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DIN EN ISO 9002



# TS-814

**CNC TURNING CENTER**



# CNC TURNING



***SUPERIORITY....***

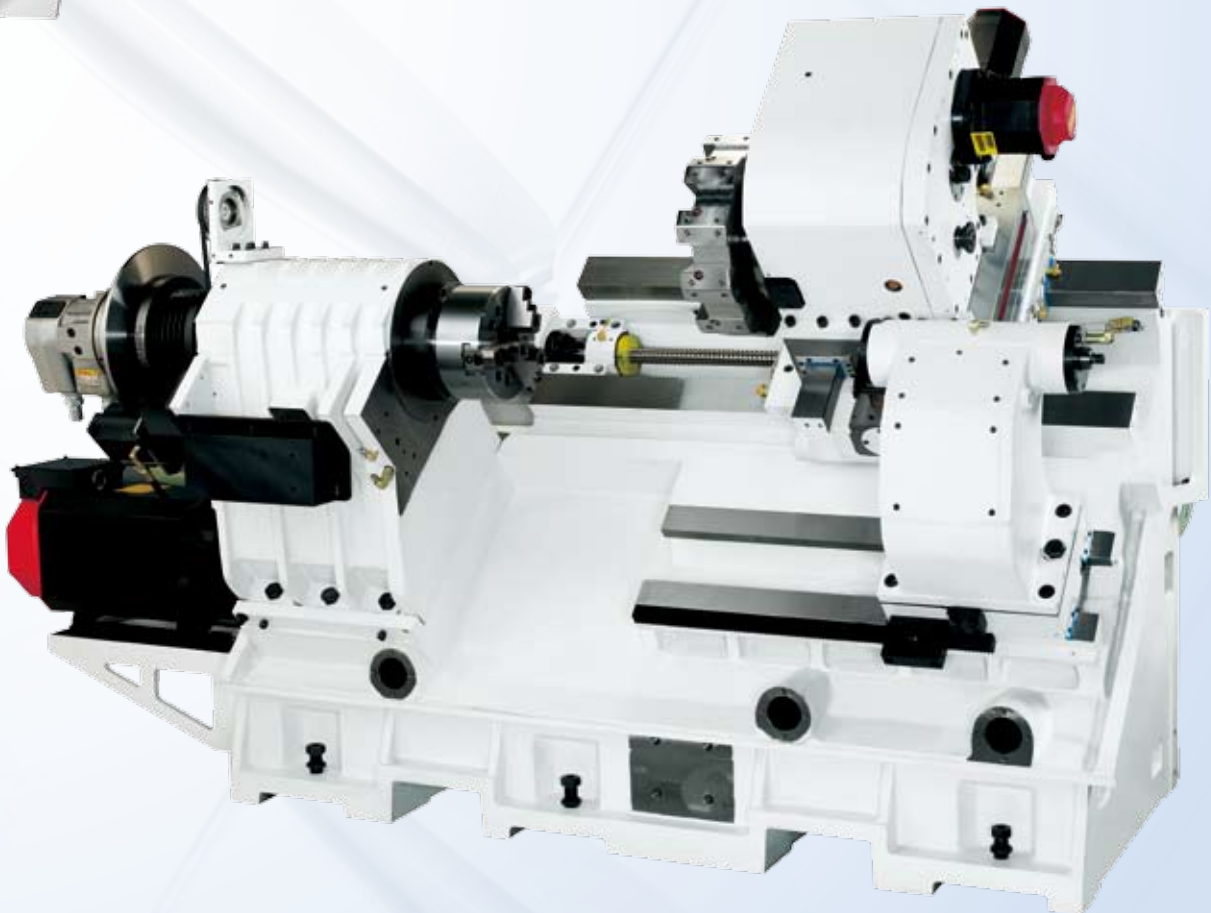
***EXQUISITE DESIGN....***

***PERFECT PRESENTATION....***

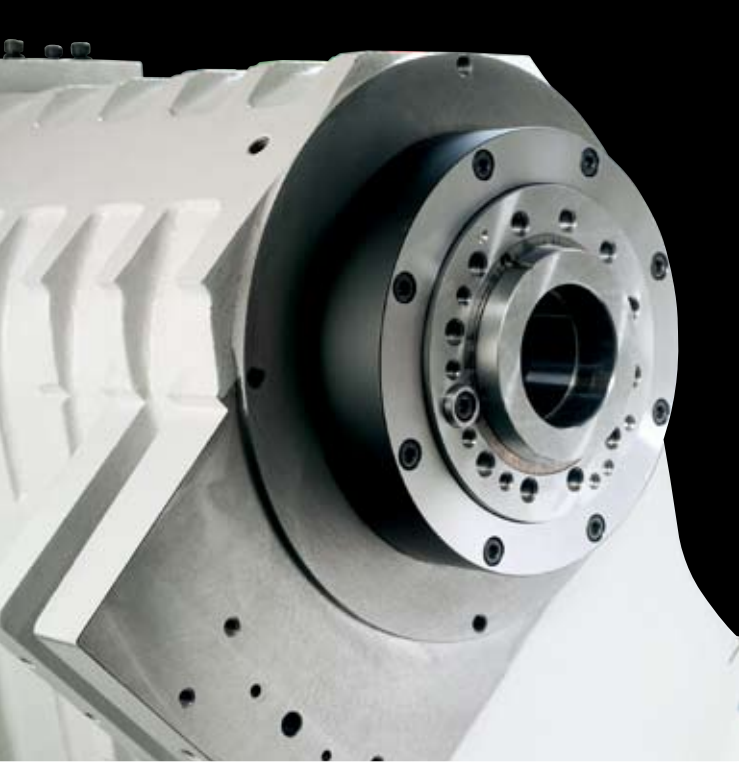
# CENTER

## ***HIGH TENSILE MECHANICAL STRUCTURE DESIGN***

- *45° slant bed single piece body designs provides best stability, vibration absorb capability and smooth chip collecting.*
- *Enhanced triangular boxing body structure build with all Meehanite cast iron.*
- *Heat-treated and precisely ground box way design on both X and Z-axis provide best cutting capability.*





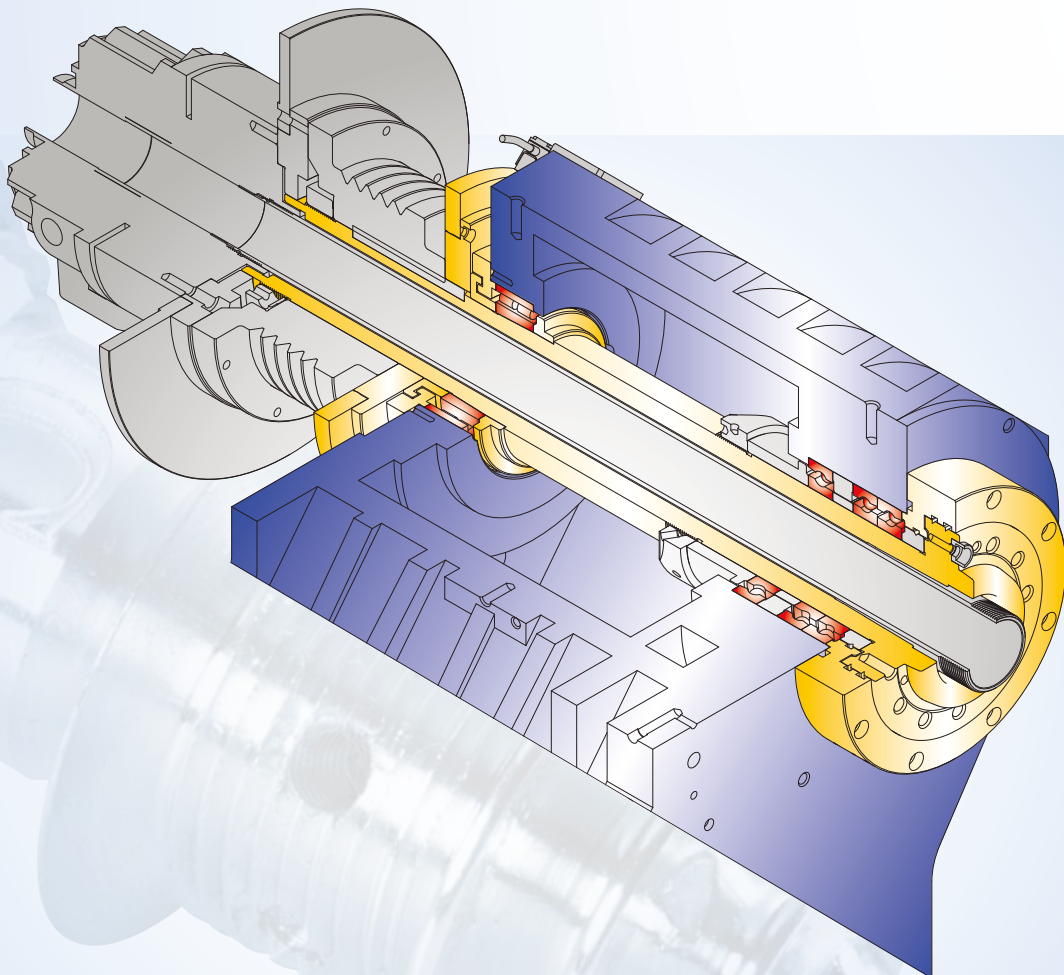


## ***SUPER STRONG SPINDLE DESIGN***

- *The rugged spindle housing with heat sink rib design provides best thermal control and mechanical balance with machine base.*

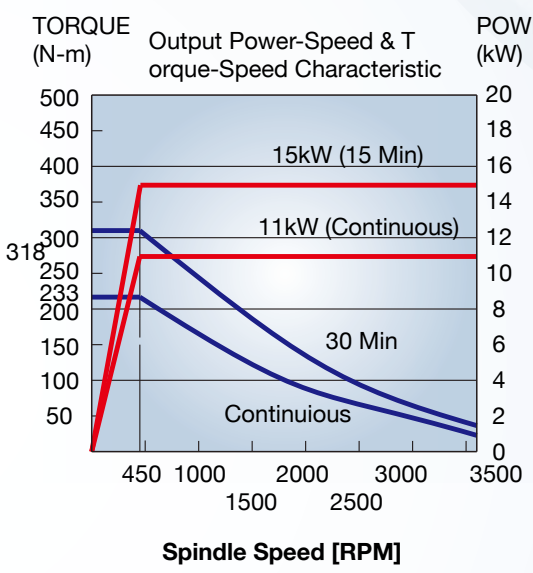
## ***SPINDLE PROFILE***

- *The spindle is built with chromium-molybdenum alloy steel with hardness to HRC 58° and precisely ground.*
- *Employs NNK high precision bearings with special bearing support design provides best rigidity and accuracy.*

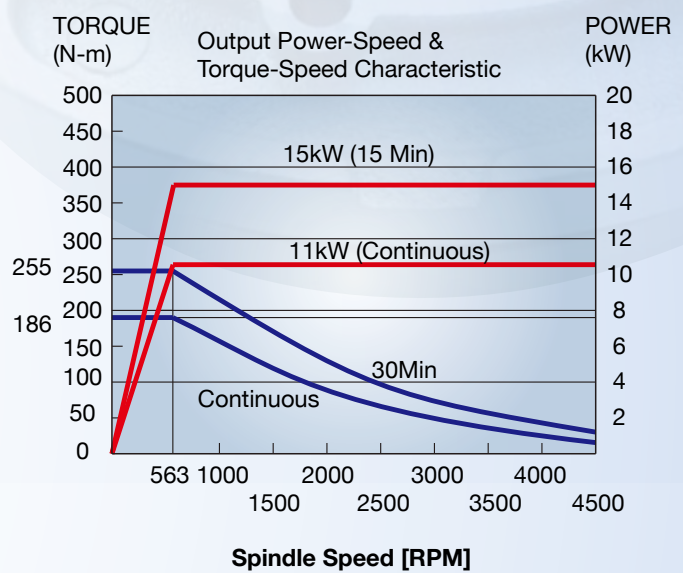


# SPINDLE MOTOR TORQUE CHART

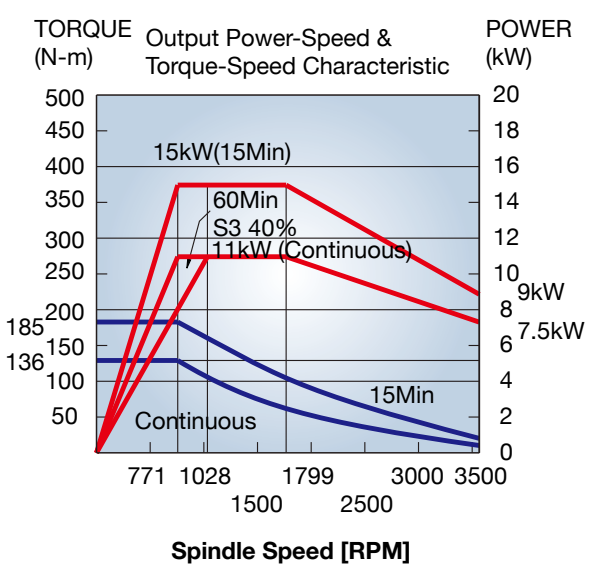
**FANUC  $\alpha$ 22i 3500rpm**



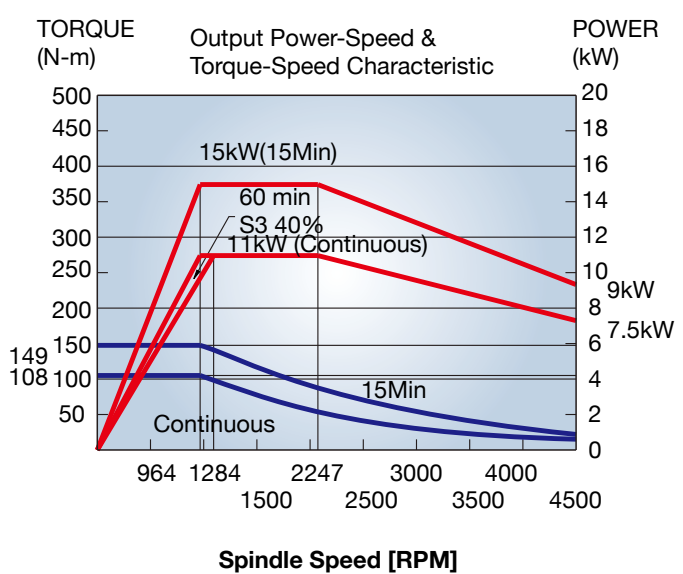
**FANUC  $\alpha$ 22i 4500rpm**



**FANUC  $\beta$ 12i 3500rpm**



**FANUC  $\beta$ 12i 4500rpm**





## PRECISE SCRAPING

- All slide way contact areas were cover with precisely scrapped TURCITE B plus automatic lubrication system to ensure longer machine accuracy.



## PRECISE BALLSCREW SYSTEM

- Both X and Z-axis equipped with pre-tensed C3 class high precision ball screw to ensure machine accuracy during operation.



### Cutting Capability

Spindle motor	15Kw (20HP)
Material	S45C
Drawtube diameter	Ø78 mm
Cutting depth	5 mm
Rapid per round	0.4 mm
Spindle speed	816 rpm



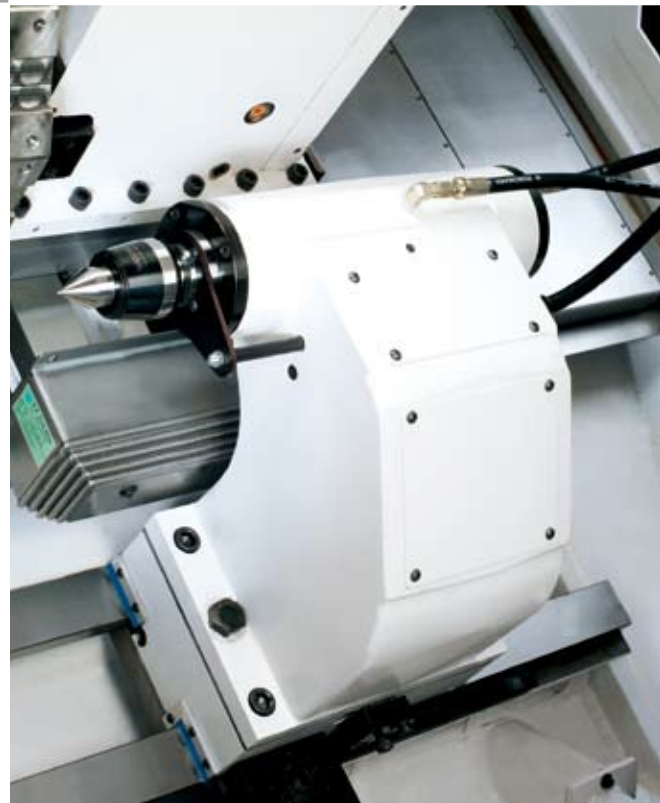


## **HIGH SPEED PRECISE SERVO TURRET SYSTEM (STANDARD)**

- *With special designed curve clutch system and servo motor driven power enhanced index accuracy and fast tool change up to 0.15 sec. for adjacent tool.*

## **MANUAL HYDRAULIC TAILSTOCK (STANDARD)**

- *The manual tail-stock with hydraulic system is standard equipment.*

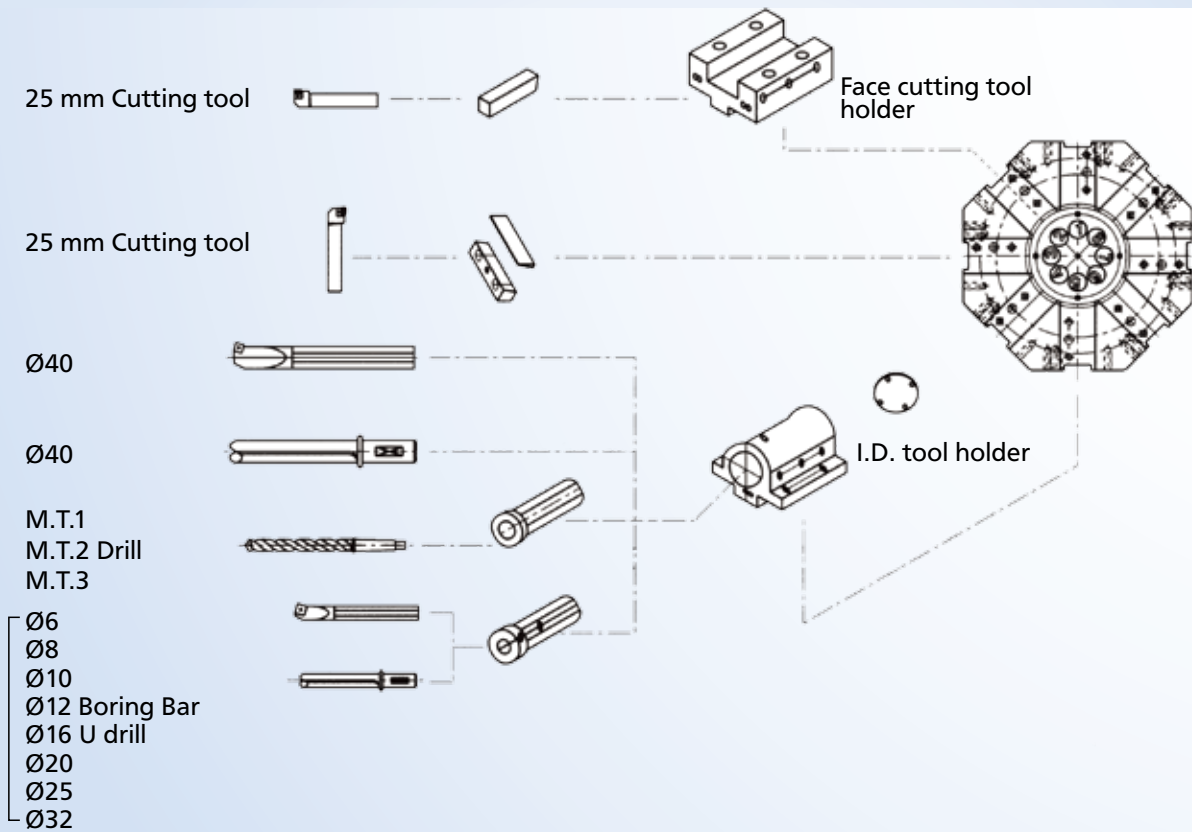


## **LIVE TOOLING SYSTEM (OPTIONAL)**

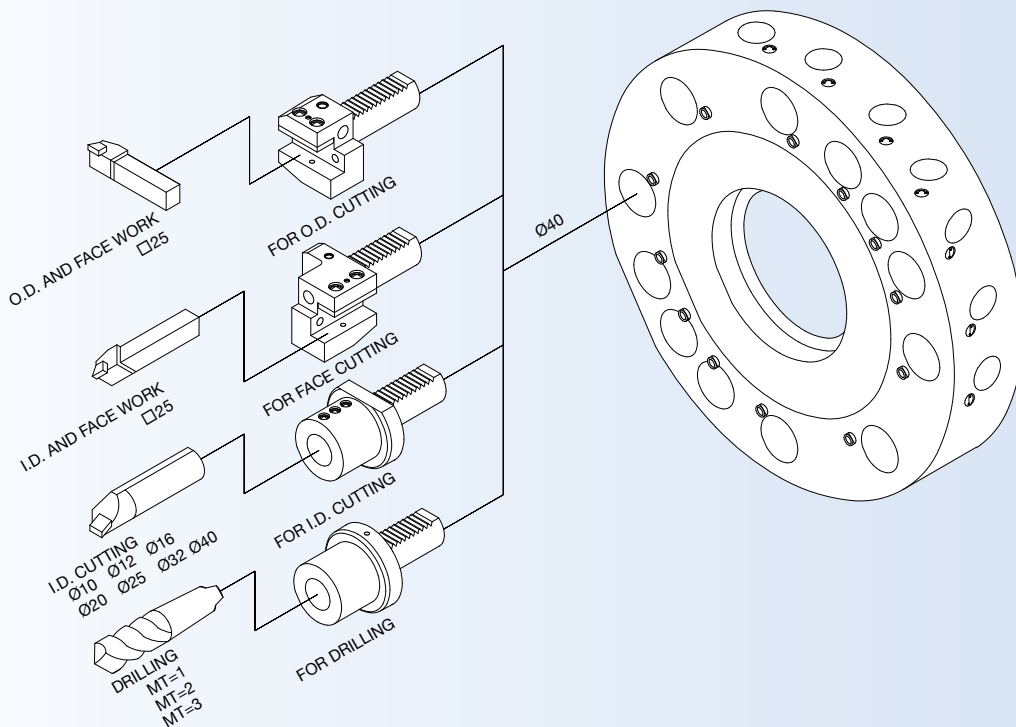
- *Provide you most complete machining ability and make your production more efficient.*



# 8 STATION TOOLING SYSTEM

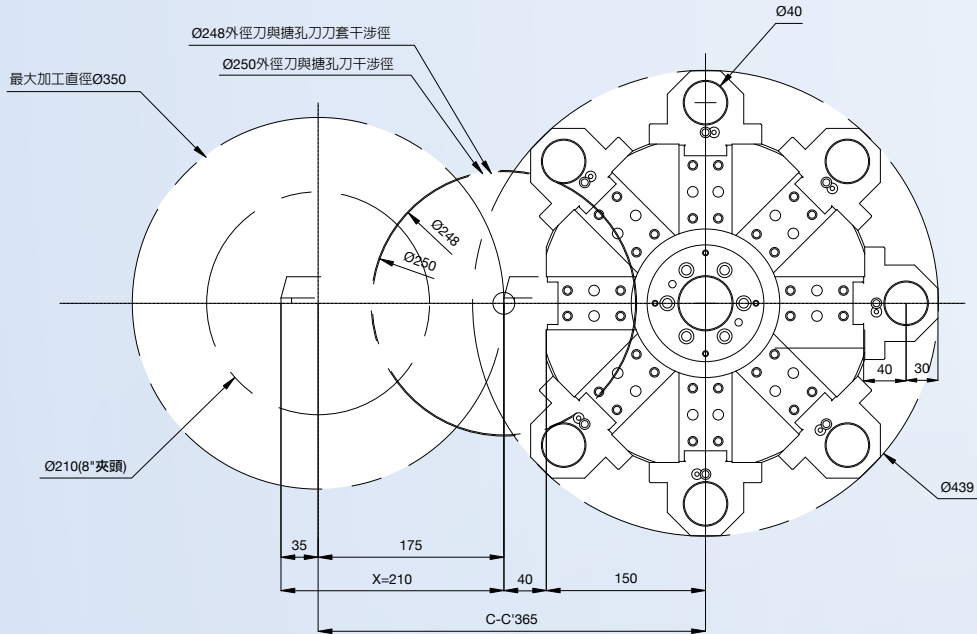


# 12 VDI TOOLING SYSTEM

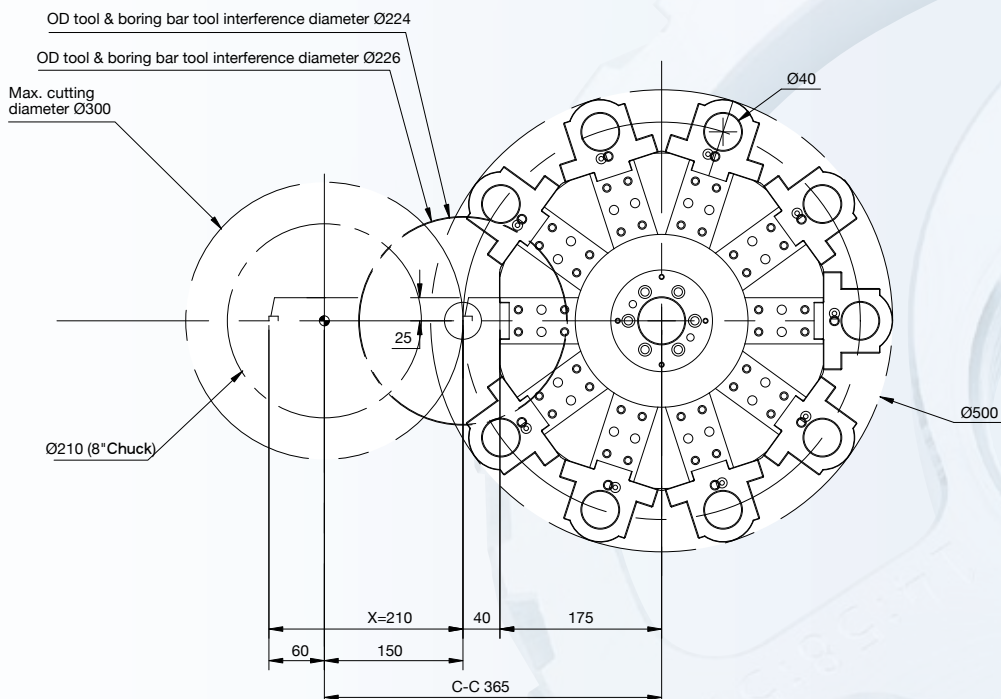




# 8 STATION TURRET INTERFERENCE DIAGRAM

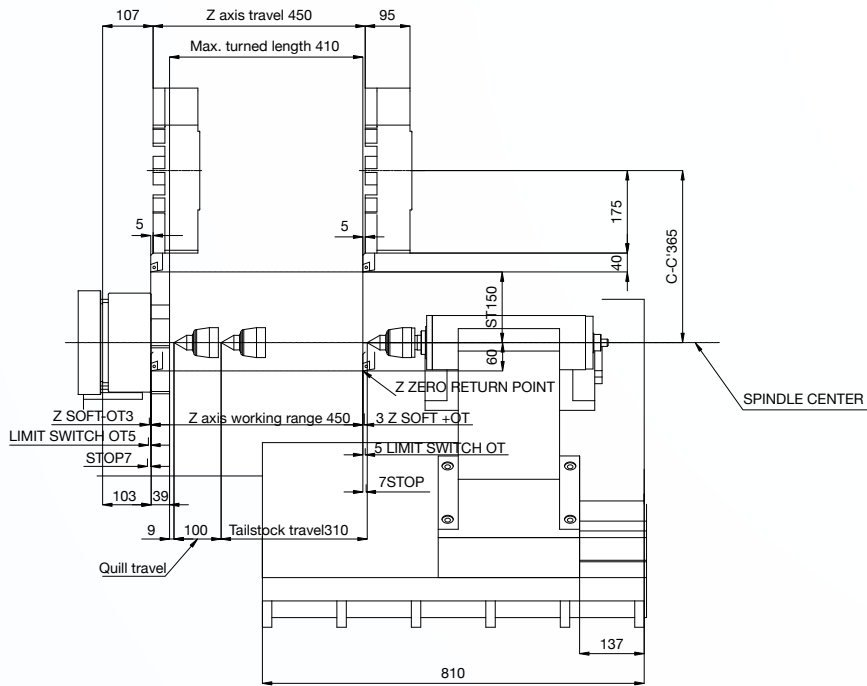


# 10 STATION TURRET INTERFERENCE DIAGRAM

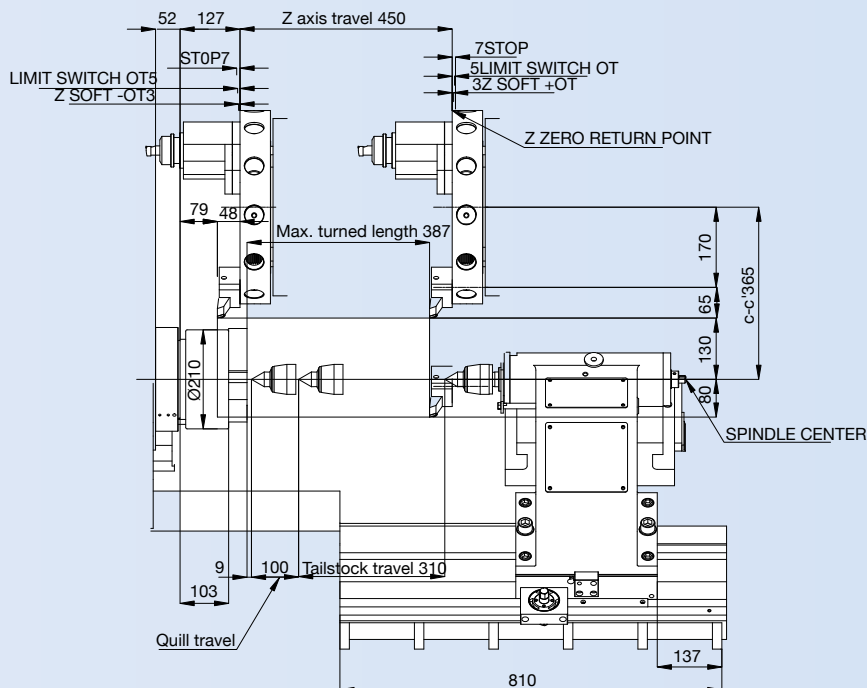




# Z AXIS MOVING RANGE DIAGRAM



# LIVE TOOLING SYSTEM Z AXIS MOVING RANGE DIAGRAM

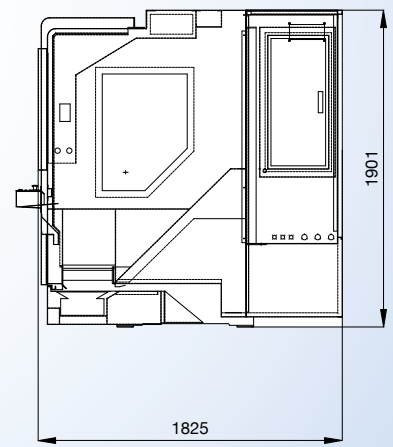
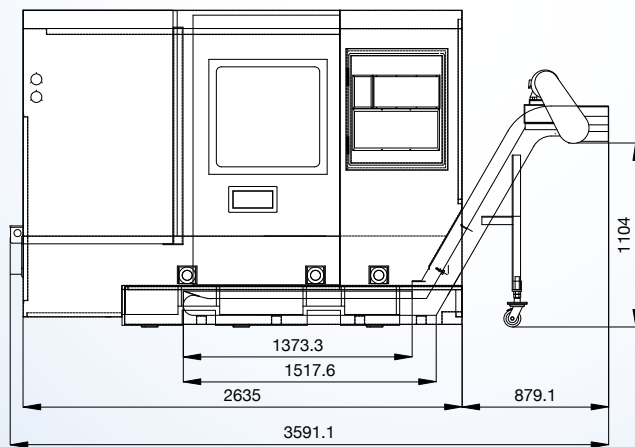
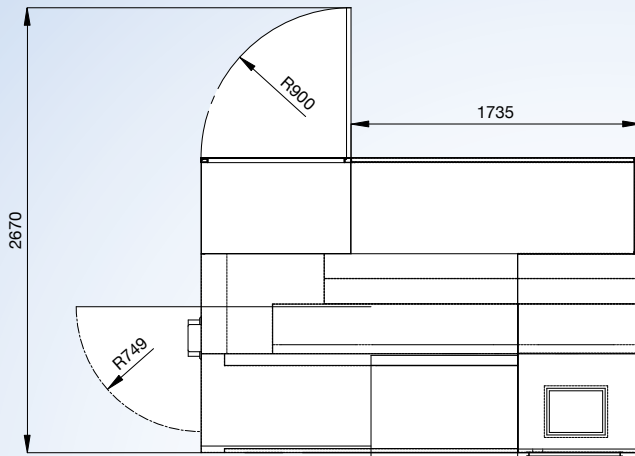






# CNC TURNING CENTER

## OUTLINE DRAWING



# SPECIFICATION

ITEM	TS-814
<b>TRAVEL</b>	
Max. swing	Ø600 mm
Swing over carriage cover	Ø370 mm
Max. turned diameter	Ø250 mm (VDI) / Ø350 mm (8 Station turret) / Ø300 mm (10 Station turret)
X axis travel	210 mm
Z axis travel	450 mm (410 mm)
Carriage inclination	45°
<b>SPINDLE</b>	
Spindle center height (from floor)	920 mm
<b>SPINDLE NOSE</b>	
Power chuck system	Hydraulic
Power chuck diameter	Ø210 mm (8")
Spindle bore	Ø62 mm
Drawtube (bar) capacity	Ø52 mm
Spindle front bearing (internal diameter)	Ø100 mm
Max. spindle speed	3500/4500 rpm (OPT)
Spindle motor (Con./30Min)	11 kw/15 kw
Min. spindle speed for full motor power	771 rpm
<b>AXIS</b>	
X and Z axis rapid traverse rate	20 and 20 m/min
X and Z axis slide way configuration	Box way
<b>TURRET SYSTEM</b>	
Tool change	Servo motor driven
Turret disc diameter	Ø410 mm (VDI) / Ø300 mm (8 Station turret) / Ø350 mm (10 Station turret)
Type	VDI 3425/40 / Large housing
Number of tool stations	12 (VDI) / 8 (8 Station turret) / 10 (10 Station turret)
Turning tool shank dimensions	25 x 25 mm
Max. boring bar diameter	Ø40 mm
Tool travel below center line	80 mm (VDI) / 35 mm (8 Station turret) / 60 mm (10 Station turret)
<b>TAILSTOCK</b>	
Tailstock quill taper	MT.4
Quill diameter and travel	Ø75 x 100 mm
Max. quill thrust	550 kg (18kg/cm <sup>2</sup> )
<b>GENERAL INFORMATION</b>	
Slide way lubrication system	Central lubrication
Coolant tank capacity	120 Liter
Approximate machine footprint	1830 x 3600 x 1900 mm
Approximate machine weight	4600 kg

Product specifications, accessories, and machine appearance are subject to change without prior notice.

## Standard Accessories

Foot switch for chuck operation  
Automatic lubrication system  
Coolant System  
Through hole hydraulic chuck  
Hard jaw 1 set  
Soft jaw 3 set  
Working Lamp  
Adjustment Tools  
Operation Manual  
Heat Exchanger  
Manual Tailstock  
8 Turret included accessories  
Chip conveyor and Cart  
FANUC Controller

## 8 Station Turret Accessories

Ø6,8,10,12,16,30,25,32 / per each  
Drilling sleeve MT3, MT2, MT1 / per each  
F.D. cutting holder 1 pc  
I.D. cutting holder 3 pc  
Deep hole drilling holder 1 pc

## Optional Accessories

Bar feeder  
Transformer  
Collet chucks  
Auto tool presetter  
CE Mark  
VDI 12 Turret  
Parts catcher  
Live tooling  
10 Station Turret  
12 Station Turret  
αp wide range motor  
SIEMENS Controller



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