





# H

# **Heavy Duty Precision Lathe**

Known as "The Workhorse" in machine shops across the country, Kingston's heavy-duty HR model has been the industry leader in its class for nearly 40 years. At the heart of this machine is a strong and rigid headstock with a hardened and ground main spindle, which features a 4.06" bore and a 3-point bearing support system for superior cutting capability. Operators benefit from the increased control that comes with 16 spindle speeds (8 – 800 rpm) and a wider range of feeds and threading choices. The unique rib structure of the 22" bedway is made with high-quality casting to ensure greater stability and accuracy in heavy-duty applications. The HR is available in 30", 34" or 40" swing and lengths from 80" – 320".

# **Machine Highlights**

- **20 HP High performance motor** with overload protection relay.
- Powerful headstock for heavy-duty cutting capability.



- 3 16 Step Spindle Speed from 8 800 RPM.
- 4 Main spindle 4.06" (104mm) bore hardened and ground alloy steel spindle for greater accuracy.

Three-point bearing support system for heavy duty cutting capability





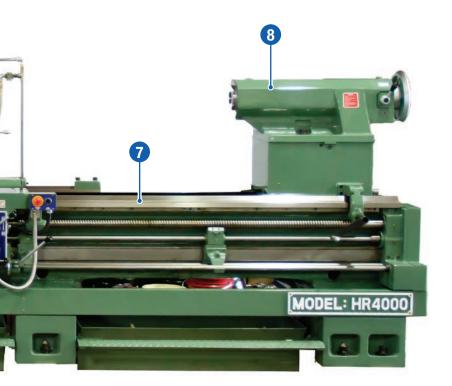
5 Feed Gearbox coarse thread cutting up to 8" lead.



Apron Overload protection device incorporates a cone clutch. An interlock mechanism for threading and feeds.



- **Bedway** Two V way, 22" wide, hardened and ground bedway.
- 8 **Tailstock** Two speed tailstock with convenient clamp lever to lock the hardened and ground quill (5 1/8").



### **Standard Features**

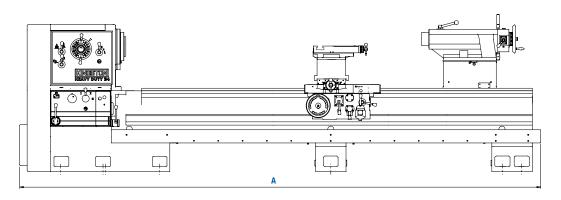
- 20HP, 230V/460V, 3 phase, 60 cycle motor, switch and wiring complete
- 4.06" (104mm) spindle bore
- Spindle nose: D1-11 camlock
- Headstock spindle adaptor ASA-450 to MT#6
- Hardened and ground bedways
- Two-speed drive tailstock quill

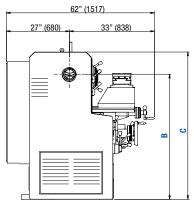
## **Optional Accessories**

- 11.9", 19.7" steady rest with roller jaws
- 23.5" steady rest with roller jaws (40" swing only)
- Roller bracket
- 7.9" follow rest
- Hydraulic brake system (factory install)
- Splashguard (factory install)
- Telescopic Taper Attachment ±8° & 3.5"/foot, 19.7" (500mm) stroke









| Model   | Α            | В                  |  |
|---------|--------------|--------------------|--|
| HR-2000 | 162" (4122)  | HR30: 46.5" (1180) |  |
| HR-3000 | 202"( 5142)  | HR34: 48.6"(1235)  |  |
| HR-4000 | 243" (6174)  | HR40: 51.8"(1310)  |  |
| HR-5000 | 281" (7144)  | C                  |  |
| HR-6000 | 325" (8264)  | HR30: 52.7" (1339) |  |
| HR-7000 | 338" (9880)  | HR34: 57.2"(1454)  |  |
| HR-8000 | 404" (10264) | HR40: 60.2"(1529)  |  |

| HR-30   | HR-34  | HR-40   |
|---|--|---|
| 30"   | 34"  | 40"   |
| 20.7"   | 25.1"  | 31.0"   |
| 41.2"   | 45.6"  | 51.5"   |
| 80" / 120" / 160" / 200" / 240" / 280" / 320" |  |   |
| 22"   |  |   |
| 46.5"   | 48.6"  | 51.5"   |
|   | 30"<br>20.7"<br>41.2"<br>80" / 120" / 1<br>22" | 30" 34"<br>20.7" 25.1"<br>41.2" 45.6"<br>80" / 120" / 160" / 200" / 240" /<br>22" |

Headstock

Spindle Bore 4.09"

Taper of Spindle Bore & Center ASA #450 x M.T. #6

Type of Spindle Nose D1-11 Number of Spindle Speeds 16

Spindle Speed 8–800 RPM, 12–1200 RPM (option)

**Gear Box** 

Number of Feed Changes Fine (20), Normal (40), Course (30)

Range of Feeds per Revolution 0.00048"-0.0168" 0.0024"-0.0337" 0.0384"-0.2694"

Longitudinal Cross ½ of Longitudinal Feed

Leadscrew Diam. & Threads per Inch 1.9" 2 TPI

Threading range Whitworth 2 to 28 TPI (40) / Coarse 5/8" to 8" Pitch (16)

Metric 1 to 14 (31) / Coarse 16 to 200 mm Pitch (61)

Module 0.5 to 7 M (20) / Coarse 8 to 56 M (30)

D.P. 0.5 to 7 M (20) / Coarse 8 to 56 M (30) D.P. 56 to 4 D.P. (40) / Coarse 3.5" to .5" D.P. (30)

**Tool Slide** 

Maximum Travel of Compound 9.4"

Maximum Travel of Cross Slide 21.2"

**Tailstock** 

Tailstock Quill Travel 11.8"
Tailstock Quill Diameter 5.1"
Tailstock Center M.T. #6

Motor

Main Drive Motor 20HP (15kw)
Coolant Pump Motor 1/4 HP

**Dimensions** 

Floor Space (inch) W: 82" L: 193" / 233" / 256" / 312" / 358" / 390" / 431"
Weight (lbs) 30" Swing 10230 / 11770 / 14300 / 15840 / 18370 / 20420 / 23500 
34" Swing 40" Swing 10940 / 12250 / 14790 / 16330 / 18860 / 20900 / 23950



### **Kingston Machine Tool**

5421 Business Dr, Huntington Beach, CA 92649 (714) 894-1648 | Fax (714) 897-2616 kingstonmachine.com

