

**KENT  
USA**

# HEAVY DUTY LATHE

**HL / HK series**

Efficiency

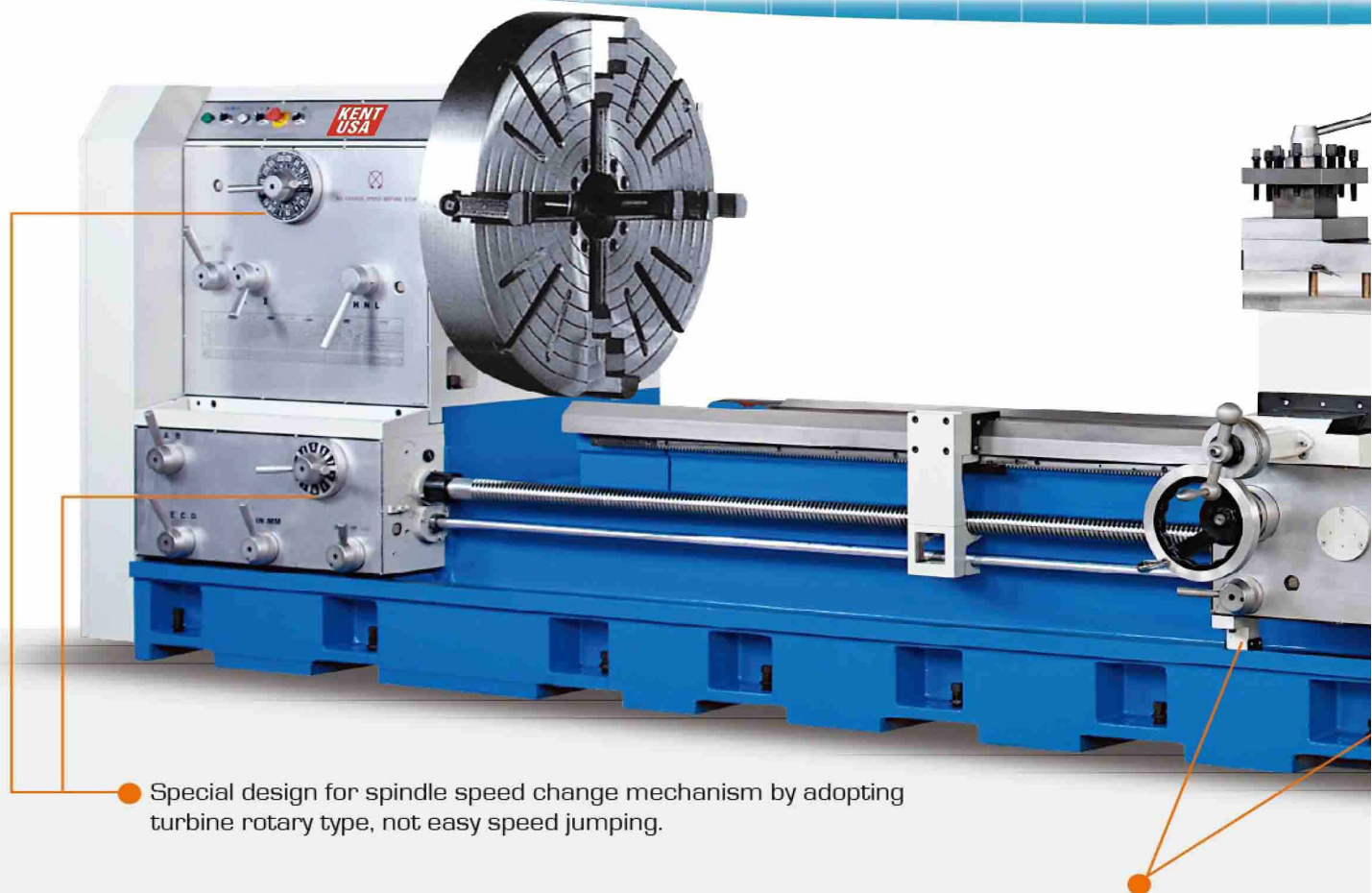
Precision

Quality



<http://www.kentusa.com>

# HL/HK series 37, 44, 44-60 X 2000, 3000, 4000, 5000,



● 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.

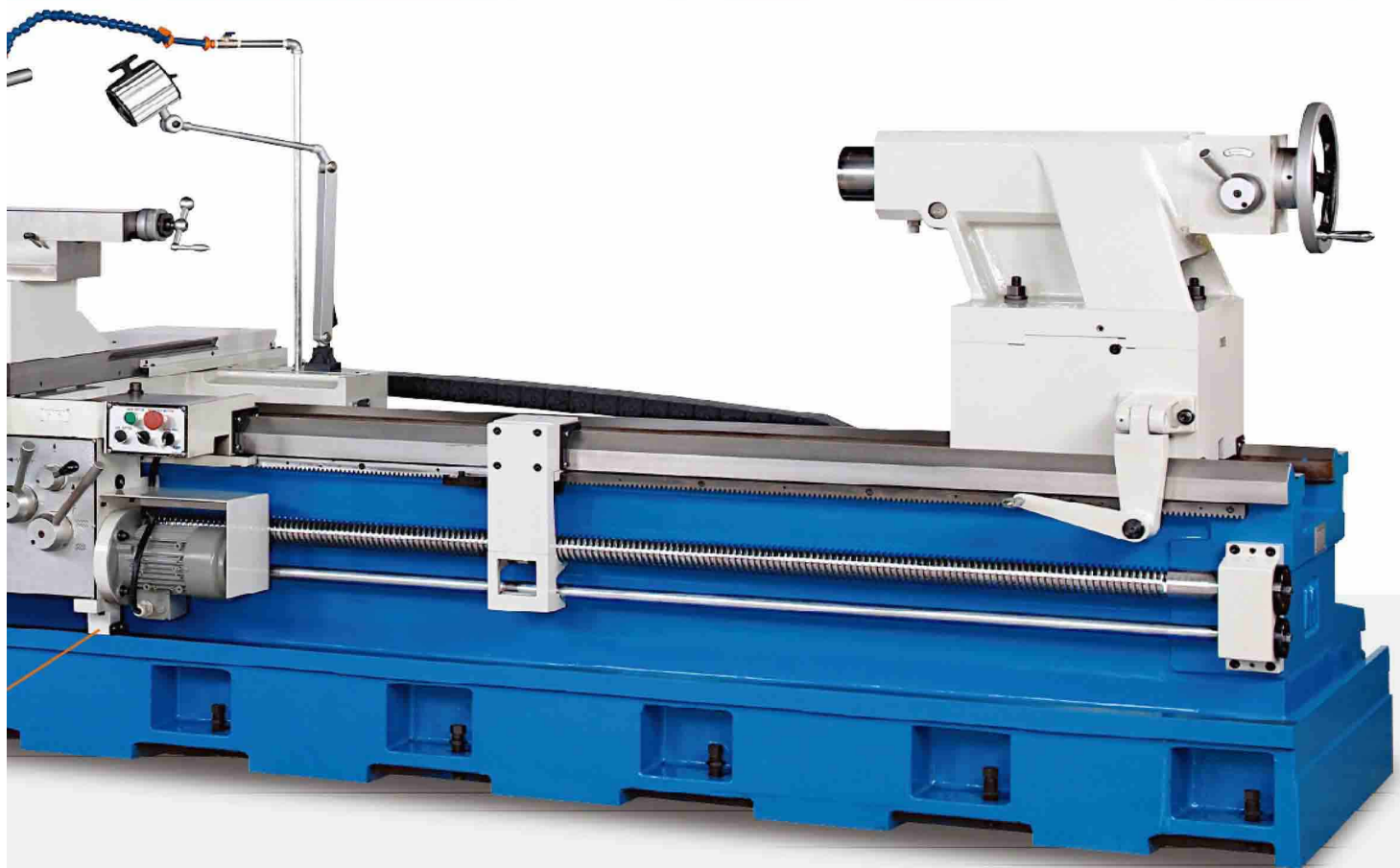
## SPINDLE BORE : 6" , 9" , 12"

BED WIDTH : 24" [ HL series ] / 32" [ HK series ]

- Swing over bed above 1130~1600 mm is available to be customized on request.
- Distance between centers above 8 meter is available to be customized on request.

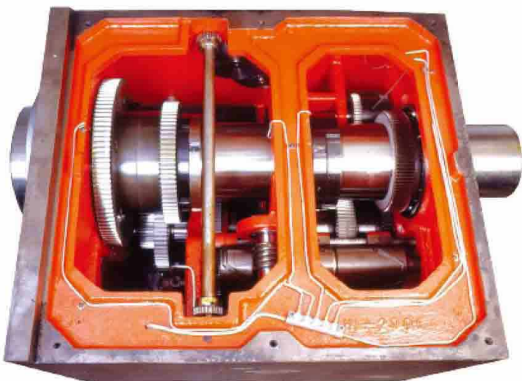
**FEATURES :** It is suitable for turning and cutting of large work piece and steel rod materials for heavy industries like oil pipe network, aerospace and heavy-duty shaft processing.

6000, 7000, 8000



*Chuck shown on the picture is optional 4-jaw independent chuck.*

*photo shown HL-44160*

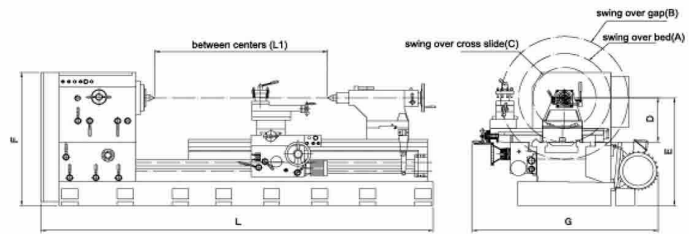


#### **Spindle & headstock**

- Bore 6", 9", 12", 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.

## LAYOUT

HL/HK	L1	2000	3000	4000	5000	6000	7000	8000
HL	L	4100	5100	6100	7100	8100	9100	10100
HK	L	4740	5740	6740	7740	8740	9740	10740
ITEM	A	B	C	D	E	F	G	
HL	37	1390	650	480	1165	1460	2050	
HL	44	1550	810	560	1245	1540	2050	
HK	37	1240	650	480	1165	1510	2170	
HK	44	1400	710	560	1245	1590	2170	



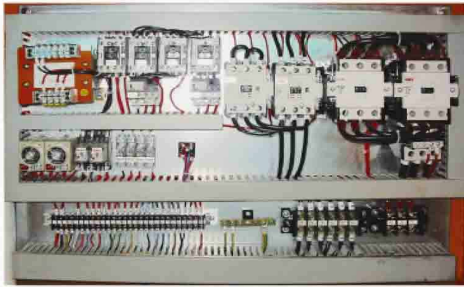
## SPECIFICATION

Unit: mm / inch

MODEL / WIDTH OF BED 24" (610)				HL-37			HL-44		HL-44-60									
MODEL / WIDTH OF BED 32" (810)				HK-37			HK-44		HK-44-60									
MODEL				2000		3000		4000		5000		6000		7000		8000		
CAPACITY	Swing over bed			960 (37.8")			1120 (44")			1130 (45")~1600 (63")								
	Swing over cross slide	HL		650 (25.6")			810 (32")			820 (33")~1290 (50.8")								
		HK		550 (21.65")			710 (27.95")			720 (28.35")~1190 (46.85")								
	Swing over gap	HL		1390 (54.72")			1550 (61.02")			1560 (62")~2030 (79.92")								
		HK		1240 (48.82")			1400 (55.11" )			1410 (55.51") ~1880 (74")								
Distance between centers				2000 (80")		3000 (120")		4000 (160")		5000 (200")		6000 (240")		7000 (280")		8000 (315")		
BED	HL	Height from floor to the spindle center	HL-37				1165 (45.87")			1245 (49.02")								
			HL-44				610 (24")											
		Width of bed				570 ( 22.44")			actual turning diameter changed by different chuck size									
	HK	Length of bed			3900 (154")		4900 (193")		5900 (232")		6900 (272")		7900 (311")		8900 (350")		9900 (390")	
		Height from floor to the spindle center	HK-37				1165 (45.87")			1245 (49.02")								
			HK-44				810 (32")											
		Width of bed				784.5 (30.89")			actual turning diameter changed by different chuck size									
		Length of bed				4390 (172.84")		5390 (212.21")		6390 (251.58")		7390 (290.95")		8390 (330.32")		9390 (369.69")		10390 (409.06")
HEADSTOCK	Spindle bore diameter			ø152 (6")			OP. 230 (9")			OP. 305 (12")								
	Spindle nose			A2-11 / OP. A2-15			A2-15 / OP. A2-20			A2-20								
	Number of spindle speeds			16 steps			12 steps											
	Range of spindle speeds			4-420 r.p.m.			7-266 r.p.m.											
CARRIAGE	HL	Width of carriage			800 (31.5")													
		Cross slide travel			600 (23.6")													
		Compound rest travel			370 (14.57")													
		Max. size cutting size			40 x 40 (1.57"x1.57")													
	HK	Width of carriage			880 (34.65")													
		Cross slide travel			700 (27.56")													
Compound rest travel			400 (15.75")															
Max. size cutting size			40 x 40 (1.57"x1.57")															
TAILSTOCK	Diameter of barrel			ø115 (4.53")			OP. ø150 (5.91") / 200 (7.88")											
	Travel of barrel			305 (12")														
	Taper of barrel			MT 6 OP. MT 7														
THREADS	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)														
	Range of diametral pitches			1-120 D.P. (70 Nos)														
	Range of module pitches			0.25~30 M.P. (53 Nos)														
FEEDS	Feed rod diameter			32 (1.26")														
	Range of longitudinal feeds			0.06-7.04 mm / rev (0.0024"-0.28" in/rev )														
	Range of cross feeds			0.03-3.52 mm / rev (0.0012"-0.14" in/rev)														
MOTOR	Main spindle motor			20HP (15kW) for HL-2000~5000														
				30HP (22.5kW) for HL-6000~8000														
	Coolant pump motor			OP. 30HP (22.5kW) / 40HP (30kW) / 50HP (37.5kW)														
	Coolant pump motor			1/8HP (0.1kw) 1HP (0.75kw)														
MEASUREMENT	N.W. / G.W. (approx) kgs	HL-37	8000/8800	9000/9900	10000/11000	11000/12100	12000/13200	13000/14300	14000/15400									
		HL-44	8300/9100	9300/10200	10300/11300	11300/12400	12300/13500	13300/14600	14300/15700									
		HK-37	9700/10600	10800/11800	11900/13000	13000/14200	14100/15400	15200/16600	16300/17800									
		HK-44	10000/10900	11100/12100	12200/13300	13300/14500	14400/15700	15500/16900	16600/18100									
	Machine size (LxWxH)	HL	4100 / 5100 / 6100 / 7100 / 8100 / 9100 / 10100 X 2050 X 1460 (HL-960) - 1540 (HL-1120) 161" / 201" / 240" / 280" / 319" / 358" / 398" X 81" X 58" - 61"															
		HK	4740 / 5740 / 6740 / 7740 / 8740 / 9740 / 10740 X 2170 X 1510 (HK-960) - 1590 (HK-1120) 187" / 226" / 265" / 305" / 344" / 383" / 423" X 85" X 60" - 63"															
	Shipping dimensions (LxWxH)	HL	(L) 4600 / 5600 / 6600 / 7600 / 8600 / 9600 / 10600 x (W) 2030 x (H) 2200 (L) 181 " / 220" / 260" / 299" / 339" / 378 / 417" * x (W) 80 " x (H) 79 "															
		HK	(L) 5100 / 6100 / 7100 / 8100 / 9100 / 10100 / 11100 x (W) 2140 x (H) 2300 (L) 201 " / 240" / 280" / 319" / 359" / 398" / 437" * x (W) 84 " x (H) 91 "															
	Standard color			Upper part :RAL-7035 light gray + lower parts :RAL-5015 blue														

● 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.



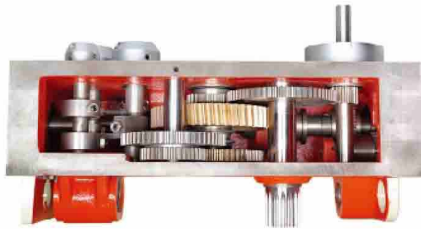
#### Electric component :

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.

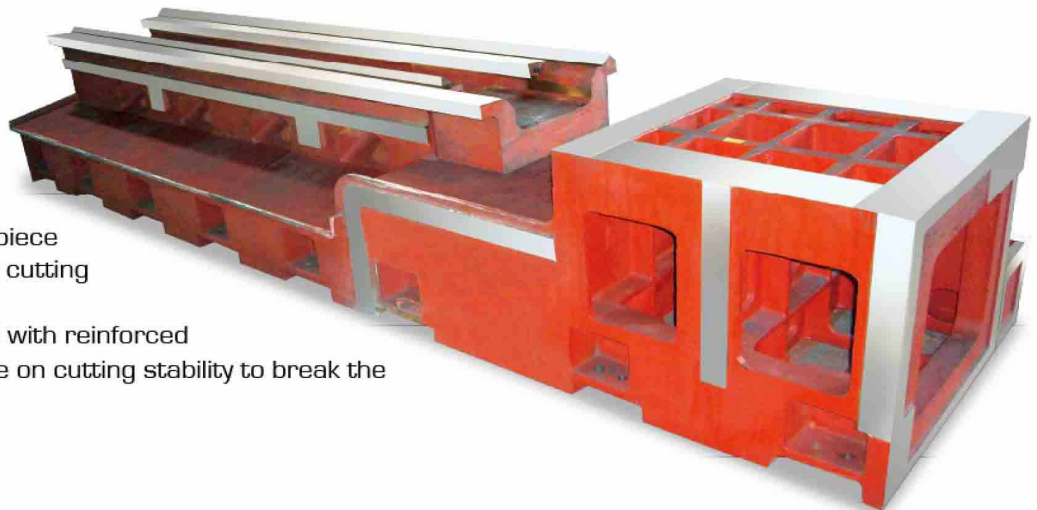


#### Apron :

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.

#### Casting :

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

#### 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.

#### Tailstock :

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

## 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



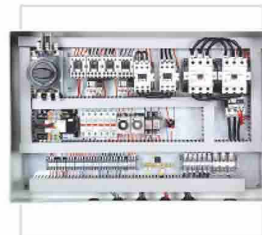
**OP9**

Quick change tool post  
(Standard style)



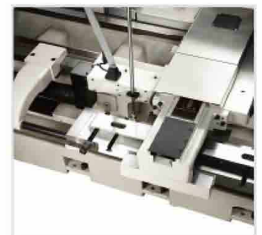
**OP9**

Quick change tool post  
(European style)



**OP10**

CE electric



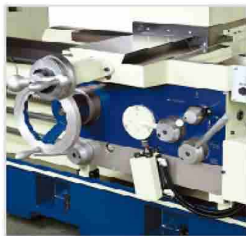
**OP11**

Taper turning attachment



**OP12**

Grinder



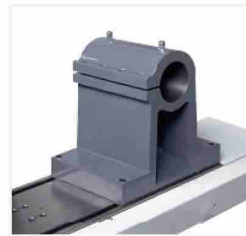
**OP15**

Longitudinal adjustable  
position feed stop



**OP17**

Tailstock with quill dia. 150  
/ 200mm



**OP19**

Boring attachment



**OP20**

Rear tool post

### STANDARD ACCESSORIES :

1. Lubricating device for headstock
2. Spindle motor 20HP
3. Electromagnetic brake
4. Metric / Inch gear box
5. Longitudinal & cross rapid feeding
6. Tailstock two steps device
7. X,Z-axes auto lubrication system
8. X,Z-axes with Turcite-B
9. Steady rest ø16"
10. Face plate with 4-jaw 40"
11. Dead center
12. Center Sleeve MT-6
13. Toolpost screw wrench
14. Level pads
15. Tools & Tool Box
16. Operation manual

Actual standard accessories shall be  
subject to the quotation sheet.

### OPTIONAL ACCESSORIES :

1. Coolant device
2. Follow rest
3. 4-jaw independent chuck 40", 50"
4. 3-jaw chuck (strong type) 20", 25"
5. Steady rest ø16", ø24"
6. Halogen light
7. Digital readout
8. Back splash guard
9. Quick change tool post [ instead of tool post ]  
[ standard style ] [ European style only for 960series ]
10. CE equipment
11. Taper turning attachment
12. Grinder
13. Hydraulic copy attachment
14. Automated rapid tool post
15. Longitudinal adjustable position feed stop
16. Five position carriage stop
17. Tailstock with quill dia. 150 / 200mm
18. Tailstock with self-rotary quill
19. Boring attachment
20. Rear tool post



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