

SPECIFICATION Spindle bore 9",10",12",15" only fit to swing over bed over 1120mm.

Unit: mm / inch

| MODEL / WIDTH OF BED 24" (610) | | HL-1120 | 1220 | 1320 | 1420 | 1520 | 1620 | | | | | |
|--------------------------------|---|---|----------------|-------------------|----------------|-------------------|----------------|----------------|----------------|---------------|------|--|
| MODEL | HL | 1500 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | 8000 | | | |
| MODEL / WIDTH OF BED 32" (810) | | HK-1120 | 1220 | 1320 | 1420 | 1520 | 1620 | 1720 | 1820 | 1920 | 2000 | |
| MODEL | HK | 1500 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | 8000 | | | |
| CAPACITY | HL | | | | | | | | | | | |
| | Swing over bed | 1120 (44") | 1220 (48") | 1320 (51.97") | 1420 (55.9") | 1520 (59.84") | 1620 (63.78") | | | | | |
| | Swing over cross slide | 810 (31.89") | 910 (35.83") | 1010 (39.76") | 1110 (43.7") | 1210 (47.64") | 1310 (51.6") | | | | | |
| | Swing over gap | 1550 (61.02") | 1650 (64.96") | 1750 (68.9") | 1850 (72.83") | 1950 (76.77") | 2050 (80.7") | | | | | |
| BED | HL | | | | | | | | | | | |
| | Distance between centers | 1500(59.06") | 2000(78.74") | 3000(118") | 4000(157.48") | 5000(196.85") | 6000(236.22") | 7000(275.59") | 8000(314.96") | | | |
| | Height from floor to the spindle center | 1245 (49.02") | | | | | | | | | | |
| | Width of bed | 610 (24") | | | | | | | | | | |
| CARRIAGE | HL | | | | | | | | | | | |
| | Width of gap (Spindle end face) | 560(22.05") (no chuck) actual turning diameter changed by different chuck size | | | | | | | | | | |
| | Length of bed | 3450 (135.83") | 3950 (155.51") | 4950 (194.88") | 5950 (234.25") | 6950 (273.62") | 7950 (313") | 8950 (352.36") | 9950 (391.73") | | | |
| | Width of carriage | 790 (31.1") | | | | | | | | | | |
| CAPACITY | HK | | | | | | | | | | | |
| | Swing over bed | 1120(44") | 1220 | 1320 | 1420 | 1520 | 1620 | 1720 | 1820 | 1920 | 2000 | |
| | Swing over cross slide | 710(27.95") | 810 | 910 | 1010 | 1110 | 1210 | 1310 | 1410 | 1510 | 1590 | |
| | Swing over gap | 1400(55.11") | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2280 | |
| BED | HK | | | | | | | | | | | |
| | Distance between centers | 1500(59.06") | 2000(78.74") | 3000(118") | 4000(157.48") | 5000(196.85") | 6000(236.22") | 7000(275.59") | 8000(314.96") | | | |
| | Height from floor to the spindle center | 1245 (49.02") | | | | | | | | | | |
| | Width of bed | 810 (32") | | | | | | | | | | |
| CARRIAGE | HK | | | | | | | | | | | |
| | Width of gap (Spindle end face) | 540(21.26") (no chuck) actual turning diameter changed by different chuck size | | | | | | | | | | |
| | Length of bed | 3960 (155.91") | 4460 (175.59") | 5460 (214.96") | 6460 (254.33") | 7460 (293.7") | 8460 (333.07") | 9460 (372.44") | 10940 (430.7") | | | |
| | Width of carriage | 880 (34.65") | | | | | | | | | | |
| HEADSTOCK | HL | | | | | | | | | | | |
| | Spindle bore diameter | ø152 (6") | | OP: 230 (9") | | OP: 255 (10") | | OP: 305 (12") | | OP: 380 (15") | | |
| | Spindle nose | A2-11 / OP: A2-15 | | A2-15 / OP: A2-20 | | A2-15 / OP: A2-20 | | A2-20 | | A2-20 | | |
| | Number of spindle speeds | 16 steps | | 12 steps | | 12 steps | | 12 steps | | 12 steps | | |
| TAILSTOCK | HL | | | | | | | | | | | |
| | Range of spindle speeds | 4-420 r.p.m. | | 8-291r.p.m | | 8-291r.p.m | | 7-264r.p.m | | 7-264r.p.m | | |
| | Diameter of barrel | HL- ø125 (4.92") OP: ø150 (5.91") | | | | | | | | | | |
| | Travel of barrel | HK-ø200 (7.88") | | | | | | | | | | |
| THREADS | HK | | | | | | | | | | | |
| | Lead screw diameter and pitch | Dia.60mm Pitch 12mm / Dia 2.36"x2 T.P.I. | | | | | | | | | | |
| | Range of metric pitches | 1~120mm (62 Nos) | | | | | | | | | | |
| | Range of inch pitches | 0.25-30 T.P.I (70 Nos) | | | | | | | | | | |
| FEEDS | HL | | | | | | | | | | | |
| | Range of diametral pitches | 1-120 D.P. (70 Nos) | | | | | | | | | | |
| | Range of module pitches | 0.25~30 M.P. (53 Nos) | | | | | | | | | | |
| | Feed rod diameter | 32 (1.26") | | | | | | | | | | |
| MOTOR | HL | | | | | | | | | | | |
| | Range of longitudinal feeds | 0.072-8.68 mm / rev | | | | | | | | | | |
| | Range of cross feeds | 0.036-4.34 mm / rev | | | | | | | | | | |
| | Main spindle motor | 20HP (15KW) for HL-2000~5000 30HP (22.5KW) for HL-6000~8000 OP: 30HP (22.5KW) / 40HP (30KW) / 50HP (37.5KW) | | | | | | | | | | |
| MEASUREMENT | HK | | | | | | | | | | | |
| | Coolant pump motor | 1/8HP (0.1kw) | | | | | | | | | | |
| | Rapid motor | 1HP (0.75kw) | | | | | | | | | | |
| | N.W. / G.W. (approx) kgs | 7800/8400 | 8300/9100 | 9300/10200 | 10300/11300 | 11300/12400 | 12300/13500 | 13300/14600 | 14300/15700 | | | |
| ACCESSORIES | HL | | | | | | | | | | | |
| | Machine size (LxWxH) | L 3650 / 4150 / 5150 / 6150 / 7150 / 8150 / 9150 / 10150 x W 2050 x H 1540 (HL-1120) L 143.7" / 163.4" / 202.8" / 242" / 281.5" / 320.9" / 360.2" / 399.6" x W 81" x H 61" | | | | | | | | | | |
| | Shipping dimensions (LxWxH) | L 4100 / 4600 / 5600 / 6600 / 7600 / 8600 / 9600 / 10600 x W 2100 x H 2200 L 162" / 181" / 220" / 260" / 299" / 339" / 378" / 417" x W 83" x H 79" | | | | | | | | | | |
| | Standard color | Upper part :RAL-7035 light gray + lower parts :RAL-5015 blue | | | | | | | | | | |
| MEASUREMENT | HK | | | | | | | | | | | |
| | N.W. / G.W. (approx) kgs | 12500/13300 | 13000/13900 | 14100/15100 | 15200/16300 | 16300/17500 | 17400/18700 | 18500/19900 | 19600/21100 | | | |
| | Machine size (LxWxH) | L 4150 / 4650 / 5650 / 6650 / 7650 / 8650 / 9650 / 10650 x W 2170 x H 1590 L 163.39" / 183" / 222.4" / 261.8" / 301.2" / 340.6" / 380" / 419.3" x W 85" x H 63" | | | | | | | | | | |
| | Shipping dimensions (LxWxH) | L 4600 / 5100 / 6100 / 7100 / 8100 / 9100 / 10100 / 11100 x W 2270 x H 2300 L 181" / 201" / 240" / 280" / 319" / 359" / 398" / 437" x W 89" x H 91" | | | | | | | | | | |
| MEASUREMENT | HL | | | | | | | | | | | |
| | Standard color | RAL-9022 | | | | | | | | | | |

- We reserve the right to modify and improve our products without notice.
- Welcome to check with us for other specification and special purpose of functions, which is accepted to be customized.
- HL-1120X1000 is available to be offered on request.

ACCESSORIES



ST10
Face plate with 4-jaw 40"



OP2
Follow rest



OP3
4-jaw independent chuck 40", 50"



OP4
3-jaw chuck (strong type) 20", 25"



OP5
Steady rest ø16", ø24"



OP8
Back splash guard



OP9
Quick change tool post



OP10
CE electric



OP11
Taper turning attachment



OP12
Grinder



OP14
Automated rapid tool post



OP15
Longitudinal adjustable position feed stop



OP17
Tailstock with quill dia. 150 / 200mm



OP18
Tailstock with self-rotary quill



OP19
Boring attachment



OP20
Rear tool post



OP23
Double chuck (Chuck type and size be inquired)

STANDARD ACCESSORIES :

- Lubricating device for headstock
- Spindle motor 20HP
- Electromagnetic brake
- Metric / Inch gear box
- Longitudinal & cross rapid feeding
1. Tailstock two steps device (quill 125mm) for HL
2. Strong electric tailstock (quill 200mm) for HK - manual quill, motorized base
- X,Z-axes auto lubrication system
- X,Z-axes with Turcite-B
- Steady rest ø16"
- Face plate with 4-jaw 40"
- Dead center
- Toolpost screw wrench
- Level pads
- Tools & Tool Box
- Operation manual

OPTIONAL ACCESSORIES :

- Coolant device
- Follow rest
- 4-jaw independent chuck 40", 50"
- 3-jaw chuck (strong type) 20", 25"
- Steady rest ø16", ø24"
- Halogen light
- Digital readout
- Back splash guard
- Quick change tool post (instead of tool post)
- CE equipment
- Taper turning attachment
- Grinder
- Hydraulic copy attachment
- Automated rapid tool post
- Longitudinal adjustable position feed stop
- Five position carriage stop
- Tailstock with quill dia. 150 / 200mm (for HL)
- Tailstock with self-rotary quill
- Boring attachment
- Rear tool post
- Double chuck
- Rear adapter
- Double chuck (Chuck type and size be inquired)

Actual standard accessories shall be subject to the quotation sheet.

DENVER IND.CO.,LTD.

258, Lane 986, Sec 1, Shi Nan Rd., Wu Jih, Taichung Hsien, 41464 Taiwan
 TEL:886-4-2335-4989 FAX:886-4-2335-4969
 e-mail:denver@ms77.hinet.net http://www.topdenver.com



DENVER

ISO 9001



Efficiency Precision



photo shown HL-1120X4000

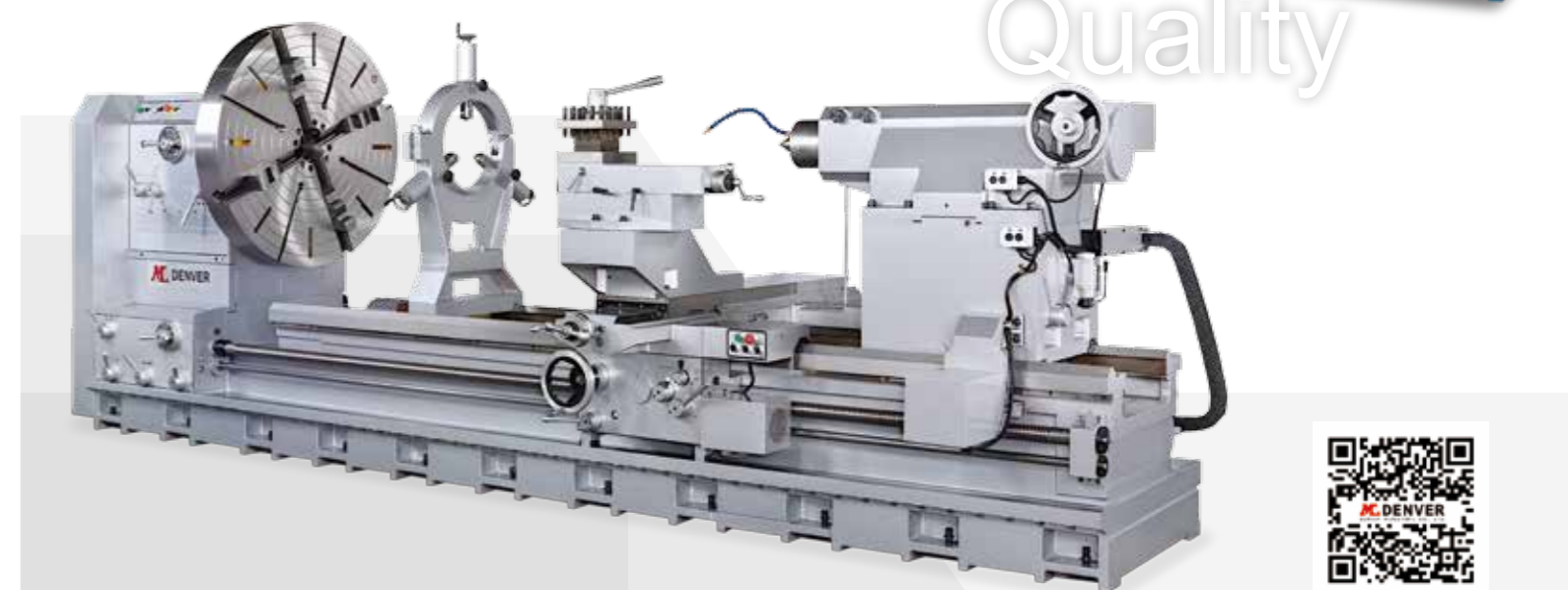


photo shown HK-1600X3000

Quality



http://www.topdenver.com

HL series 1120, 1220~1620 < 38", 44", 48"~63" >

BED WIDTH: 24"

HK series 1120, 1220~2000 < 38", 44", 48"~79" >

BED WIDTH: 32"

X 1500, 2000, 3000, 4000, 5000, 6000, 7000, 8000 < 59", 80", 120", 160", 200", 240", 280", 315" >



Special design for spindle speed change mechanism by adopting turbine rotary type, not easy speed jumping.

Extra 3rd support to be suitable for processing of large work piece and enhanced heavy-duty cutting ability.

Chuck shown on the picture is optional 4-jaw independent chuck. photo shown HK-1600X3000

SPINDLE BORE : 6", 9", 10", 12", 15"

Spindle bore: 9", 10", 12", 15" only fit to swing over bed over 1120mm.

BED WIDTH : 24" (HL series) / 32" (HK series)

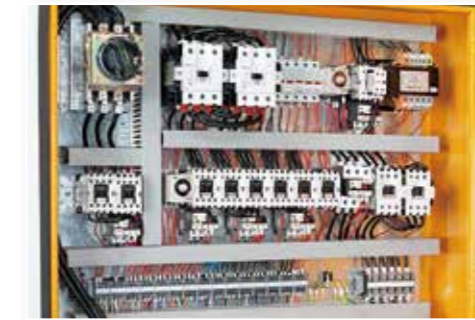
- Swing over bed above 1220~1620 / 2000 mm is available to be customized on request.
- Distance between centers above 8 meter is available to be customized on request.

FEATURES : It is suitable for turning and cutting of large work piece and steel rod materials for heavy industries like oil pipe network, aerospace and heavy-duty shaft processing.



Spindle & headstock

- Bore 6", 9", 10", 12", 15", turbine speed change mechanism with on easy speed jumping and three-point support for the box.
- Fitted with adjustable, electromagnetic brake for easy braking adjustment according to different work piece materials and speed.
- Gear and shaft are made of super alloy material with bearings to offer durable cutting and low production noise.
- Sealed oil bath lubrication system with enforced oil supply by mechanical pump to achieve better lubrication effects.



Electric component :

20HP/30HP motor, 2 stage safety start-up device and overloading power cut system.



Gear box :

Adopt quick-change universal metric/inch gearbox for inch, metric, DP, MP, threading and multiple threads, all function is reached without any change gear, wide and complete range of threads and operating easily to improve production efficiency.



Apron :

Equipment with rapid feeding, rapid transmission, forward and reverse movement and safety device matched with sealed oil bath auto-lubricating system.

Base :

- One piece casting work with reinforced inner structure, extra 3rd support to be suitable for processing of large work piece and enhanced heavy-duty cutting ability.
- The gap part base special with reinforced structure, it is no influence on cutting stability to break the gap for necessary.

Saddle :

Anti-friction processed surface with regular oil injection, lubricated and friction endurable.

Processing :

Base, spindle, saddle, dovetail slot surface of cross slide, top slide and tailstock quill are high frequency treated, precision ground for extending service life.

Casting :

FC-30 steel are used for main structures like base, spindle, saddle and tailstock, which are annealed and have no deformation.

Tailstock :

Two stage feeding device, swing arm movement to have smooth and labor saving operation.

LAYOUT

Unit : mm

| HL/HK | L1 | 1500 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | 8000 |
|-------|------|------|------|------|------|------|------|------|-------|
| HL | L | 3650 | 4150 | 5150 | 6150 | 7150 | 8150 | 9150 | 10150 |
| HK | L | x | 4650 | 5650 | 6650 | 7650 | 8650 | 9650 | 10650 |
| ITEM | A | B | C | D | E | F | G | | |
| HL | 960 | 1390 | 650 | 480 | 1165 | 1460 | 2050 | | |
| HL | 1120 | 1550 | 810 | 560 | 1245 | 1540 | 2050 | | |
| HK | 960 | 1240 | 550 | 480 | 1165 | 1510 | 2170 | | |
| HK | 1120 | 1400 | 710 | 560 | 1245 | 1590 | 2170 | | |

