

HEAVY DUTY MANUAL LATHE

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MANUAL LATHE
HEAVY DUTY LATHE

A series



L&L

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▶ L&L MACHINERY INDUSTRY CO. LTD, a professional high-precision lathe manufacturing company with its self-developed logo "L&L", was founded in 1991. Based on the sustained family business and profound knowledge in technology, L&L has created its superior A series of manual lathes. Our heavy-duty lathes are developed to furnish optimum performance required by a wide range of industries, including the general machining industry, mining industry, shafts, pattern and roller manufacturing, power utilities, as well as the petroleum industry. All the machines have been designed to meet the strictest requirements of our customers and have obtained a distinguished reputation around the world. In addition to the best quality lathes, we possess innovative R&D teams, experienced staff, as well as a complete after-sales service system. We hold the belief to provide the most precise, innovative and quality-assured lathes for our esteemed customers and regard the belief to be our ultimate goal.

▼ **Manual lathe**
L & L Machinery Industry Co., Ltd.

Manual lathe

▶ **A 42 X 3000, Spindle bore 305 mm(12")**

ADVANTAGE

- Super rigid for heavy cutting design
- One piece meehanite casting
- Bed width 610mm, with double V ways
- User-friendly operation
- Big bore loading capacity
- Between centers 1500-7000mm



Headstock and Operational Panel

- Rigid one piece casting design for heavy cutting.
- Gears and spline shafts are hardened and ground.
- Spindle is supported by high precision taper roller bearings.
- Electro-magnetic brake.
- 18-step speeds provide high torque and excellent cutting conditions.

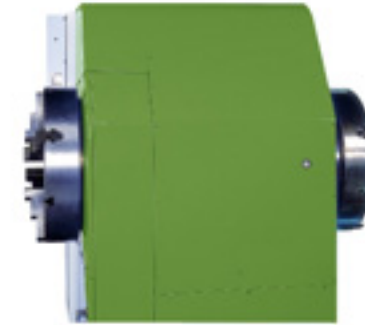


Hydraulic disk brake (opt.)

- 2 sets of hydraulic brake units, to stop spindle quickly
- To eliminate the initial of heavy work piece, extend the life of gears in headstock

Tailstock

- **Quill Diameter:**
165mm: provides excellent support for heavy workpieces.
- **Quill Movement Type:**
 - a. Manual: controlled by the hand wheel.
 - b. Electric & Manual: Switch by lever easily (opt.).
- **Body Movement:**
 - a. Manually by crank. (S.T.D)
 - b. Motorized by reduction motor.



Double Chucks (opt.)

Long workpiece turning stability is achieved by utilizing a second chuck at the rear of the spindle.

Apron and Carriage

- The cross slide uses a ballscrew.
- Rapid traverse is included.
- Friction is reduced because the cross slide and carriage are covered with Turcite B.
- The bed way and cross slide have an automatic lubrication system.
- Exceptional durability is assured as the gears in the apron are nitrite treated.
- Digital readout is available.



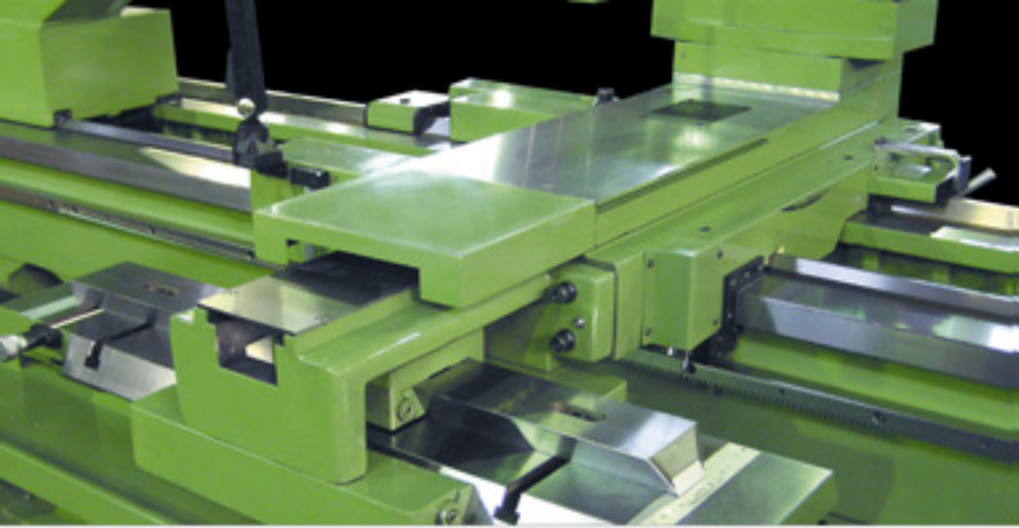
Bed

- "Single piece MEENHANITE" cast-iron, thorough stress relieving.
- Induction heating treated to HRC 52±2.
- Precisely ground for excellent accuracy.

Gear box

- All shafts and gears are hardened and ground to HRC 45.
- The universal gear and box are protected by lubrication and a built-in safety device.
- By simply changing the levers, a wide range of feeds and threads can be easily changed.

Features



▶ **Taper attachment**

- +/- 10 degree strove 470 mm

Accessories



Steady Rest with 3-roller Jaws

- Clamping capacity from 30-300 mm; Ø80 mm quill
- Clamping capacity from 255-455 mm; Ø80 mm quill
- Clamping capacity from 280-550 mm; Ø105 mm quill



American 4-jaw chuck

- 20", 25", 32", 36" 40" for option

3-jaw chuck

- 12", 15", 18", 21", 24", 32", 40"



Quick change tool post

- Flat type quick change tool holder x 2
- V-type quick change tool holder x2
- Ø50 mm boring tool holder x2

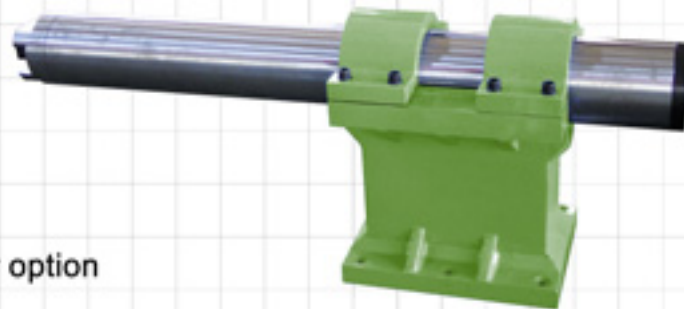


Follow rest

- Clamping capacity from 30-230 mm

Boring Attachment

- Boring bar diameter: 6"
- Length: 1200 mm / 1500 mm
- Tool size: 32 mm
- Sleeve: Ø50 mm~ Ø120 mm for option



▼ **Roller bracket**

- Clamping capacity from 355-720 mm

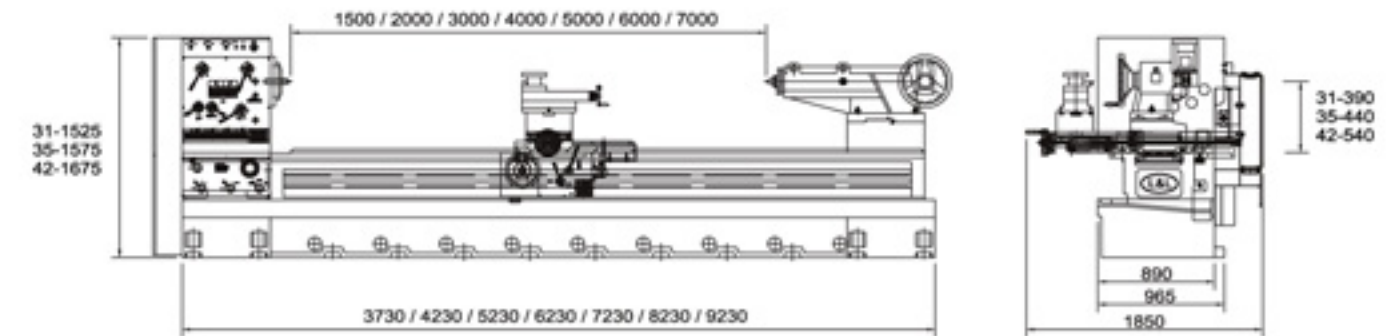


Specifications ◀

model	A31	A35	A42		
	800	900	1100		
Swing over bed	450	550	750		
	1050	1150	1350		
	390	440	540		
	610 mm				
Bed width	610 mm				
Bed way for carriage	2 V ways				
Bed way for tailstock	1 V way and 1 flat way				
Bed way for steady rest	1 V way and 1 flat way				
Between centers	1500 / 2000 / 3000 / 4000 with gap				
	5000 / 6000 / 7000 without gap				
Spindle bore	105 mm	153 mm	230 mm	305 mm	405 mm
	ASA-A2-8	ASA-A2-11	ASA-A2-15	ASA-A2-20	ASA-A2-28
	10-1200 rpm	7~700 rpm	7~600 rpm	5~450 rpm	6~300 rpm
Spindle center	105 mm, 153 mm - MT#5 / 230 mm, 305 mm - MT#6				
Spindle motor	30HP				
Threading	Inch: 30 ~ 0.25TPI (70 sets) / Metric: 1~120 mm (62 sets)				
	DP: 1~120mm (80 sets) / MP: 30~0.25TPI (53 sets)				
X-axis feed	0.0016"~0.048"IPR / 0.04MM~1.2MM MPR				
Z-axis feed	0.0032"~0.096" IPR / 0.08~2.4MM MPR				
X-stroke	600 mm				
Z-stroke	1500 / 2000 / 3000 / 4000 / 5000 / 6000 / 7000				
X-axis rapid traverse	1500 mm/min				
Z-axis rapid traverse	3000 mm/min				
Compound slide stroke	300 mm				
Tailstock quill diameter	165 mm				
Tailstock body movement	MOTORIZED				
Tailstock quill movement	STD: HANDWHEEL / OPT: ELECTRICAL				
Tailstock quill stroke	200 mm				
Tailstock center	MT#6				

- Remark: 1. 305mm spindle bore is only available for A35 and A42
 2. If option "taper attachment", Z-axis stroke will be diminished
 3. Specification subject to change without prior notice

▶ Dimensional drawing



▶ Machine dimensions & weight

A series	Between centers	1500	2000	3000	4000
A31	LxWxH(cm)	3730x1850x1525	4230x1850x1525	5230x1850x1525	6230x1850x1525
	N.W / G.W(kg)	5800 / 6800	6800 / 7800	8300 / 9500	9800 / 11200
A35	LxWxH(cm)	3730x1850x1575	4230x1850x1575	5230x1850x1575	6230x1850x1575
	N.W / G.W(kg)	6300 / 7300	7300 / 8300	8800 / 10000	10300 / 11700
A42	LxWxH(cm)	3730x1850x1675	4230x1850x1675	5230x1850x1675	6230x1850x1675
	N.W / G.W(kg)	6800 / 7800	7800 / 8800	8300 / 10500	10800 / 12200

A series	Between centers	5000	6000	7000
A31	LxWxH(cm)	7230x1850x1525	8230x1850x1525	9230x1850x1525
	N.W / G.W(kg)	11300 / 12800	12800 / 14400	14300 / 16100
A35	LxWxH(cm)	7230x1850x1575	8230x1850x1575	9230x1850x1575
	N.W / G.W(kg)	11500 / 13300	13300 / 14900	14800 / 16600
A42	LxWxH(cm)	7230x1850x1675	8230x1850x1675	9230x1850x1675
	N.W / G.W(kg)	12000 / 13800	13800 / 15400	15300 / 17100