

Big Bore and Chucker type CNC Lathe
HANTURN BB550

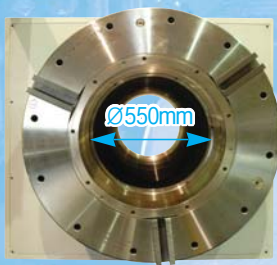




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The Hankook Heavy Duty CNC Lathe Hanturn BB550 is Designed for Maximum Efficiency, Rigidity and Versatility in Heavy Machining Operations.



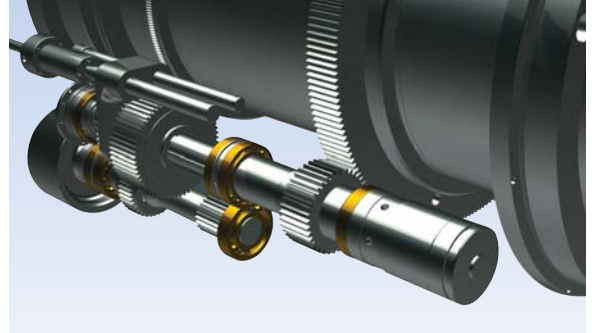
Features

- Big spindle bore $\text{Ø}550\text{mm}$ (21.6")
- Powerful 769 kgf.m (7536 N.m) spindle torque
- Powerful 45kW (60Hp) 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



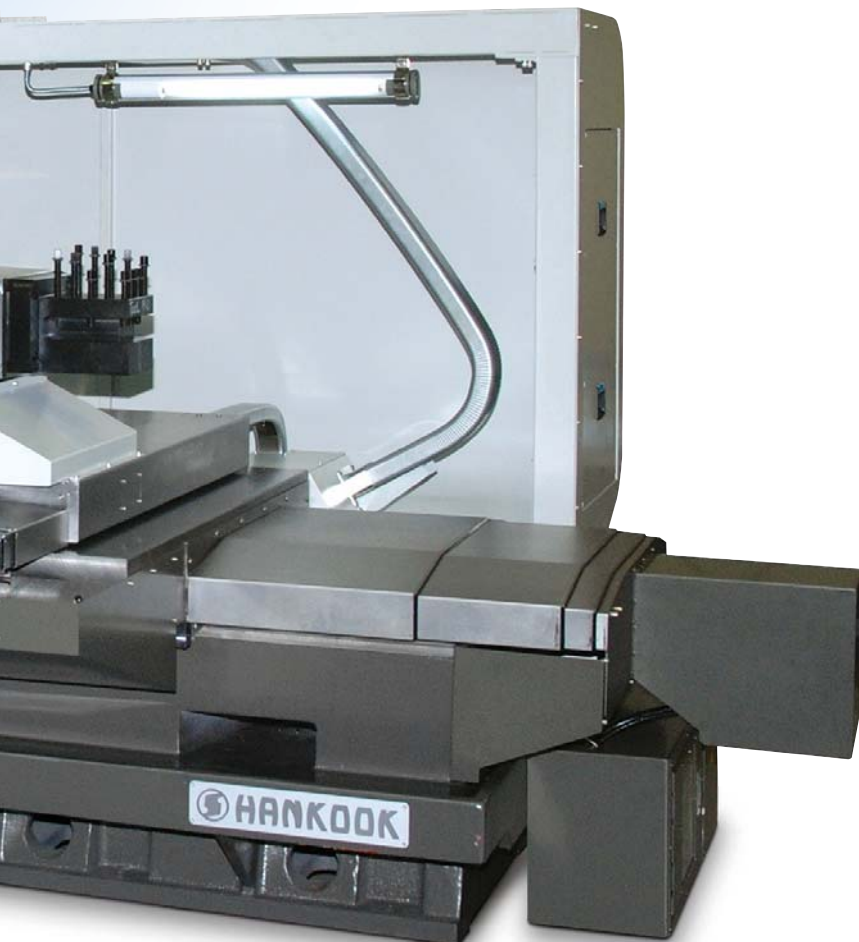
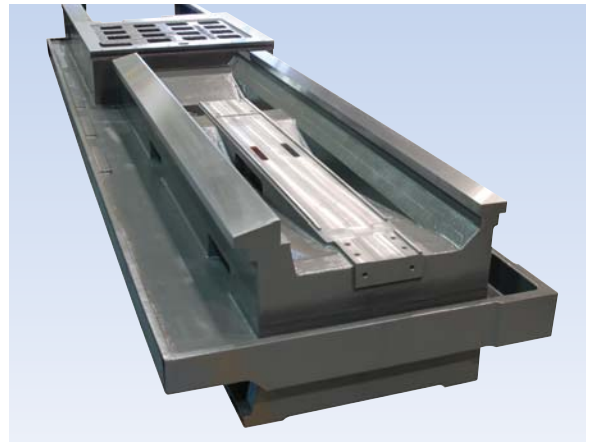
■ Headstock

- 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.
- Big spindle bore, $\varnothing 550\text{mm}$ (21.6").
- High volume forced lubrication system with safety interlock is provided for lubrication and heat dissipation.

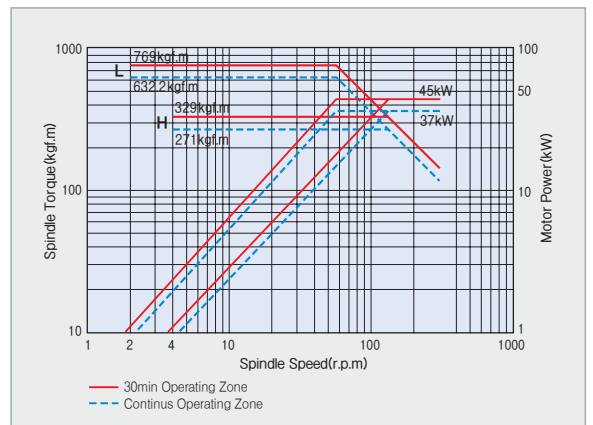


■ Bed

- The extra wide (1320mm) 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

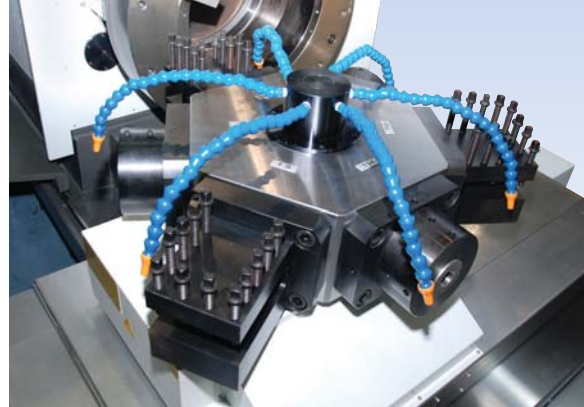


Carriage



- 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.

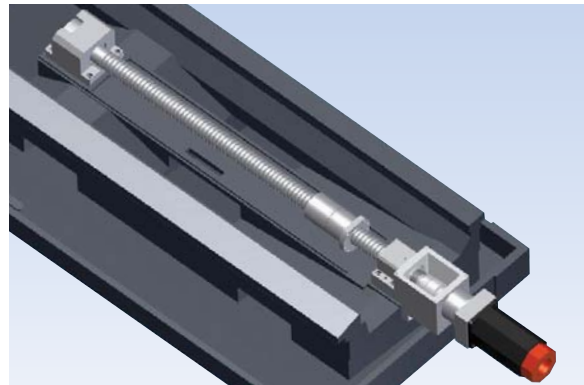
H-6 Turret



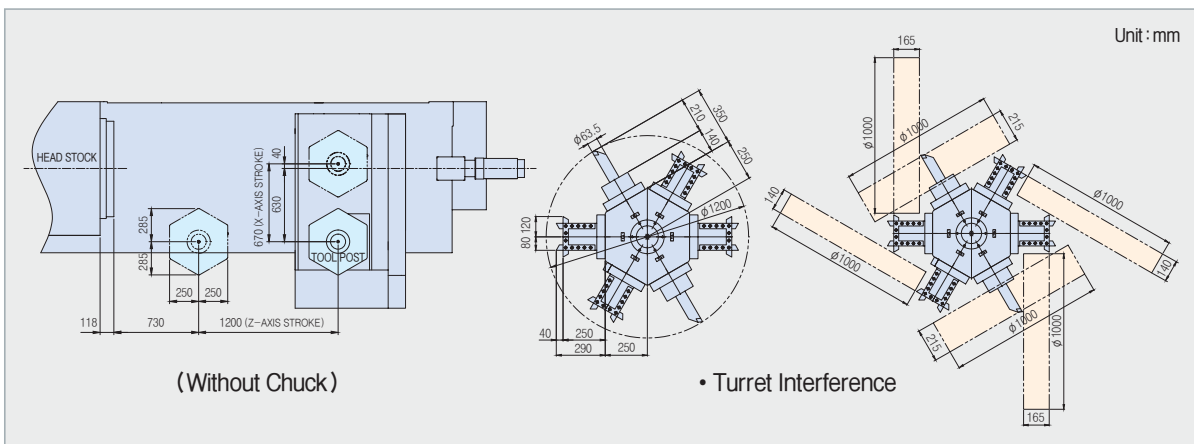
- Extra wide and rigid horizontal hexagonal tool turret with a full capacity of heavy-duty turning, boring and big size threading.
- Very accurately positioned after indexing, and securely locked by Curvic Coupling.
- Bi-directional indexing to select the closest path to the next tool position programmed.

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 $\varnothing 80$ 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.



Machining Range





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Machine Specifications

	Items	Unit	HANTURN-BB550
Capacity	Swing over bed	mm(inch)	Ø1100(43.3)
	Swing over carriage	mm(inch)	Ø600(23.6)
Spindle	Spindle bore	mm(inch)	Ø550(21.6)
	Spindle speed	rpm	2~306
	Spindle speed range	step	Auto 2
	Max. spindle torque	kgf.m(N.m)	769(7536)
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)	1100(43.3)
	X-axis rapid traverse	m/min(ipm)	4(157)
	Z-axis rapid traverse	m/min(ipm)	6(236)
Bed	Bed width	mm(inch)	1320(52)
	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)	2300(91)
	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 Ø550mm
- Automatic index turret (Hydraulic H-6)
- 4-jaw independent chuck (ID Ø560mm)
- Coolant system
- Oil cooler for headstock lubrication
- Hydraulic power unit
- Automatic lubrication system for guides
- Chip conveyor & bucket
- OD tool holder (□32mm)
- Boring tool holder (Ø60mm)
- Boring bar sleeve (Ø60×40, 32mm)
- Levelling block
- Foundation bolts & nuts
- Tool box with maintenance tools

Optional Accessories

- Air chuck (ID Ø560mm)
- Pneumatic system
- Transformer
- 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



■ 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

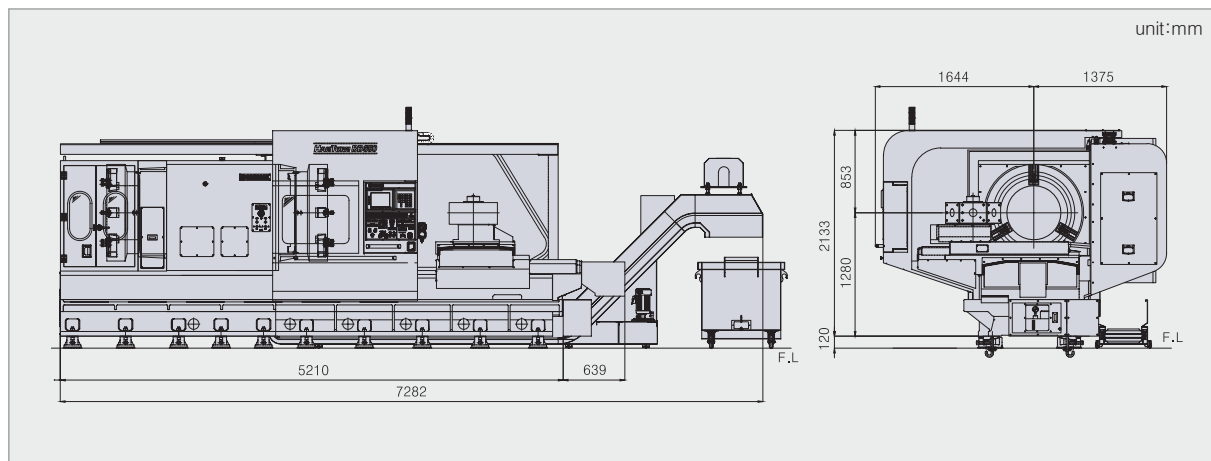
Programming Features

- 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.



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