



# AJAX CENTRE LATHE MODEL

**AM400HD - 650HD**



Machine Tool Exporters to the World since 1940

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**AM400HD-650HD**

The headstock of this machine provides 18 spindle speeds which are in geometric progression and are easily selected , all headstock gears are case hardened and “REISHAUER” ground with splined shafts which turn on anti-friction bearings . The short and rigidly supported spindle is made from Chromium, Nickel, Molybdenum alloy steel, case hardened and fully ground .

The spindle turns on preloaded high precision taper roller bearings on the front and middle with a needle roller bearing at the rear . The spindle assembly is also high speed dynamically balanced . The A1-15” ASA spindle nose allows a large through bored spindle of 155mm diameter and the rugged headstock design provides maximum efficiency for all forms of turning and finishing .

The spindle Start , Reverse and Stop are selected through double Electromagnetic Multi-disc Clutches and Brake Clutch with dual control from headstock and apron .

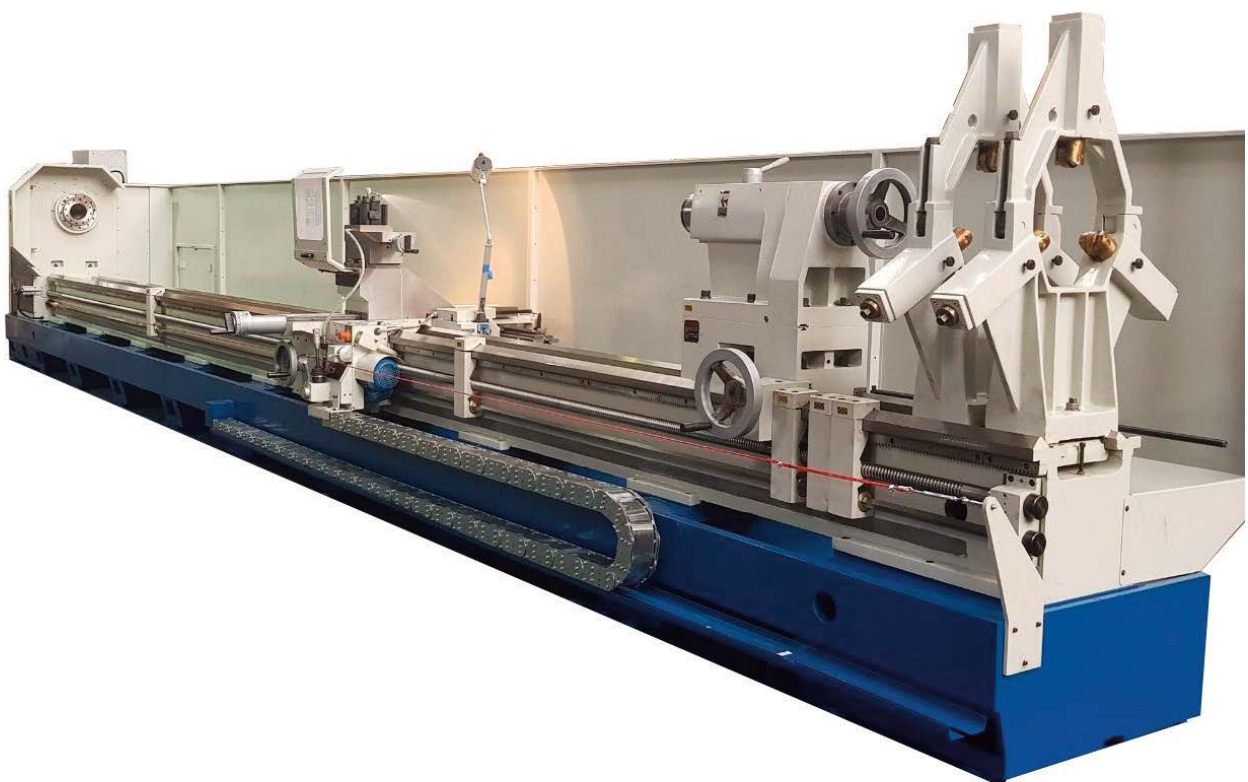
The Headstock also incorporates an enlarged pitch thread system with a ratio of 8:1 , and also allows movement of the carriage with the spindle stopped .

The Gear Box provides a comprehensive range of threads with a safety coupling for the feed shaft to protect gear box from overload , there is also a four directional rapid traverse , as standard on the machine , for longitudinal and cross traverse .

Cascade lubrication to the Headstock, Gear Box , Electromagnetic Clutches and Brake Box is by Automatic pump from a separate oil tank .

The Bed ways and Cross ways are simultaneously lubricated by a centralized manual pump .

All test conditions and deviations are according to the ISO Norm 1708/1979 (E)



<b>Model</b>	<b>AM400HD</b>	<b>AM500HD</b>	<b>AM650HD</b>
<b>CAPACITY</b>			
Centre height (mm)	400	500	650
Swing over bed (mm)	800	1000	1295
Swing over saddle wings (mm)	720	970	1240
Swing over cross slide (mm)	570	770	1080
Length in gap in front of Faceplate	235	235	235
Distance between centres in mm	2000 / 3000 4000 / 6000	2000 / 3000 / 4000 5000 / 6000	Various
Bed width (mm)	510	510	510
Height of Bed (mm)	450	450	450
Cross slide travel (mm)	500	600	700
Top slide travel (mm)	200	200	200
Tool section (mm)	40x40	40x40	40x40
<b>HEADSTOCK</b>			
No. of spindle speeds	18	18	21
Spindle speed range (rpm)	6.3 - 500	3.15 - 500	3.15 - 500
Spindle nose	A1-15"ASA	A1-15"ASA	A1-15"ASA
Spindle bore (mm)	155	155	155
Spindle taper	No.6 MT	No.6 MT	No.6 MT
Spindle Internal Taper	1:20	1:20	1:20
<b>FEEDS AND THREADS</b>			
Range of longitudinal feeds (mm/rev)	0.09-1.04	0.09-1.04	0.09-1.04
Range of cross feeds (mm/rev)	0.045-0.502	0.045-0.502	0.045-0.502
Longitudinal Rapid Feed (mm/min)	2600	2600	2600
Cross Rapid Feed (mm/min)	1300	1300	1300
No. of threads	96	96	96
Range of Metric Threads (mm)	0.6-8.0	0.6-8.0	0.6-8.0
Range of imperial threads (tpi)	3-44	3-44	3-44
Range of module threads (mod)	0.375 - 5	0.375 - 5	0.375 - 5
Range of DP threads (dp)	6-88	6-88	6-88
Enlarged Feeds and Pitch Thread	8:1	8:1	8:1
Leadscrew Pitch (tpi)	2	2	2
<b>TAILSTOCK</b>			
Spindle diameter (mm)	170	170	170
Spindle Morse Taper	No.6	No.6	No.6
Spindle Travel (mm)	330	330	330
<b>MOTORS</b>			
Main Motor (kW)	22	22	22
Rapid Traverse Motor (kW)	1.5	1.5	1.5
Coolant Pump Motor (kW)	0.09	0.09	0.09

## TECHNICAL SPECIFICATIONS



**STANDARD ACCESSORIES**

- Adjustable Feed Shaft Overload Protection Device
- Complete Electrical Equipment
- Coolant System with Pump & Chip Tray
- Electromagnetic Clutches and Brake
- Rapid Traverse
- One-Shot Lubrication
- Taper Reducing Sleeve for Spindle
- Service Tools
- Set of Levelling Screws
- Operating & Spare Parts Manual
- Standard electric's are 415 volts 3 phase 50 cycles



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