



## Semi-automatic Heavyduty Bandsaws

- Model Number : SH-4030
- Design Style : Large Section Cutting: Billets, Ingots, Dies, Plates

### Specifications

<b>Maximum Cutting Capacity</b>	Round	300 mm (12")
	Square	300 mm (12")
	Height x Width	300 x 400 mm (12"-15.7")
<b>Saw Blade</b>	Size	3820L x 34W x 1.1T mm (150.4" x 1.3" x 0.042")
	Speed	21,38,55,68,81 m/min (60Hz) (70,127,180,224,267 fpm)
	Tension	Hydraulic (with blade breakage detector)
<b>Motor Output</b>	Blade	3.75 kW (5 HP)
	Hydraulic	0.18 kW (1/4 HP)
	Coolant	0.1 kW (1/8 HP)
<b>Tank</b>	Hydraulic	25 L (6.2 gal)
	Coolant	60 L (15 gal)

### Machine Features

## SH-4030 Machine Features

### Machine Structure:

*Oversized hydraulic cylinder* supports the *rugged saw frame* with heavy-duty universal ball joint accomplishing smooth & consistent downfeed through the entire cutting cycle. Special wear resistant DU bushing works inside the precision bore solid cast hinge and ground pivot shaft to ensure durability and long useful life.

The saw head adopts a back tilt design which allows the blade to twist less than traditional bandsaws between the wheel and blade guide; thereby putting less stress on the blade, insuring longer life.

### Blade Drive:

The *gearbox* is specially designed to accept high lateral pressure. Unlike conventional gearboxes, the Cosen design accepts more pressure during operation and will not create thermal distortion, providing long gearbox life under production conditions.

## **Blade Guidance & Lubrication System:**

*Carbide guides* securely guide the blade during the cutting cycle. The carbide is relieved so that coolant can both cool and lubricate the blade during the cut.

The *bearing guides* eliminate blade stress by pre-aligning the blade before it enters the carbide guides. Two *additional guides* located on a central axis support the blade from the top, giving it extra penetrating force for faster cuts.

*Hydraulic blade tensioning device* provides correct blade tension every time it's put on.

*Integral coolant system.* Coolant is supplied at four critical points: exit & entry of blade through blade guides, middle of cut via *adjustable flex hose*, and blade cleaning brush.

Synchronized power driven blade brush effectively cleans chips from blade to extend blade life.

## **Control & Automation:**

*Precision cutting feed rate valve system* for optimal cutting performance in any material.

*Automatic work height selector* positions the saw frame to a safe clearance above the work piece after cut-off, so that the next piece can be positioned without damaging the blade.

## **Material Clamping & Feeding:**

*Split vise jaws* on the machine vise are standard. The split front vise will hold the work piece on both sides of the blade for a burr-free cut.

*Hydraulic vise* enable clamping and unclamping of any material from the operator's control station.

*Ductile cast iron vises* with replaceable hardened wear plates.

*A built-in horizontal roller* located on the entry side of the saw to facilitate smooth material feeding.

*Discharge Table* with built in coolant return adequately supports cut-off stock and provides coolant savings in the long run.

## **Safety:**

All blade covers and guarding on the saw are painted Alert Orange to increase safety alertness.

Conduits protect all exposed electric wiring and hydraulic circuits.

## **Standard Accessories:**

*Blade "clip" device* eases blade changing when necessary by holding the blade on the band wheel during installation, making it very easy for one person to change the blade.

Additional flushing hose for cleaning

Bi-metal saw blade

Tool Box with tools, leveling pads, and an additional wire brush

Operation & parts manual