



## Semi-automatic Heavyduty Bandsaws

- Model Number : **SH-1713**
- Design Style : **Large Section Cutting: Billets, Ingots, Dies, Plates**

### Specifications

Max. Capacity	Round	1300 mm (51")
	Square	1300 mm (51")
	Rectangular(H x W)	1300 x 1700 mm (51.2" x 67")
Saw Blade	Size(LxWxT)	13000L x 80W x 1.6Tmm (512" x 3.1" x 0.06")
	Speed	15-80 m/min. (49-264 fpm)
	Tension	Hydraulic Controlled
	Guide	Tungsten Carbide Blade Guide (Hydraulic Clamping Force)
	Cleaning	Electric Power Driven Wire Brush
Motor Output	Blade	20 HP (15 KW)
	Hydraulic	3 HP (2.2 KW)
	Coolant	0.5 HP (0.37 KW)
Tank Capacity	Hydraulic Oil	160 Liter
	Coolant	200 Liter
Vise Control Method		Hydraulic
Split Vise		Yes
Double Sides Material Feeding		No
Weight		18000 Kgs (39600 lbs)
A (Bed Height)		620 mm (24.4")
B (Length)		3000 mm (118")
C (Width)		5892 mm (232")
D (Height)		4228 mm (166.5")

### Machine Features

## SH-1713

### Machine Structure

- The heavy duty, rigid saw frame is supported by two large bore hydraulic cylinders, providing unsurpassed rigidity, and the smoothest cutting attainable throughout the cutting cycle.

- Dual Column design with rigid, precision ground columns ensures smooth saw frame movement and the consistently stable cutting force required throughout the cutting cycle.

## **Blade Drive & Lubrication System**

- Planetary gear reducer drive is used to drive the blade and provides an increased level of torque efficiency than a worm gear reducer. With Cosen's specially designed planetary gearbox equipped to your machine, mechanical efficiency can be raised to above 90%, largely increasing cutting efficiency and saving your electric bills. While due to low efficiency, the traditional worm gearbox may fail to drag along the blade and cause jammed blade, Cosen's planetary gearbox would not have this problem at all. Specially designed to sustain high lateral pressure, this drive system facilitates even more perfect cutting performance.
- Inverter Blade Speed Control is used for higher efficiency and accurate infinitely variable blade speed with easy to read LED speed indicator.
- Powered Chip Brush is driven by an independent electric motor for optimum blade cleaning, prolonging blade life & blade guides.
- Hydraulically powered guide arm is positioned from the operator's counsel permitting more efficient cutting by being moved closer to the material.

## **Blade Guidance System**

- Hydraulic Blade Tension insures consistently accurate recommended blade tension for straight cuts and increased blade life. The blade tension is slightly released when the machine is idle, resulting in longer blade life.
- Hydraulic Blade Tension System, with large easy to read pressure gauge, makes changing saw blade easy and convenient.
- Carbide blade guides are activated hydraulically providing consistent and correct blade guide adjustment insuring straight cuts.
- Carbide Blade Guides provides continual self-adjusting blade support for straight cuts and are relieved to facilitate coolant flow thru the guides for extended blade life.
- Additional blade guiding bearings contacting the back of the blade provides extra support for added penetrating force for faster cuts.
- Heavy cast iron moveable Guide Arm is hydraulically powered from the operator's control counsel for easy operation, and efficient cutting.

## **Control**

- Last Cut function will allow the operator to complete a cut with the machine able to safe shut itself off after finishing the last cut of the day.
- Ergonomically designed, user-friendly control panel.
- Precision Feed Pressure control valve with micro-precision adjustment.
- Saw Blade Height Selector allows the user to adjust the saw frame height and cutting depth.

## **Material Feeding and Clamping**

- Hydraulic driven work bed with rollers provides a safe and convenient way to load and unload the material, and the material can be fed from the front side or the rear side of the machine with equal ease.
- Hydraulically controlled movable work bed for moving large material safely.
- Vises are located on both sides of the blade and are driven by three oversized, full stroking hydraulic cylinders, which can clamp large material securely throughout the cutting cycle.
- Stock Position Cylinder, which is built in the fixed vise, will push the stock away from the fixed vise for easier handling and lifting.
- Shadow Light projects the blade line on the material making measuring lengths easy.

## Safety

- Blade breakage and/or slippage are detected automatically and will safely shut down the machine automatically.
- Interlock design in electrical and hydraulic system prevents the saw from accidental start, i.e. work vise and blade guides need to be clamped first before blade starts, guide arm will not move until the blade guides are released from clamp pressure.
- All moving parts, blade covers, and guarding on the saw are painted Alert Orange to increase safety alertness.

## Floor plan

