# HD2600/3100

HYUNDAI WIA CNC Turning Center



# **Technical** Leader

The CNC Turning Center HD2600/3100, designed by Hyundai WIA with years of expertise and the latest technology, is a Turning Center that maximizes productivity and performance.

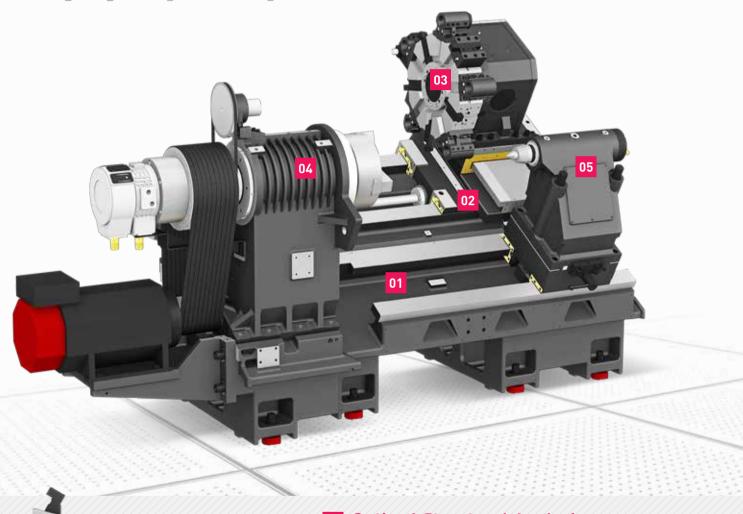


MODEL		HD2600	HD3100		
Swing Over the Bed	mm(in)	Ø630 (24.8″)	Ø750 (29.5″)		
Max. Turning Length	mm(in)	659 (25.9″)	780 (30.7")		
Chuck Size	inch	10″	12"		
Bar Capacity	mm(in)	Ø81 (3.2″)	Ø102 (4")		
Speed (rpm)	r/min	3,500	2,800		
Motor (Max.)	kW(HP)	26/18.5 (34.9/24.8))	26/18.5 (34.9/24.8)) [35/22 (46.9/29.5)]		
Travel(X/Z)	mm(in)	265/680 (10.4"/26.8")	265/830 (10.4"/32.7")		
No. of Tools	EA	10 [12]			

[OPTION]

# **Basic Features**

The Best Productivity Popular 10 & 12 inch Heavy Duty Cutting CNC Turning Center





## 01 Optimal Structural Analysis

Through the structural analysis, it is designed to maintain dynamic-rigidity even during the heavy-duty cutting by increasing tool post body size and reducing the machine height.

In addition, HD2600/3100 has a 30° of bed angle, which is advantageous for more stable processing.

#### • Tool tip rigidity enhancement

HD2600 Z-axis: 17% UP Y-axis: 49% UP

HD3100 Y-axis: 20% UP

#### Integrated Coolant Tank

The coolant tank is installed at the front of the bed to prevent leakage, enabling stable machining with the use of high pressure coolant.



## All Axes Box Guideway

All axes of HD2600/3100 are designed with Box Guideways for better travel ability. Box Guideways show great performance in offsetting vibrations caused by heavy duty cutting.

<Travel capacity enhancement through 6-side covered design>

#### Sealed GIB Structure

X-axis of HD2600/3100 is designed to minimize the damage of turcite from chips by applying the sealed GIB structure.

#### **Ball Screw**

All axes are driven by high precision double anchored ballscrews. This provides outstanding positioning and repeatability with virtually no thermal growth. All ballscrews are connected directly to the servo drive motors, to eliminate backlash.

• Rapid Traverse Rate (X/Z axis) : 24/30 m/min (945/1,181 ipm)

• Travel (X/Z axis) HD2600 : 265/680 mm (10.4''/26.8'') HD3100 : 265/830 mm (10.4''/32.7'')

### High Rigidity Turret for Heavy-duty Cutting

Turret is designed to complement the rigidity to process heavy–duty products easily. In addition, we increased the disk width of the turret to reinforce the rigidity.

• No. of Tools: 10 [12] EA

Tool Size (O.D/I.D): □ 25/Ø50 mm (□ 1"/ Ø1.6")

• Indexing Time (1-Step) HD2600 : 0.17 sec HD3100 : 0.22 sec

Disk Width Expand



120 mm (4.7") 20% UP 〈Static-rigidity increased :I.D 20%, O.D 3% UP〉

# High-Precision Spindle

Long Lasting High Accuracy & Excellent Performance CNC Turning Center



## Spindle Specialized in Rigid Cutting

HD2600/HD3100 has each torque of 734N·m(541.4lbf·ft) and 1,123N·m (828.3lbf·ft) to perform rigid and intermittent cutting excellently.

Especially, HD3100 model provides gear spindle option {1,613N·m (1,189.7lbf·ft)} to satisfy various customer needs.

#### Ribstar-type Belt

Machining precision and spindle noise problem has enhanced by complementary of stick-slip problem in low speed section.

#### 05 Tail Stock

Tailstock enables stable machining of high quality products where quill travels up to 120mm (4.7").

Quill Type: MT#5

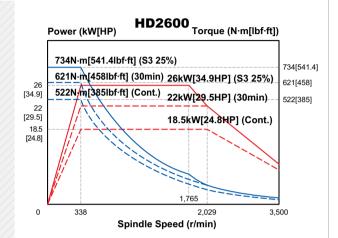
Quill Dia. : Ø100 mm (3.9")

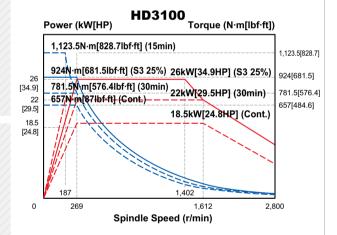
• Quill Travel: 120 mm (4.7")

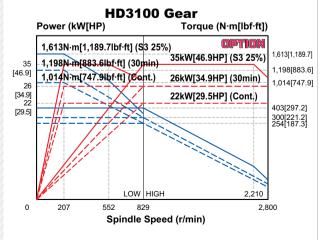
Tail Stock Reinforcement :

Thrust 742 kgf (1,636 lbf)  $\rightarrow$  989 kgf (2,180 kgf)









# **SPECIFICATIONS**

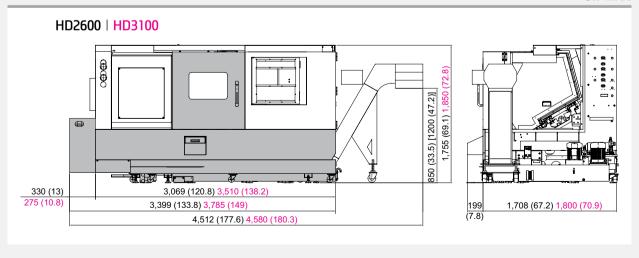
#### **Specifications** [ ]:Option

MODEL			HD2600	HD3100			
CAPACITY	Swing Over the Bed	mm(in)	Ø630 (24.8″)	Ø750 (29.5″)			
	Max. Turning Dia.	mm(in)	Ø460 (18.1″)	Ø500 (19.7″)			
	Max. Turning Length	mm(in)	658 (25.9″)	780 (30.7")			
	Bar Capacity	mm(in)	Ø81 (3.2″)	Ø102 (4″)			
Spind le	Chuck Size	inch	10″	12"			
	Spindle Bore	mm(in)	Ø91 (3.6″)	Ø115 (4.5″)			
	Spindle Speed (rpm)	r/min	3,500	2,800	[2,800]		
	Motor (Max/Cont.)	kW(HP)	26/18.5 (34.9/24.8))	26/18.5 (34.9/24.8))	[35/22 (46.9/29.5]		
	Torque (Max)	N·m(lbf·ft)	734 (541.4)	1,123 (828.3)	[1,613 (1,189.7)]		
	Spindle Type	-	BELT	BELT	[GEAR]		
	Spindle Nose	-	A2-8	A2-11			
Feed	Travel (X/Z)	mm(in)	265/680 (10.4"/26.8")	265/830 (10.4"/32.7")			
	Rapid Traverse Rate (X/Z)	m/min (ipm)	24/30 (945/1,181)				
	Slide Type	-	BOX GUIDE				
turret	No. of Tools	еа	10 [12]				
	Tool Size (O.D/I.D)	mm(in)	= 25/ Ø50 (= 1"/ Ø2")				
	Indexing Time (1–Step)	sec	0.17	0.22			
TAIL STOCK	Taper	-	MT#5				
	Quill Travel	mm(in)	120 (4.7")				
	Quill Dia.	mm(in)	Ø100 (3.9″)				
MACHINE	Floor Space (L×W)	mm(in)	3,400×1,708 (133.9"x67.2")	3,885×1,800 (153″x70.9″)			
	Height	mm(in)	1,755 (69″)	1,850 (72.8″)			
	Weight	kg(lb)	5,800 (12,787)	6,000 (13,228)			
CNC	Controller	-	HYUNDAI WIA FANUC i Series				

Specifications are subject to change without notice for improvement.

#### **External Dimensions**

unit : mm (in)





Head Office & Factory

153, Jeongdong-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do **Tel** +82 55 280 9206, 9299 **Fax** +82 55 210 9804