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MACHINE MODEL

# H 650

Semiautomatic double column straight cut bandsaw

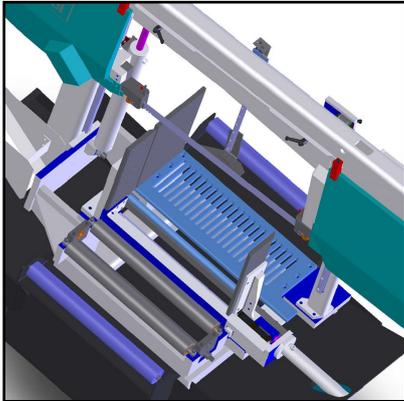
Short description

H 650 is a double column, semiautomatic bandsaws for straight cut of tubes, pipes, profiles, beams and and solids (up to 280mm) suitable for carpentries, steel works factories, structural steels and tubes producers. The machine has a wide working area to support material before and after the blade and electrowelded sawframe structure with hydraulic descent.



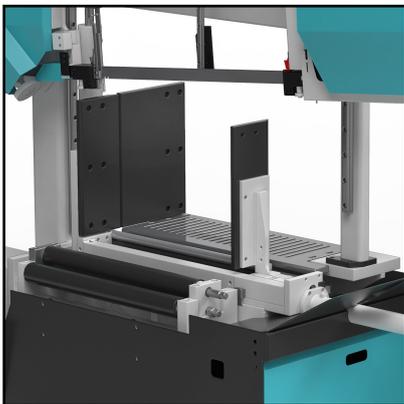
Cutting capacity at 0°	Round: 510mm - Square: 480mm - Rectangular: 650x450mm
Cutting capacity with bundle device	Max: 650x450mm - Min: 125x15mm
Cutting capacity at 0° for solids (C45)	280mm (350mm con motoriduttore 4KW e lama 41mm)
Minimum scrap-end with bundle device	250mm
Fixed vice full stroke	650mm
Blade motor	3KW (4kw in option)
Blade speed	15-100 m/min
Blade size	5320x34x1.1mm (option: blade h. 41 mm)
Blade tension	1900kg/cm2
Blade inclination	6°
Weight	2100kg
Machine size	1895x2870x2300mm

## Features



### Wide working area

The machine is equipped with a wide working area to have full material support while cutting (even on solid material and big diameters and sections). To ease material loading the machine has 2 free rollers before the blade (one more lifting roller is optional); after the cutting line the material is supported by a perforated plate..



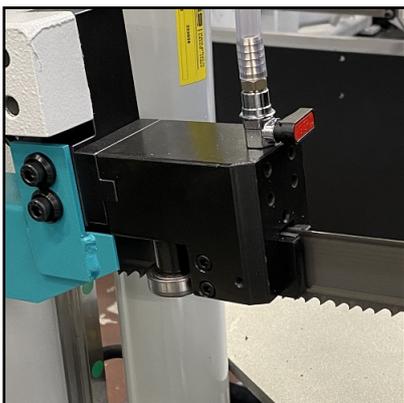
### Fixed vice

The bandsaw's fixed vice has an hydraulic cylinder with 650 single full stroke that provides for a complete and accurate material blocking. All movements are on recirculating ballscrews.



### Electrowelded sawframe

The sawframe as an electrowelded, rigid structure with hydraulic descent (the user can regulate pression and speed by selectors on mobile consolle); the bow slides on double linear guides and recirculating ballscrew metal pads. Thanks to the rigid structure and the perfectly balanced sawframe descent the machine can keep a constant feeding rate while cutting; also vibration are reduced. All this details allow to have a perfect cutting process on a wide range of materials and diameters.



### High blade tension

Imet bandsaws have a high blade tension to avoid failuers and breakages during the cycle: H 650 blade is quipped with control microswitch for immediate stop if the blade loose tension. Band allignment is provided by hard metal bladeguides sliding on linear guides with supplementary bearings.



### Inclined blade

All Imet bandsaws for structural steels and profiles have an inclined blade (6° for H 650) that optimize cutting cycle and feed rate: the band is never parallel to the working plate and the material so that the machine is always working only on a material section (even on solid plates or square tubes) even while doing the end-cut. This gives relief to the blade, avoiding stress, increasing performances and extending blade-life.



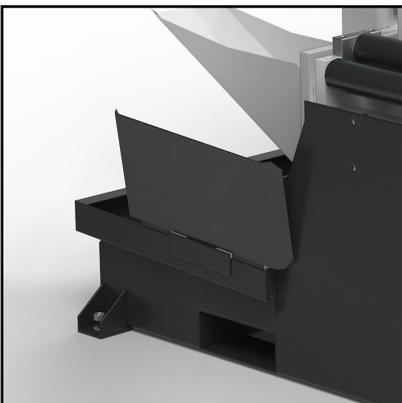
### Material detection device

The machine has a mechanical material detection device that goes down together with the bow and allows to have fast approach to the material and detect the first-cut point. This allows to have a fast descent while not cutting, when the device "touches" the material the machine uses the feed rate set by the operator optimizing the cutting time.



### Mobile panel control

H 650 is equipped with a mobile panel console with control LED for blade tensioning, blade guard opening, motor thermal block and electrical tension. Through the control the operator can select the cutting mode he wants between 3 different end-cutting modes: bow goes up with blade turned off, the blade still on when the sawframe came back in original position, the sawframe doesn't go up when cycle ends.



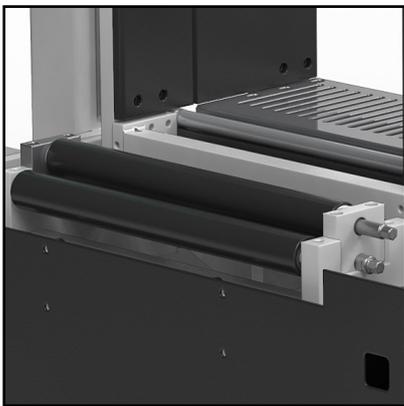
### Chips tray and brush

The machine has a standard motorized brush with nylon teeth (also available with metal teeth) to remove chips from the blade while in the back of the machine there's a tray to collect all the remainings (transported by the coolant liquid during the process).



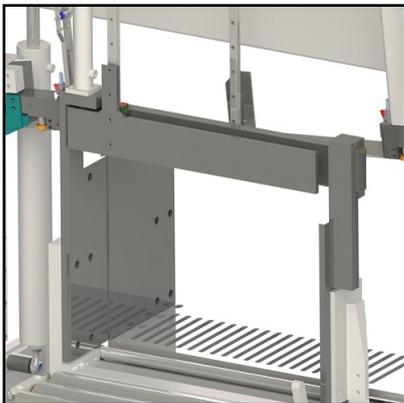
**High performances pack** **OPTIONAL**

It's possible to optimize cutting performances both on solids and profiles (big diameters and increase capacities for solids from 280mm to 350mm) by adding the pack with: blade motoreducer with 4KW power, 41mm blade height and hydraulic tensioning system.



**Supplementary loading roller** **OPTIONAL**

It's available in option a supplementary horizontal roller on loading side (positioned between the two standard rollers) dedicated to ease the loading and dragging of the material during the cycle. The roller has a lifting system through a lateral lever and rotation by handwheel that allows to lift the bar and reduce friction while loading it.



**Bundle cutting device** **OPTIONAL**

Bundle cutting device is hydraulic driven with horizontal adjusting mechanical device that gives the possibility to cut a pack of tubes, pipes or bars. Maximum size is 650x450mm, minimum 125x10mm.



**Laser ray** **OPTIONAL**

The laser ray (installed under the sawframe and descending together with the bow) points the cutting line on the material, giving the user the possibility to see where the machine's going to cut.



**Minimal lubrication** **OPTIONAL**

Minimal lubrication system with nozzle and 1.3l tank.



**Loading and unloading roller table** **OPTIONAL**

Free roller table that can be applied to both loading or unloading side. The table is equipped with 1 supporting leg and steel rollers. Connection element are not required with H 650 (machine has already one roller on each side to attach the table). Single module is 1.5 meter long with 1500kg capacity.



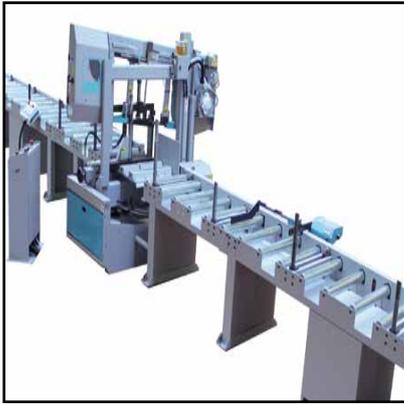
**Digital reading unloading roller table** **OPTIONAL**

Unloading side roller table with digital length stop, manual positioning and set value displayed on LCD screen. The table has steel supporting rollers while measure reading is made by magnetic encoder. Available in 3, 6 and 9 meters lengths.



**Unloading roller table with motorized stop** **OPTIONAL**

Unloading side roller table with motorized length stop with 5.7" touch display for system programming that allows to set up to 20 cutting lengths. Movement provided by toothed belt and motoreducer with pneumatic cylinder that provides for accurate system stop while position reading by encoder on rack; automatic 50mm retreat to ease the unloading. Available: 3, 6 and 9 meters.



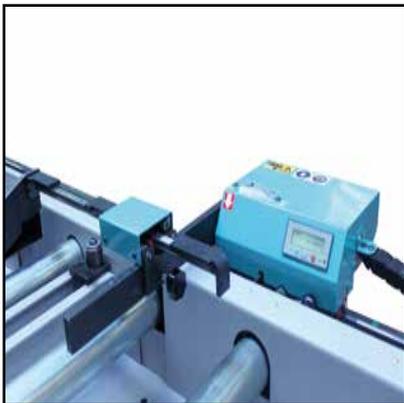
**Loading side motorized roller table** **OPTIONAL**

Loading side motorized roller table with mobile controller with easy button system to start/stop the system. Movement is provided by a brushless motor with rack and pinion; motoreducer managed by inverter. Lengths available: 3, 6, 9 and 12 meters.



**Unloading side motorized roller table** **OPTIONAL**

Unloading side motorized roller table with mobile controller with easy button system to start/stop the system. Movement is provided by a brushless motor with rack and pinion; motoreducer managed by inverter. Lengths available: 3, 6, 9 and 12 meters. Unloading table can be ordered only together with loading RTR.



**Digital reading length stop with manual position** **OPTIONAL**

Only suitable with RTR roller tables, the RL has manual positioning with digital reading (by LCD display) length stop. The system is equipped with automatic slowdown sensors. Availbale: 3, 6, 9 and 12 meters.



**Motorized length stop** **OPTIONAL**

Only suitable with RTR roller tables, the RR system has numerical control measurement functioning in with fast approaching and automatic slowdowns by material detection. Availbale: 6, 9 and 12 meters



**Pair of vertical rollers**

**OPTIONAL**

Pair of vertical rollers to prevent material falls, made in steel. Max. 2 pair on a single RTS table.



**Single vertical roller**

**OPTIONAL**

Single vertical roller to prevent material falls, made in steel. Max. 2 element on a single RTS table.