

# HEAVY DUTY LATHES



For High Quality
Precision &
Economical Production





Accr. No. M3111204IN

(AN ISO 9001: 2008 COMPANY)





# HEAVY DUTY LATHES

HIPAT Lathes are robustly designed Precision Machinesfor high grademass or hatch production. They have full proof units combining all the features expected in a high efficiency and heavy duty production Lathes. These machines are fitted with Brass Bearings or Taper Roller Bearings having lead screw & feed shaft, the front side and are suitable for all sliding surfacing and screw cutting operations.

#### **BED**

The bed is of close grained cast iron and homogenous structure, is of wide and robust section extreemly rigid and well rib bed accurately machined and Precision ground bedways ensure lasting accuracy and provide perfect fit with the saddle and tailstock, the bed is normally provided with a full gappiece.

### **HEAD STOCK**

The Head Stock is of sturdy design and robust construction ensuring full utility of modern cutting tools without any vibration, smooth running and perfect balance. Eight different speeds can be had on the spindle. The bearings fitted in the Head Stock are of the following three types:

- i) Parallel Brass.
- li) Conical Brass.
- iii) Taper R oller Bearings.

# **CARRIAGE**

The main slide is of close grain castings with three machine cut slots. The V ways running on the bed as also its upper surface are accurately hand scrapped and aligned accurately with the bed and head stock it is provided with automatic feed system. Direct reading dials are fitted with all the feed screws which arc very accurately threaded and fitted. The Compound slide in indexed for taper turning.

### THREE SPEED GEAR BOX

Three speed gear box is provided with the lathe to obtain coarse, medium and fine cutting ranges, both long and cross on the feed bar through gears. The Lead Screw with accurate threads is to be used only for thread cutting and can be engaged or disengaged with a handle provided on the gear box while the other handle is for obtaining the desired three sppeds.

#### **TOOL POST**

The Tool Post is made out of solid steel and can hold four different tools at a time and can be swivelled at any desired angle.





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### TAIL STOCK

Tailstock, mounted on independent guideways of bed, is of robust design. provide sufficient support to the job and is securely locked by means of bolt acting on grip plate under the bedways It can be off-set for turning tapers.

#### COUNTER

The counter is of robust comruction with its shaft running in ball bearings and is fitted in the base directly under the headstock. The V-Belt/flat belt that transmits power to the spindle cart be easily shifted and can be made loose artight by means of a lever. The main feature of the counter is that it transmits power to the spindle and that V. Belt flat belt as also the main drive belts become loose or fast at a time.

#### STANDARD ACCESSORIES

Plate(One). Chuck Plate(One).centres(Twot Bace Centre. Adapter(One). Stationery Steady (One). Follow Rest Assembly (One). Set of 22 Change. Gears (One), Motor plate (One)

#### **OPTIONAL ACCESSORIES**

Electric Motor, Starter or Electric Coolant Pump. +4Jaw Independent Chuck, & 3Jaw Self Centring Chuck, Gears to cut metric threads. Tapper turning attachment, tool post grinder & Double Gap or Triple Gap etc.

# **Technical Specifications**

Model	HHL-12	HHL-16	HHL-20	HHL-24
Length of Bed	12'	16'	20'	24'
Width of Bed	26"	26"	28"	28"
Height of Centre	24"	24"	26"	26"
Swing over Bed dia.	47"	47"	51"	51"
Swing in Gap dia.	72"	72"	76"	76"
Width of Gap infront of face plate	14"	14"	15"	16"
Swing over saddle dia.	37"	37"	41"	41"
Admit between centre	70"	120"	165"	213"
Spindle hollow	41/8	41/,"	41/,"	41/8
No. of spindle speed	6	6	6	6
Size of Morse Taper	5MT	5MT	5MT	5MT
Leadscrew pitch	2TPI	2TPI	2TPI	2TPI
Power required in H. P.	7.5	10	15	20
R.P.M. of Motor Approx.	960	960	960	960
Approx. Weight in Kgs.	5000	6000	7200	8000

Note: The above dimensions may change due to constant improvement in our designs.

# HIPAT MACHINE TOOLS

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