

## Laxman Horizontal Metal Cutting Bandsaw Machine

**High Performance Compact & Economical**



**Model BLM hs 1 Bandsaw**

### TECHNICAL SPECIFICATION

<b>CUTTING CAPACITY</b>					
Model		BLM-1	BLM-1HS	BLM-2	BLM-3
Round	MM	175	200	300	350
Square	MM	150 X 150	175 X 175	250 X 250	300 X 300
Rectangular	MM	200 X 140	200 X 140	350 X 150	400 X 150
<b>DRIVE</b>					
Drive Motor	-----	0.5 H.P., 1440 RPM	1.0 H.P., 1440 RPM	1.5 H.P., 1440 RPM	2 /1.5 H.P., 1440 RPM
Coolant Pump	-----	0.15 H.P., 440 Volts	0.15 H.P., 440 Volts	0.15 H.P., 440 Volts	0.15 H.P., 440 Volts
Blade Speed	Meter/Minute	25,30,40	20,35,55,75	20,35,55,75	20,35,55,75
<b>MACHINE SPECIFICATION</b>					
Saw blade-carbon or bi-metal	MM	2540 x 20 x 0.9	3000 x 27 x 0.9	3760 x 27 x 0.9	4100 x 34 x 1.1
Guide pulley	MM	340	400	496	496

diameter					
Floor space L x W x H	MM	1500 x 570 x 870	1630 x 570 x 870	2400 x 830 x 1050	2550 x 830 x 1050
Net weight	KG	272	322	450	520
Packed weight	KG	381 Approx	431 Approx	540 Approx	610 Approx
Optional	Universal Vice for angular degree cutting				
	Single Phase Saw Motor, Pump, Contector				
	Variable speed A/c Drive For blade saw				
	Semi Auto	Not available	Hydraulic Motor 1hp	Hydraulic Motor 1hp	Hydraulic Motor 1hp
		Hydraulic operated up , down and vice clamp and decamp Cycle type and manual both option available in machine			
	Fully automatic	Not available	Hydraulic Motor 1hp	Hydraulic Motor 1hp	Hydraulic Motor 1hp
		Not available	Shuttle vice movement 200mm	Shuttle vice movement 200mm	Shuttle vice movement 200mm
		Not available	PLC and Hydraulic solenoid valve base control		
		Hydraulic operated up – down, main vice clamp - decamp, shuttle vice clamp - decamp, shuttle vice auto feeding Cycle type and manual both option available in machine, in case Blade seepage or breakdown then automatic retract or shut down			

## SPECIAL FEATURES

- Less power consumption compared to Hacksaw.
- Continuous cutting by means of circular endless blade.
- Smoother and faster cutting compared to Hacksaw.
- Easy and precise gravity manual feed control.
- Makes optimum use of the blade due to rewelding of blade.
- Special swing cut operation to cut larger section.
- Efficient self centering vice.
- Optional swivel vice for 30°/45°/60° angular cutting.
- Special designed heavy duty gear box
- Blade guide made of bearing & carbide tips
- Less material wastage due to lesser blade thickness.
- Good parallelism compared to hacksaw machine.

Useful for cutting metal pieces, Laxman metal cutting Horizontal band saw is designed to work at three Or four or variable different speed. Which makes this versatile machine ideally suitable for most workshop and tool rooms. Also the most economical of its kind available in India today.

## **A VERSATILE MACHINE**

The wide range of material commonly used can be cut by employing its slow speed for hard steels & S.S type material, medium speed For structural and machine steels and high speed for cutting thinner and softer materials like brass and aluminum at faster rates.



**Model BLM 1 Band Saw**

## **WITH SMOOTHER CUTTING ACTION.**

The entire saw frame can be easily raised by hand, locked at any required height (depending on the size of the job) by means of lever near the material-holding vice handle. When the lever is released, the saw frame and the revolving saw blade come down smoothly on the metal.

This smooth action is

achieved hydraulically by controlling the flow of oil passing through a oil control valve. The arrangement effectively eliminates any possible damage to the teeth blade due to a sudden drop.

## **EFFICIENT CLAMPING –AND A SWIVEL VICE,**

The two vice-jaws are both fixed on a single long screw, half of on a single long screw which has left hand thread and other half has right hand threads. Thus turning of the screw by means of the long handle provided brings the jaws together vice as fast as when one jaw is fixed to the machine body.

A bar stop (which may be swivel vice when not required) is useful as a built-in gauge for cutting off a number of pieces of equal lengths. And using a swivel vice (which when ordered with the machine is supplied at no extra cost) material may be cut at any angle up to 45°, thus adding to the versatility of the machine.

Two easily adjustable arms with carbide tipped guides with upper and side bearing support at their ends can be locked close to the jaws, keep the saw blade aligned on the job for an accurate, smooth and controlled vertical cut with a minimum of wear on the blade.

## **IT USE A WORM GEAR DRIVE.**

The machine is driven by a robust motor using a belt a step cone –pulley arrangement to give the tree or four cutting speeds .A case-hardened worm, mounted on the same shaft as the driven cone-pulley, actuate a worm wheel (both run in an oil bath to reduce wear to minimum) thus reducing the speed of the driving saw pulley mounted over latter. An endless saw blade passes over this pulley and the driven saw pulley is easily tightened in front of the frame. The same nut is loosened for removing the blade, which is a simple and quick operation.

## **FEED CONTROL IS PRECISE AND EASY.**

The downward feed of the blade and the pressure on the material are the conveniently controlled by a Nut which can be suitably adjusted for cutting both large and solid bars (where greater pressure is required) as well as smaller job and hollow thin-walled tubes (needing low cutting pressures) This pressure of cutis clearly read by an indicator on a straight graduated scale fixed on the side of the machine.

## **AND CUTTING MORE EFFICIENT IN TIME AND BLADES**

To relieve the load on the blade, an ingenious SWING-CUT arrangement is designed in to the laxman bandsaw. By means of a simple lever control,



**Model BLM hs 3 BandSaw**

the complete saw frame can be given a see-saw swinging movement so that the saw blade cuts the metal in small convex arcs instead of a straight line cutting. The swing-cut design gives a tremendous advantage whilst cutting big sections and hard metals. (For cutting thin section and softer materials, the conventional straight motion is generally sufficient.) It eliminates the need for frequent changing of the blade and cutting pressure while cutting materials of different hardness and sections, at the same time cuts with a high efficiency.

## **AND THEN THERE'S SAFETY**

At the end to the cutting operation, the saw frame comes down on an automatic stop arrangement which instantly cuts off the supply to the main motor. Thus prevents any possible accidental breakage or loss of power.

A separate 0.15 H.P. motor is provided for the coolant pump, to deliver the coolant from the tank underneath onto the saw blade which, with the

frictional heat, might otherwise distort or even break through this motor is electrically geared with the main motor to start simultaneously, it can be cut off by an independent switch on its body if the coolant is not required.

A chip tray provided under the frame collects all the chips and cuttings, allowing easy cleaning.

Wire brush assembly provided for dropdown the chips of blade, To get high efficiency of the blade.

## **Laxman Fully Automatic Horizontal Metal Cutting Band Saw Machine Model Auto BLMhs-1**

An ample array of superlative **Fully Automatic Bandsaw Machine** is provided by us that are manufactured from the optimum quality raw materials. We are counted among the prominent Fully Automatic Bandsaw Machines manufacturers, based in India. Robust structure, high durability and excellent performance are some of the unique features of these Bandsaw machines.

We are actively engaged into making Bandsaw Machines on a large scale. This product comprises the following features which makes it a preferred in the market:



### **Model AutoBLMhs 1 Fully Automatic BandSaw**

- Dynamometric blade tensioning.
- Blade guide with combined action of side bearings, carbide plates and top bearing
- Cutting vice plate and carriage vice equipped with replaceable hardened plugs to protect the material Supporting surface
- Automatic shutdown
- Hydraulic operated shuttle vise & Carriage Vice assembly.
- Hydraulic or gravitational (natural ) arm down with precision flow control both option are available in this machine
- Step Pulley with V-Belts / VFD for various Band Speed Selection for Various grade of Material.
- Electrical Control Panel with PLC.
- Auto Cycle with single or Double Stock, Single Cycle, Manual Cutting and Cutting setting option are available in Switch board.
- Self driven rotating wire brush Arrangement.
- Chip Removing Tray / Optional Automatic Chips removing Conveyor arrangement.

- Automatic Machine cycle & saw motor "OFF", in case of Blade Breakage or slippage.
- Infinitely Variable Feed Control Valve for Setting the Cutting Rate.
- Availability of Automatic height adjustment for saw frame.
- Bunch cutting also possible.
- Cutting Job Automatic drop In bucket.
- Highly Compact and economical Fully Automatic Horizontal metal cutting bandsaw machine

## "Laxman" Semi Automatic Horizontal Metal Cutting Band Saw Machine Model Semi BLMhs-1

Feeding of the job is done manually. Clamping & Declamping is Automatic. An auto switch is to be pressed in auto mode of machine. Machine automatically clamps the job. Swiveling arm starts running down on gravitational force/ Hydraulic force for cutting operation. After cutting arm automatically goes up. Machine automatically declamps the job. An auto switch is again pressed and the cycle repeats. Feeding knob is given to get required feed of the arm coming down. Get the required speed of the blade by adjusting v-belt depending upon the material to be cut.



**Model Semi BLMhs1 Semi automatic bandsaw**



## LAXMAN MACHINE TOOLS

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