

Big Bore and Chucker type CNC Lathe
HANTURN Series

HANTURN-BB370 / HANTURN-BB550





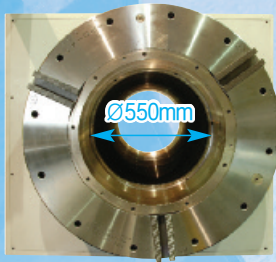
Big Bore and Chucker type CNC Lathe

HANTURN BB370/BB550

The Hankook Heavy Duty CNC Lathe Hanturn BB550 is Designed for Maximum Efficiency, Rigidity and Versatility in Heavy Machining Operations.

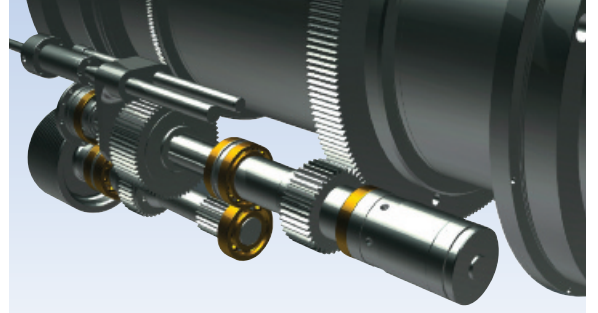
Features

- Big spindle bore (Ø370/Ø550mm)
- Powerful 520/770kgf.m (5100/7540N.m) spindle torque
- Powerful 60 horsepower spindle motor
- Extra wide (1320mm) one-piece cast iron bed
- Induction-hardened and precision-ground guide ways
- Heavy duty bi-directional H-6 turret
- Full automatic lubrication to all critical areas



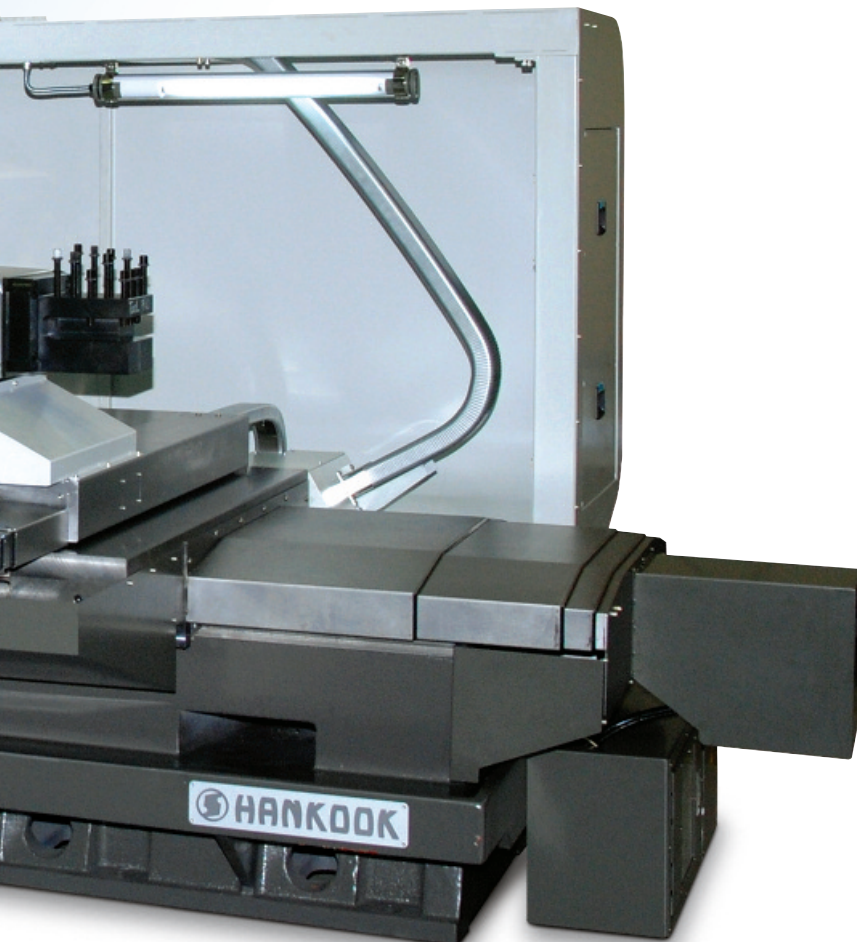
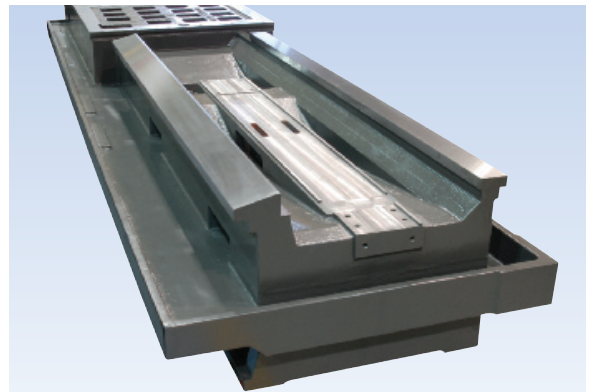
■ Headstock

- Extremely rigid, robust box type to sustain heavy duty work.
- 2 steps gear change for high torque driving with low speed.
- All spindle bearings are high precision class and permanently grease lubricated to minimize thermal growth.
- Big spindle bore, $\varnothing 370/\varnothing 550\text{mm}$ (14.5/21.6").
- Gears of main spindle and other bearings are forced-lubricated.

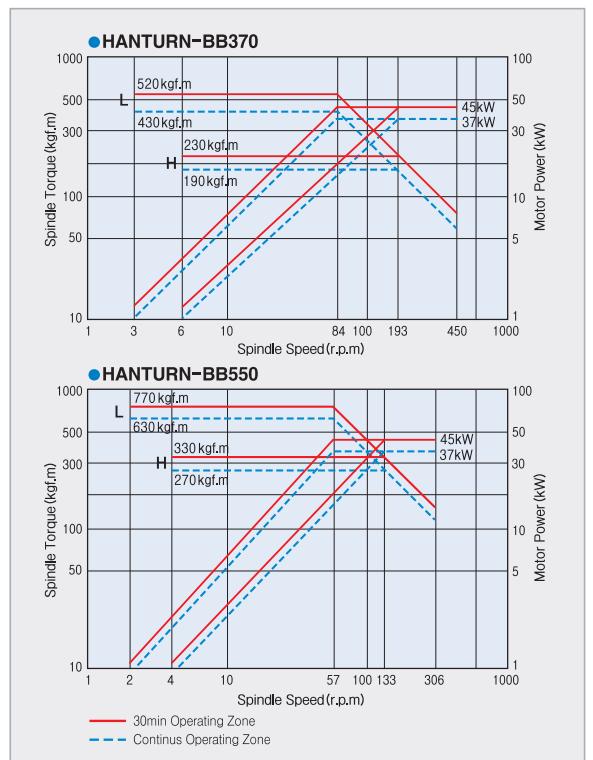


■ Bed

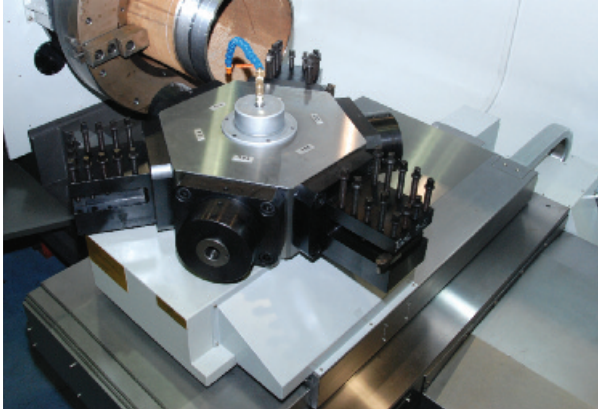
- The extra wide (1220mm) bed is a heavy one-piece casting with thick ribbing to prevent twisting and deformation.
- Fine grain Meehanite cast iron is used for its excellent dampening characteristics.
- Chips are easily disposed through steep angle chutes provided in between bed ways.



■ Spindle Torque & Power Diagram



Carriage & Turret Tool Post

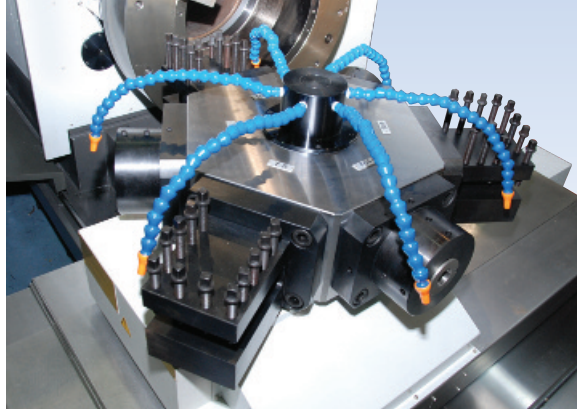


- The extremely rigid extended box type saddle and wide (600mm) cross slide allow heavy and interrupted cutting with ultimate stability and high accuracy.
- The fluorine-plastic resin combined way lubrication provides a low friction on surface and prevent guide-way from wearing.

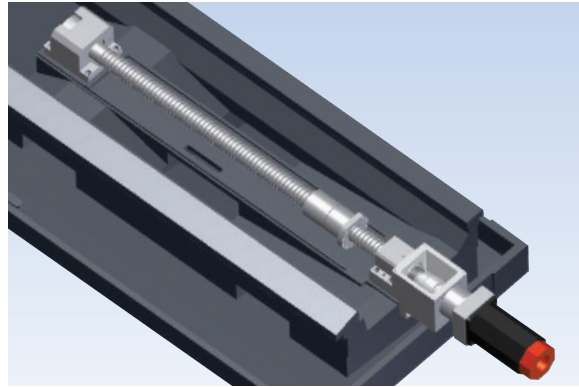
Axis Drives

- Each axis is driven by high precision ball-screw and powered by high torque, maintenance free Fanuc digital AC servo motor.
- Ball-screws are supported on both ends by high precision bearings.
- Driven by $\varnothing 80\text{mm}$ dia., 20mm pitch ball-screw centrally mounted for stable travel, efficient power, smooth finish and best accuracy.
- Rapid traverse rate of X-axis is 4000mm/min and Z-axis is 6000mm/min.

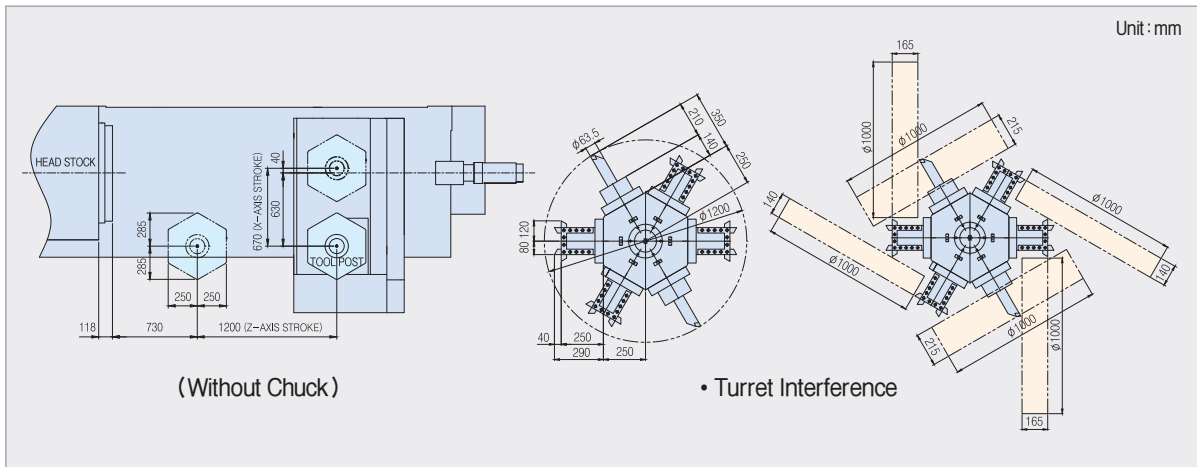
H-6 Turret



- Extra wide and rigid horizontal hexagonal tool turret with a full capacity of heavy-duty turning, boring and big size threading.
- Very accurately positioned after indexing, and securely locked by Curvic Coupling.
- Bidirectional indexing to select the closest path to the next tool position programmed.



Machining Range



Machine Specifications

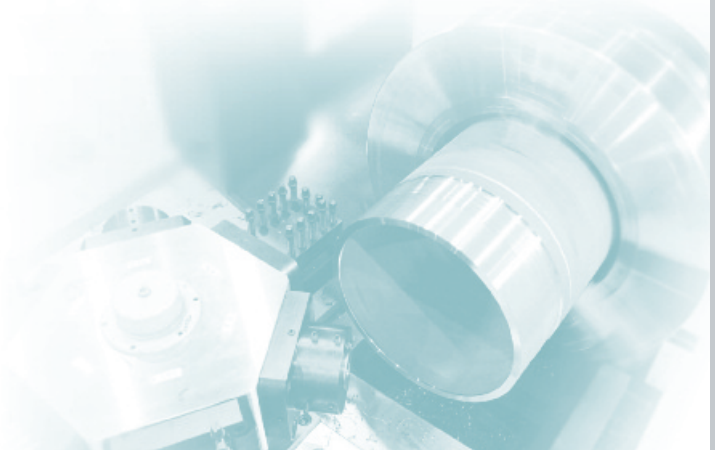
Items		Unit	HANTURN-BB370	HANTURN-BB550
Capacity	Swing over bed	mm(inch)	Ø1100(43.3)	Ø1100(43.3)
	Swing over carriage	mm(inch)	Ø560(22)	Ø600(23.6)
Spindle	Spindle bore	mm(inch)	Ø375(14.7)	Ø550(21.6)
	Spindle speed	rpm	3~450	2~306
	Spindle speed range	step	Auto 2	
	Max. spindle torque	kgf.m(N.m)	520(5100)	770(7540)
Tool Post	Type of tool post	–	H-6 (Hydraulic index)	
	No. of tool	EA	6	
	Tool size	mm(inch)	32×32 (1 1/4×1 1/4)	
Travel	X-axis travel	mm(inch)	670(26.4)	
	Z-axis travel	mm(inch)	950(37.4)	
	X-axis rapid traverse	m/min(ipm)	4(157)	
	Z-axis rapid traverse	m/min(ipm)	6(236)	
Bed	Bed width	mm(inch)	1220(48)	
	Bed length	mm(inch)	5210(205)	
Motors	Spindle motor	kW(Hp)	AC 37/45(50/60)	
	X-axis servo motor	kW(Hp)	AC 3(4)	
	Z-axis servo motor	kW(Hp)	AC 7(9)	
Machine Size	Height	mm(inch)	2600(102)	
	Floor space(Chip conveyor included)	mm(inch)	7510×3370(296×133) : L×W	
	Machine weight	kg(lbs)	16,500(36,400)	
CNC Controller		–	FANUC 32i-A	

Standard Accessories

- CNC controller, FAUNC 32i-A
- Spindle motor & electrical equipments
- Spindle bore Ø370/Ø550mm (BB370/BB550)
- Automatic index turret (Hydraulic H-6)
- 4-jaw independent chuck (ID Ø370/Ø560mm)
- Coolant system
- Oil cooler for headstock lubrication
- Hydraulic power unit
- Automatic lubrication system for guides
- Chip conveyor & bucket
- OD tool holder (□32mm-4ea)
- Boring tool holder (Ø60mm-2ea)
- Boring bar sleeve (Ø60×40, 32mm-2ea)
- Levelling block
- Foundation bolts & nuts
- Tool box with maintenance tools

Optional Accessories

- Air chuck (ID Ø370/Ø560mm)
- Pneumatic system
- Transformer (Normal or CE spec)
- Drill sleeve (MT#4, #3)
- Boring tool holder (Ø63.5mm)
- Boring bar sleeve (Ø60×25, 20mm/Ø63.5×40, 32, 25, 20mm)
- Air-conditioner for electrical cabinet





HANTURN BB370/BB550

Big Bore and Chucker type CNC Lathe



Standard CNC Control Features

FANUC 32i-A Control Features

- Simultaneously controllable axes : 2
- Minimum programmable increment : 0.001mm(0.00001")
- Tape storage length : 640m(512 KB)
- Registerable programs : 63
- Backlash compensation
- Pitch error compensation
- Constant surface speed control
- Self diagnostic functions

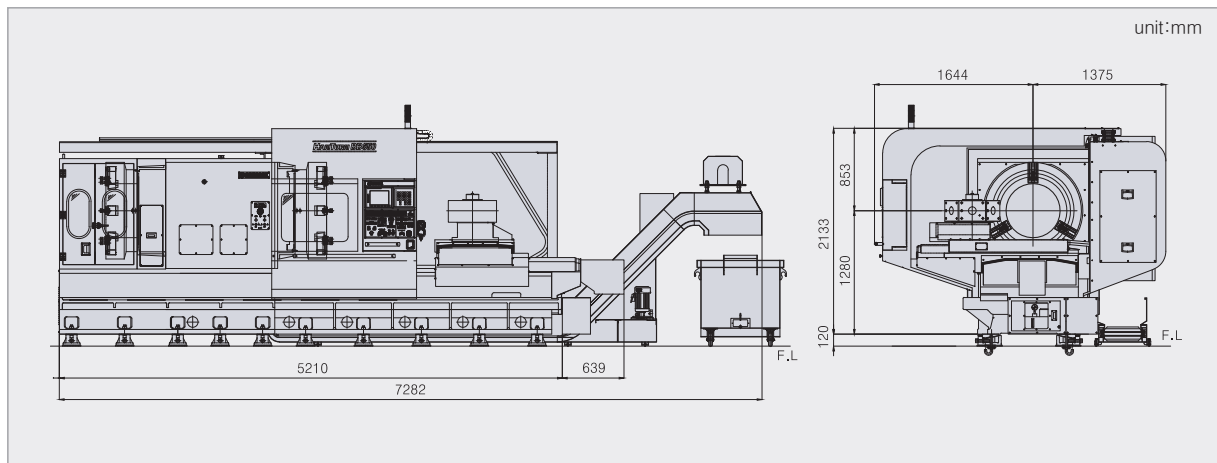
Programming Features

- Circular interpolation by radius designation
- Tool nose radius compensation(G40-G42)
- Combined use of absolute/incremental command
- Inch/Metric programming
- Chamfering, corner R
- Multiple repetitive cycles(G70-G76)
- Canned cycles(G90,G92,G94)
- Decimal point programming
- Reference point return (G27-G30)
- Sub-program 4 holds nested

Operation Features

- 10.4" color LCD
- Geometry and wear offsets
- 64 pairs of tool offsets
- Run hour display
- Thread cutting retract
- Direct input of offset value measured
- Input/output interface (RS232C)
- Keyboard type manual data input (MDI full key)
- Program protect key
- Incremental offset
- Rapid traverse override
- Feed rate override
- Spindle speed override
- Tape code: EIA, ISO Automatic recognition

External Dimensions



• Specifications and features are subject to change without prior notice.



HEAD OFFICE & PLANT
HANKOOK MACHINE TOOLS CO., LTD.
 42, Yeondeok-ro, Seongsan-gu, Changwon-si,
 Gyeongnam, 642-290 Korea
 TEL: 82-55-282-7781/7660 FAX: 82-55-284-9791
 E-mail: sales@hanmachine.com
www.hanmachine.com

AMERICA OFFICE
Hankook America, Corp.
 1601 Atlantic Drive-#109 West Chicago,
 IL 60185 U.S.A
 TEL: 1-630-562-9240
 FAX: 1-630-562-9250
 E-mail: hankookamerica@msn.com

EUROPE OFFICE
Hankook Machine Germany GmbH
 Schwalbacher Str. 62
 65760 Eschborn / Germany
 TEL: 49-6196-99849-0 FAX: 49-6196-99849-29
 E-mail: haller@hanmachine.de
www.hanmachine.de