

SEMI-AUTOMATIC DOUBLE COLUMN 0° CUTS BAND SAWING MACHINES

## SIMPLE AND POWERFUL WITH A HEAVY-DUTY HEART

**FERROUS & NON-FERROUS MATERIALS** 

## THOR LINE

450	Best solution for tube cutting up to 450 mm.
560	Best solution for tube cutting up to 560 mm.
660	Best solution for tube cutting up to 660 mm.
860	Best solution for tube cutting up to 860 mm.
1020	Best solution for tube cutting up to 1020 mm.





SEMI-AUTOMATIC DOUBLE COLUMN BAND SAWING MACHINES







### > STANDARD FEATURES

► Variable vice pressure	➤ Variable vice pressure
	► Laser beam
	► Head feed rate on display
	► Touch screen
	► Hydraulic blade guide

### > OPTIONS

- ► Hydraulic bundle clamping
- ► Hydraulic bundle clamping for maximum cutting capacity
  - ▶ 3° canted head
  - ► Mist lubrication
- ▶ Power transformer for voltage different than V.400-415 50Hz
  - ► Bi-metal blade
  - ► Laser beam (only for STANDARD PLC)





# > TECHNICAL FEATURES





PERFORMANCE CHARACTERISTICS	THOR 450	THOR 560
Minimum cut length (without bundle)	15 mm	25 mm
Minimum clamping	45 mm	60 mm
Max. open vice	460 mm	570 mm
Max. vertical open vice	460 mm	565 mm
Band saw blade dimension	6600 x 41 x 1.3 mm	7700 x 54 x 1.6 mm
Blade speed	20 - 100 m/min	20 - 100 m/min
Blade motor	7.5 Kw (10 HP)	11 Kw (15 HP)
Hydraulic unit motor	1.1 Kw (1.5 HP)	2.2 Kw (3 HP)
Weight of the saw	4000 Kg	5500 Kg
Size of machine	3350 x 1500 x 2175 mm	3850 x 1600 x 2280 mm
Shipping dimensions	4500 x 1750 x 2300 mm	4000 x 2200 x 2350 mm
CUTTING RANGE - 0°		
0	450	560
	450 x 450 mm	560 x 560 mm
Hydraulic bundle clamping	450 x 270 mm	560 x 340 mm
Hydraulic bundle clamping for maximum cutting capacity	450 x 420 mm	560 x 515 mm
CUTTING RANGE - 3°		
0	420	525
	450 x 420 mm	525 x 525 mm
Hydraulic bundle clamping	3 450 x 270 mm	525 x 340 mm
Hydraulic bundle clamping for maximum cutting capacity	3 450 x 400 mm	525 x 480 mm







THOR 660	THOR 860	THOR 1020
25 mm	25 mm	25 mm
60 mm	60 mm	60 mm
670 mm	870 mm	1030 mm
665 mm	865 mm	1030 mm
8800 x 67 x 1.6 mm	9300 x 67 x 1.6 mm	11000 x 67 x 1.6 mm
20 - 100 m/min	20 - 100 m/min	20 - 100 m/min
11 Kw (15 HP)	15 Kw (20 HP)	15 Kw (20 HP)
2.2 Kw (3 HP)	2.2 Kw (3 HP)	2.2 Kw (3 HP)
6200 Kg	7800 Kg	9500 Kg
4300 x 1700 x 2474 mm	4500 x 1750 x 3000 mm	5100 x 2100 x 3300 mm
4500 x 2200 x 2545 mm	4700 x 2200 x 3100 mm	5300 x 2200 x 3400 mm
660	860	1020
660 x 660 mm	860 x 860 mm	1020 x 1020 mm
660 x 400 mm	860 x 520 mm	1020 x 620 mm
660 x 615 mm	860 x 800 mm	1020 x 950 mm
610	805	970
610 x 610 mm	805 x 805 mm	970 x 970 mm
610 x 400 mm	805 x 520 mm	970 x 620 mm
610 x 565 mm	805 x 750 mm	970 x 900 mm

## > SAW HEAD

- ▶ Built in coolant tank powered with high flow coolant pump and flow nozzle with tap control to clean better the blade, thus granting a longer life.
- ► Hydraulic blade tensioning system keeps the tensioning constant during the cut.
- ► Hydraulic powered cleaning wire brush to clean better the blade, thus granting a longer life.
- ▶ Automatic machine stop if blade breaks.
- ▶ Auto-setting of saw head height.
- ▶ The automatic alignment of the front blade head guide jointed to the cutting vice reduces setting time independently from the material size.
- ▶ Infinitely variable pressure controlled cutting feed and upward return rapid movement by hydraulic cylinder.
- ► Hand operated lubrication system for vertical columns bearings.





Saw head moving on linear guides with preloaded ball screw slides that grants both a mechanical vibration reduction during the cut and greater cutting stability.



Blade moves on graded cast iron wheels. Driver wheel on specially designed spindle of worm reduction gear box.



Set of hard metal blade guide plates, equipped with anti-vibration rollers and extremely wear resistant, that helps to grant longer blade life and cutting stability.



Working light.



▶ Split vice for rigid clamping and burr free cuts: split main vice helps in holding the job on both sides of cutting.

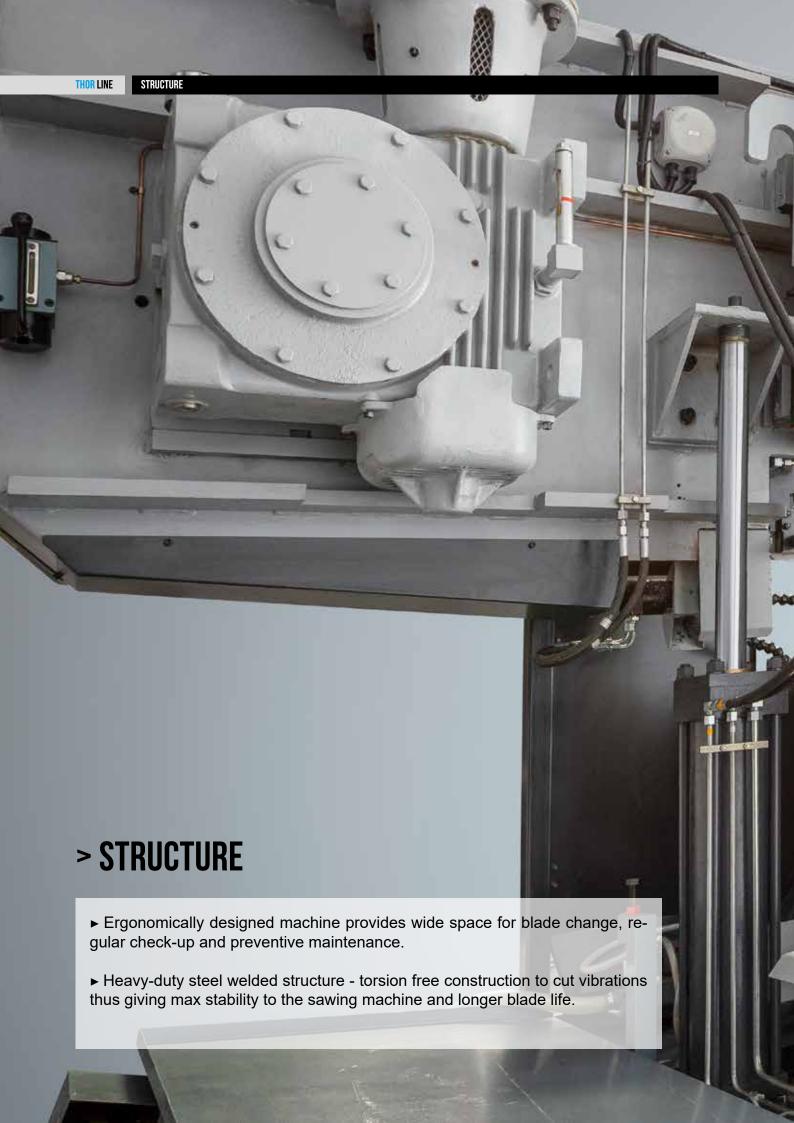
► Hydraulically operated main vice with double acting hydraulic cylinder.

▶ Blade guide united with vice thus granting a self-adjustment according to the size of the material.

► Hydraulic vice clamps the material both in the infeed and outfeed side of the blade, thus allowing to safely execute precise and burr-free cuts.

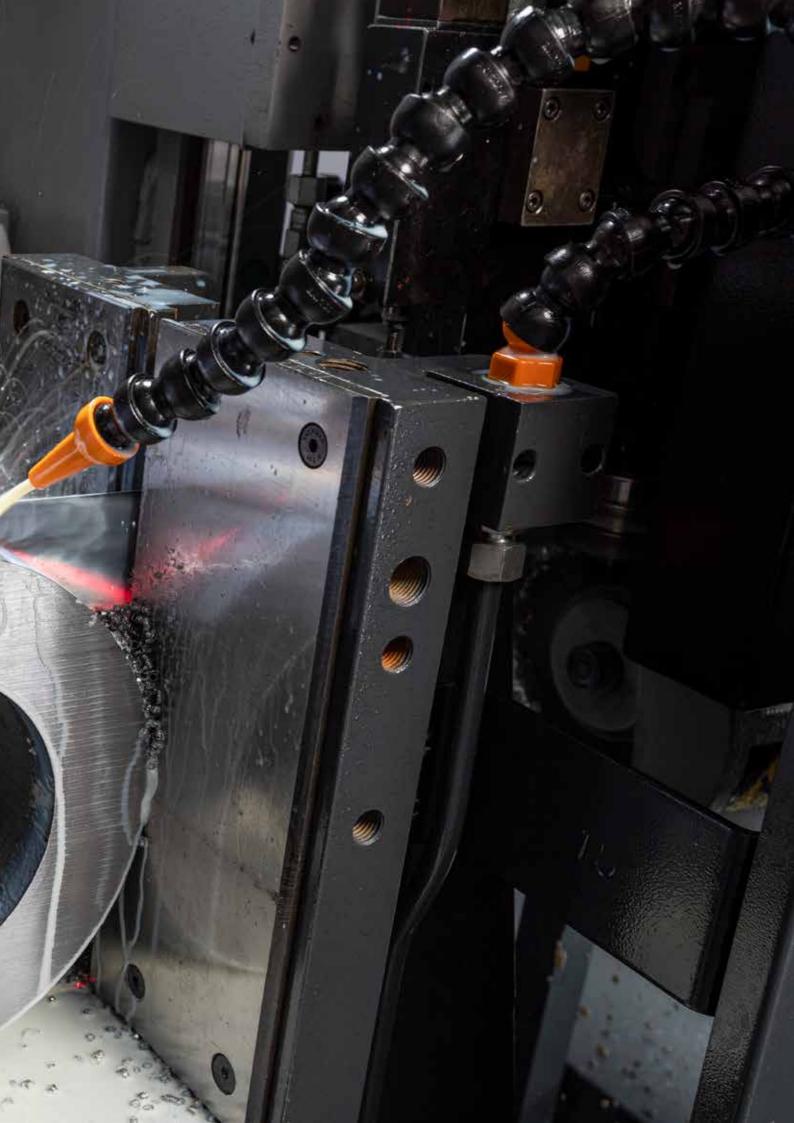
▶ Loading side equipped with roller conveyor and vertical rollers to place and contain pieces to cut.











## > TECHNOLOGY

- ▶ Automatic head down feed regulator through infinitely variable feed control valve that adjusts in automatic saw head down feed rate according to size and hardness of material.
- ▶ The chip auger ensures better operating conditions and reduces processing time by preventing passive working times of the production process for the manual waste removal.
- ► Auto-setting of saw head height.





Inverter for infinite variable blade speed allows to adjust the saw blade rotation speed according to the type of material.



Electric motor is coupled to the gearbox. Saw blade speed change through inverter for optimum productivity and tool life.



Latest generation hydraulic power pack with high efficiency and low consumption. Separate hydraulic power pack and tank for easy maintenance.



Fast approach device grants a quick descent of the saw head very close to the material, thus reducing the cycle time and blade damages indipendently of the size of the material.





## > CONTROL

- ▶ User friendly programming of cutting cycles.
- ▶ Electrical control panel with hmi and push buttons, emergency stop button, main isolator, PLC, VFD, step down transformer, auxiliary contractor, cable connector and connector with fuses.
- ► Hydraulic valve and feed pressure adjustment valves are fitted on control panel for easy operation.

	HMI	STANDARD PLC
FUNCTIONS / CAPABILITIES		
Head feed rate on display	٧	×
Colour	٧	black & white
Screen visibility and sharpness	high	average
HMI & PLC memory	high	low
Program uploading and downloading	easy	difficult
Download without laptop at site by SD card	٧	×
Communication	Analog and Modbus both	Modbus only
Input/Output increment	٧	×
Additional modules	can be added	cannot be added
Saw motor speed set limit	٧	×
Feed scale (feed rate indicator)	٧	×
Language option	٧	٧
Analog I/O	٧	×
Alarm message	Y	×
AVAILABLE COMPATIBLE OPTIONS		
Chip conveyor On/Off	٧	×
Coolant / mist	Υ	٧
Saw VFD communication	٧	٧
Blade speed limit	٧	×
Saw head up with saw ON/OFF	γ	٧







#### **SERVICE & SUPPORT**

The Mep After Sale Service supports Customers with a range of services that for years have been one of the Company's excellence.



#### **SPARE PARTS**

Our technical staff is always ready to guarantee you the best assistance in the identification of the spare parts, even for machines out of production, and shipping by the fastest couriers within 24-72 hours after placing the order.

Moreover, storage and modern logistics ensure that our spare parts warehouse is constantly optimized in order to guarantee maximum availability.



#### **MAINTENANCE PLANS**

A regular maintenance has several benefits: less frequent failures and breakages, longer life of the sawing machine and its parts, more efficient system.

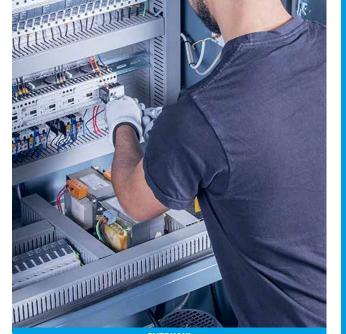
Find out which maintenance plan is the most suitable for your production needs or check if the maintenance KIT suitable for your sawing machine is available. Maximize efficiency to avoid any unpleasant events! Prevent expensive downtime by relying on the experience of our after sale service team.



#### **TRAINING PLANS**

Conceived for your MEP sawing machines or cutting lines: these cutting-edge courses are oriented to customers and workshop practice and they are about notions and practice directly on the machine!

Stand out from the competion by taking full advantage of the potential of your sawing machine!



#### **OVERHAUL**

Restore the efficiency of your sawing machine by improving productivity, cutting precision and safety.



#### INTEGRATIONS AND OPTIMIZATIONS

Upgrades to enhance the software version in use, along with the integrations needed to connect its parts with other systems, maximize the efficiency of your workshop by making the most of its potential.

## OUR EXPERIENCE AND SUPPORT TO GRANT YOUR EFFICIENCY, ALWAYS!

## AFTER SALES PROGRAM

Given the primary importance of Customer Satisfaction, particular attention has been paid to the management of the After Sales Service by a highly specialized internal staff that constantly interacts with quality control, Authorized Customer Service Centres, Sales Office and End Customers.

## > NOTES





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