

Revas Technologies

Revas Technologies band saw machines division

produces a wide range of horizontal sawing machines able to satisfy even the most advanced requirements of the market. Our cutting centres are engineered both mechanically and electrically by our Research and Development Department and the manufacturing is performed into our **Revas** workshops.

Range of application

Forging

Ingots cutting (square, circle, polygon shaped)
Specimen cutting
Custom-made cutting of forged products

Metal Service Centres:

Commercial laminated cutting (square, circle, polygon shaped) Iron plates, slabs, blocks cutting

Mechanical Workshops:

Custom-made raw materials cutting

Machines for:

Carbon steel, alloys and high-alloys, stainless steel, aluminium, light alloys, cast iron, copper.





Automation



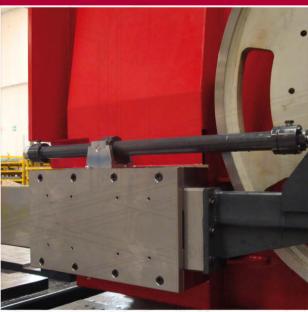












- Our sawing machines are manually/ automatically managed with CNC / PLC
- HMI interface worker machine for programming
- Spindle motor for blade rolling, brushless type coupled with epicyclic gear
- Powered axes for positioning and working, brushless type, coupled with epicyclic gears with reduced backlash
- · Automatic management of blade wear, block break and bending
- "Re-trace" function for releasing from working in case of lack of power supply
- Automatic adaptation of the cutting parameters to the working conditions through adaptative/analog control based on absorptions
- Blade control and sliding compensation system
- · Laser for cutting tracing lines for the positioning of the item
- Rotating blade guide with continuous repositioning for horizontal and oblique cutting (horizontal sawing machine)
- · Automatic hydraulic blade tensioning
- Automatic guide arm positioning



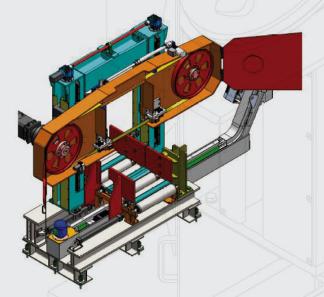
- Bimetal and carbide tipped blades
- Every movement is performed on linear guides with recirculating balls or rolls
- Rack and pinion transmission on longitudinal axes

Assembly characteristics

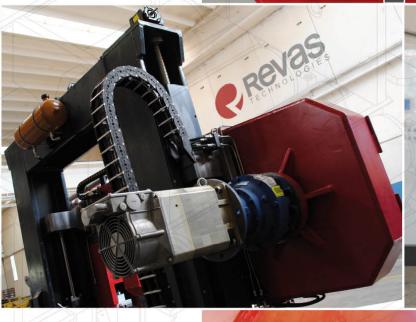
- Recirculating balls precision screws transmission on vertical axes
- Structures properly shaped with a finite-element analysis program in order to guarantee strength and vibration damping
- Blade dragging flywheel profile specifically projected in order to guarantee a perfect blade guiding and duration
- Blade guide specifically projected in order to guarantee a perfect 90° bending operation, guiding and vibration absence
- Double series of three bearings for a vertical guide of the blade with long lasting roll bearings
- · Screw or carpet chip conveyor
- Telescopic metal cover for gliding guides
- Hydraulic cylinders for vice movement and blade guides equipped with precision position transducer for the automatic management of the positions
- Safety barriers complying with the provisions of the Law
- · Chip brush motor



Horizontal sawing machines - Fixed portal









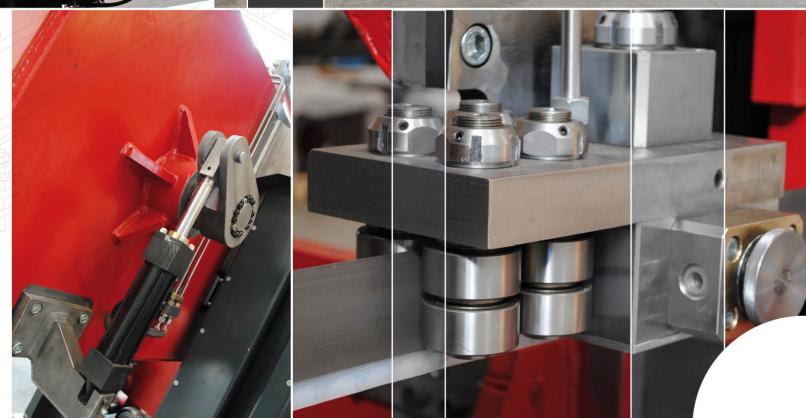
Revas SHS

Model		SHS 700	SHS 1000	SHS 1500
Cutting Capacity	mm x mm	700 x 700	1000 x 1000	1500 x 1500
Blade Speed	m/min	10-120	10-120	10-120
Main Motor Power	kW	12	18,5	18,5
Blade Type	mm x mm	67 x 1,6	67 x 1,6	80 x 1,6
Weight	ton	9,5	16,5	22

Option

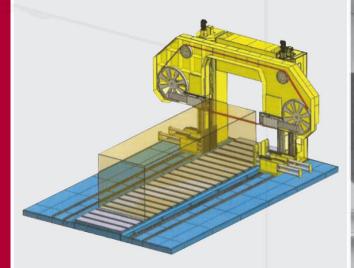
Blade speed up to 200 m/min Modular feeding roller table





SHG

Horizontal sawing machines - Gantry | Light Line







Revas SHG-L

Model		SHG-L 1000	SHG-L 1500	SHG-L 2000
Cutting Capacity	mm x mm	1000 x 1000	1500 x 1500	2000 x 2000
Blade Speed	m/min	10-120	10-120	10-120
Main Motor Power	kW	18,5	18,5	21,5
Blade Type	mm x mm	67 x 1,6	80 x 1,6	80 x 1,6
Horizontal Working Length	mm	3000 x 6000	3000 x 6000	3000 x 6000
Weight	ton	22 / 25	29 / 33	31 / 35

Option

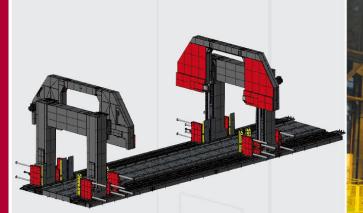
Blade speed up to 200 m/min Modular horizontal working length Special application cutting: 0° - 90° Multiple portal version





SHGH

Horizontal sawing machines - Gantry | Heavy Line









Revas SHG-H

Model		SHG-H 2500	SHG-H 3000	SHG-H 3500	SHG-H 4000
Cutting Capacity	mm x mm	2500 x 2500	3000 x 3000	3500 x 3500	4000 x 4000
Blade Speed	m/min	10-120	10-120	10-120	10-120
Main Motor Power	kW	21,5	29,6	29,6	29,6
Blade Type	mm x mm	80/100 x 1,6	80/100 x 1,6	100 x 1,6	100 x 1,6
Horizontal Working Length	mm	5000 x 8000	5000 x 8000	5000 x 8000	5000 x 8000
Weight	ton	60 / 67	67 / 75	75 / 82	82 / 89

Option

Blade speed up to 200 m/min Modular horizontal working length Special application cutting: 0° - 90° Multiple portal version





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e, Revas

Modular basement

Precision Rack - Central Basement - Lateral Basement - Linear Guides

Modular basement in order to foresee future extension divided in 3 separated sectors in order to avoid interference between the central basement and the lateral basements



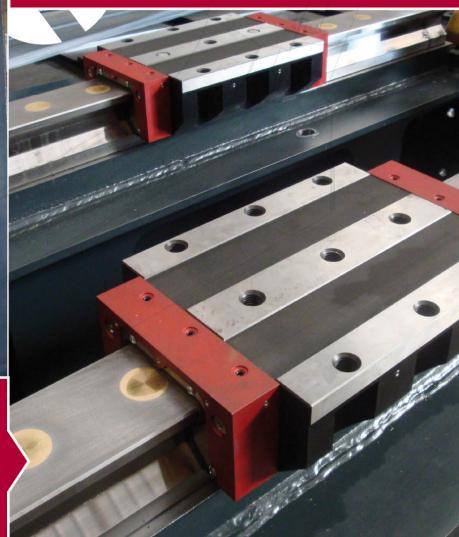


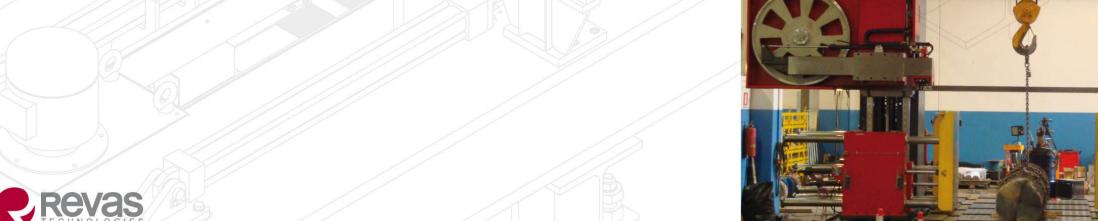
Gantry vertical bridge

Guides SystemBridge shifting by means of linear guides in order to guarantee: gantry movement precision stability higher load capacity



Gantry movement by n° 2 independent motors (electronic axially linked) and related n° 2 reduction gears in order to guarantee: high movement precision no backlashes due to gear coupling transmission





Gantry horizontal portal

Guides SystemPortal shifting through the basement by means of linear guides in order to guarantee: gantry movement precision

higher load capacity higher life time



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Bearing system directly at the wheel in order to guarantee: higher load capacity higher capacity against axial loads

Wheel surface

Medium/high steel carbon induction hardened high wear proof

Wheel surface profile in order to guarantee: blade self centering no vibrations high stability



Rotating Blade Guide System 0°÷90°

Horizontal blade reaction: roll bearing system integrated with hard metal hydraulic preloaded block

Vertical blade reaction: adjustable hard metal block

