**

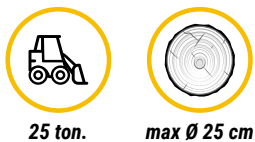
**HARDOX**  
IN MY BODY



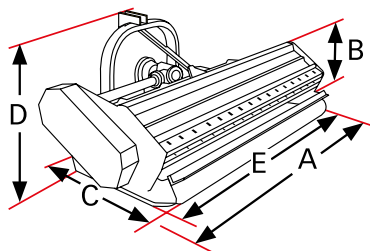





# HULK FORREST *PISTON*

PROFESSIONAL SERIES



OVERGROWN VEGETATION,  
BRANCHES, SHRUBS



	RPM		
<b>PISTON CIL. FISSA</b>			
45 c.c.	1.800 - 2.200	65÷80 lt/min	350 max BAR
56 c.c.	1.800 - 2.200	80÷100 lt/min	350 max BAR
63 c.c.	1.800 - 2.200	90÷100 lt/min	350 max BAR
80 c.c.	1.800 - 2.200	110÷140 lt/min	350 max BAR
<b>PISTON CIL. VARIABLE (optional)</b>			
56/80 c.c.	1.800 - 2.200	85÷110 lt/min	350 max BAR

# NEW UNIVERSE SKID

**Mulcher designed for Skid-Steer loaders, for all shredding operations of bushes, branches and trees up to a maximum diameter of 25 cm, equipped with helical forestry rotor Ø 450 mm with fixed tools.** The specially reinforced frame to withstand the axial loads caused by the movement of the skid steers in demanding conditions is equipped with screw adjustable interchangeable support skids and with two rows of HARDOX® counter-knives that guarantee a fine and homogeneous shredding. The hood is hydraulically adjustable with cylinder integrated and protected in the Hardox double frame. Double row of front protection chains, with screwed plates that limit the escape of shredded material whilst protecting the operator and the tractor / cab at the same time.

Mechanical arch for pushing down branches whilst protecting the tractor, helping convey the material to the rotor for better shredding. On request, this can be hydraulically operated for greater ease of use and comfort. Fixed tools in wear resistant tungsten carbide for highly professional and difficult jobs. Double-edged tools allow them to be reversed when worn and therefore take advantage of the other side for longer life. With a sturdy and professional rotor, the HULK FORREST PISTON stands out for its ergonomic design that guarantees excellent visibility for the operator during the various operations. It can be used with any brand of Skid Steer Loader on the market thanks to our "SMARTFIT" Universal hitch. Supplied with a REXROTH® AXIAL PISTON hydraulic motor or optionally available with the VARIABLE DISPLACEMENT PISTON HYDRAULIC MOTOR (REXROTH® a Bosch Company®) with automatic variable flow rate, which allows increased productivity and reduced consumption at the same time. Dustproof chassis and reinforced side to withstand the axial load of the crawlers, hydraulic opening and closing of the hood.

Standard with valve developed by ORSI 3 in 1 which allows to have advantages in the hydraulic circuit to be easily used on all models of different Skid Steer Loader brands.

HULK FORREST PISTON	A cm	B cm	C cm	D cm	E cm
170	202	53	118	113	170
210	224	53	118	113	192
250	252	53	118	113	223



## STRENGTH POINTS



INTERNAL DOUBLE FRAME  
IN HARDOX



REXROTH AXIAL PISTONS  
ENGINE INCLINED AXIS





TUNGSTEN CARBIDE  
FIXED TOOLS



ORSI V3.1



DOUBLE-ROW SELF-ALIGNING  
ROLLER BEARINGS

HULK FORREST <i>PISTON</i>		170	210	250
TECHNICAL SPECIFICATIONS				
Working width		170 cm   66,9"	192 cm   75,6"	220 cm   86,6"
Machine weight*		1480 kg   3263 lbs	1590 kg   3505 lbs	1680 kg   3703 lbs
tools	 hammers <b>Kg 1,6</b>	N° 36	N° 40	N° 48
	<b>A</b>	219x20 mm   8,6"x0,8"	219x20 mm   8,6"x0,8"	219x25 mm   8,6"x1"
	<b>B</b>	455 mm   17,9"	455 mm   17,9"	455 mm   17,9"
N° belts Powerband Triplex		2	2	2

HULK FORREST <i>PISTON</i>		170	210	250
MACHINE				
Double frame in Hardox		✓	✓	✓
Hardox counter-knives		✓	✓	✓
Hydraulic rear tailgate		✓	✓	✓
Bonnet with a double row of protective chains		✓	✓	✓
Adjustable height skids in Hardox steel		✓	✓	✓
Completely closed and dustproof frame		✓	✓	✓
Double row of protective chains with screwed flaps		✓	✓	✓
Reflectors		✓	✓	✓
Swinging coupler for skid steer loader universal type		✓	✓	✓
Mechanically adjustable arch for pushing down branches		✓	✓	✓
Hydraulically adjustable arch for pushing down branches		•	•	•
<b>A.</b> 6 way solenoid valve 12 Volt for machine not set up for command bonnet opening		•	•	•
<b>B.</b> Extra cost for non-universal blade attachment		•	•	•
TRANSMISSION				
Unidirectional motor with external axial piston drainage		✓	✓	✓
Lateral transmission with 6 belts		✓	✓	✓
Helical forest rotor Ø 450mm with fix tools in tungsten		✓	✓	✓
Double-row self-aligning roller bearings		✓	✓	✓
Double rotor support		✓	✓	✓
Automatic belt tensioner		✓	✓	✓
Rexroth axial piston motor with variable displacement cc 56/80		-	•	•
HYDRAULIC SYSTEM				
One way valve on return		✓	✓	✓
ORSI V3.1-1 which includes valve of max. pressure + anticavitation valve + flow regulator MAX back pressure on oil drainage = 2 BAR		✓	✓	✓

# HULK FORREST *PISTON*

## PROFESSIONAL SERIES





# WILD TO SURVIVE











*« The first Orsi Mulcher was purchased by my family about 25 years ago. The main quality we were looking for was reliability and performance of the machines in very difficult field conditions. The ORSI machines we have had are as reliable as possible, and have always done the work in the fields very well and importantly, we are extremely happy with the service. »*

Azienda Agricola Boselli  
Daniele e Filippo (BOLOGNA) Italia



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