

YOU JI COSMOS
Sincerity Responsibility Innovation

Versatile

Rigid



Powerful

YCL SERIES
CNC VERTICAL TURNING CENTER



The YCL Series Delivers

- ☛ 40 Years of Design Pedigree
- ☛ Robust Machine Structure
- ☛ Optimum Cutting Performance
- ☛ Aesthetically Designed Machine Guards
- ☛ Internationally Accepted Brand
- ☛ Carefully Configured Controller Package
- ☛ High Focus Of Ergonomics All Around The Machine

You Ji Customers in India (Over 400 Installations)



and many more!

Overview

With a quest to bring the latest and the best machines at a reasonable price to our customers, we have joined hands with our long-term partner YOUJI to form a 50/50 JV company, YOUJI Cosmos Machine Tools LLP. This partnership aims to serve the rising demand for high quality Vertical Lathes in India by being close to the end customer and understanding their evolving needs.

About You Ji Machine Tools,

With over 42 years of experience, YOUJI has been catering to a wide range of applications in Aerospace, Turbines, Bearings, Pumps, Valves, Railways & Automobile industries in over 46 countries. Located in Taiwan they have one of the largest and truly integrated manufacturing facility of 1,55,000 sq. mt. in the Taiwan province. For their flagship products the VTL'S they are one of the largest manufacturer in the world with a range from 200 mm to 8000 mm table diameter. Their technological strength includes Vertical Turning Lathe with 3 Axis, Turn Mill, Turn Mill with Y Axis, Heavy-duty with Hydrostatic Tables, Automatic Pallet Changer, Double Turret - Double Ram machines and high accuracy machines conforming to aerospace standards.

Founded	1978
Managing Director	Mr. Wang, Cheng-Jen (Massa Wang)
Floor Space	155,000m2
Employees	460 people



**SOLD
IN OVER
46 COUNTRIES
ACROSS THE
WORLD**



**NOW
MADE IN INDIA**





YCL 700 / 850 / 1000

The YCL series feature robustly designed structure. The transmission includes rigid roller guideways & C3 Class precision ball screws. The extremely rigid Hydraulic turrets provide ultimate stability to ensure heavy cutting and obtain best surface finish.

With over 30 years of manufacturing expertise the machines have utmost reliability and performance.



ROBUST PERFORMANCE

	YCL 700	YCL 850	YCL 1000
Chuck size	15" / 18"	18" / 21"	21" / 24"
Spindle Power - Siemens	16/28KW	16/28KW	16/28KW
Spindle Motor - Fanuc	15/18.5KW	18.5/22KW	18.5/22KW
Max. Speed	2500rpm	2000rpm	1500rpm
Max Weight	600 kgs	1000 kgs	1200 kgs



DESIGN FEATURES

- You Ji Vertical lathe is designed for heavy duty turning
- The combination of robust structure and roller LM Guideways ensures the highest level of rigidity and stability for highly accurate turning
- Hydraulic Turret with Powerful spindle motor allows great cutting performance



Superior
Rigidity



Superior
Efficiency



Superior
Accuracy



Superior
Performance

YOU JI
LONG LIFE
DESIGN

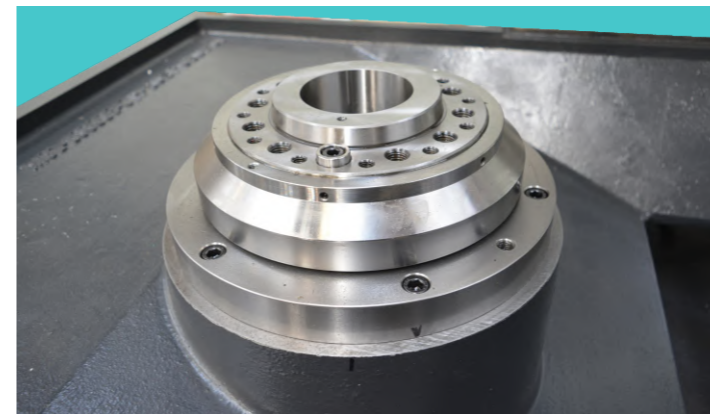


Base

YCL base is specially designed to withstand heavy loads and absorb vibrations during severe machining conditions.

Robust monoblock base made of cast iron.

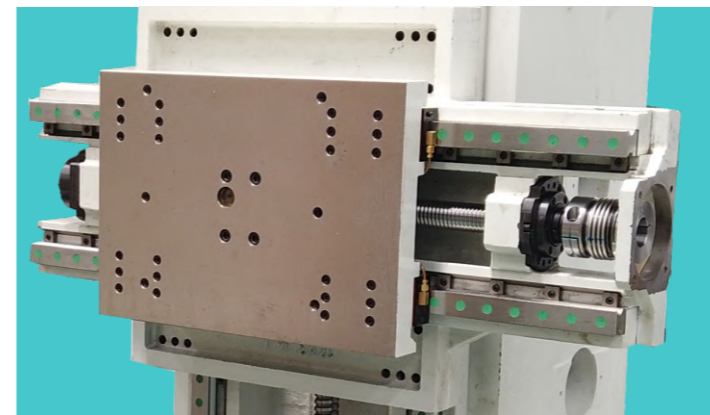
For efficient chip disposal of high volume of chips the base is designed with steep slope and high capacity flushing system.



Heavy Construction Spindle

YCL series spindles are built to provide unsurpassed performance in turning tough steels as well as difficult materials like titanium, Inconel and nickel-base and superalloys and other challenging material.

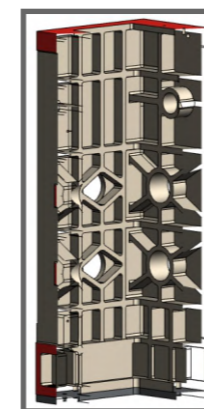
Coupled with rigid cylindrical roller bearings and angular contact ball bearings which are used to withstand radial and axial loads during machining, precision and performance are assured.



Strong Saddle

Robust Saddle design ensures the high cutting performance and rigid mounting for the heavy duty hydraulic turret.

This ensures high durability and accuracy.



Column

The column is Heavily Ribbed to provide a balanced strong structure for heavier cutting.

Roller guideway alongwith the integrated motor mounting bracket design on saddle provides vibration free performance and ensures high precision with long life.

COMPONENTS ON YCL



Hub



Motor Housing



Motor Base



Housing



Fly Wheel



Elevator Part



Motor Cover



Compressor Housing



Brake Drum (truck)



Press Plate



Brake Disc



Brake Drum



Stub Axle



Aluminum Wheel



Pump

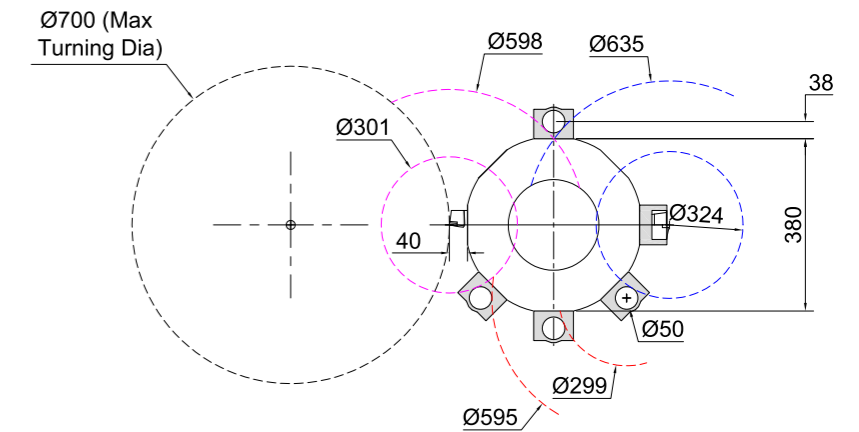


Valve

Turret Interference Diagram

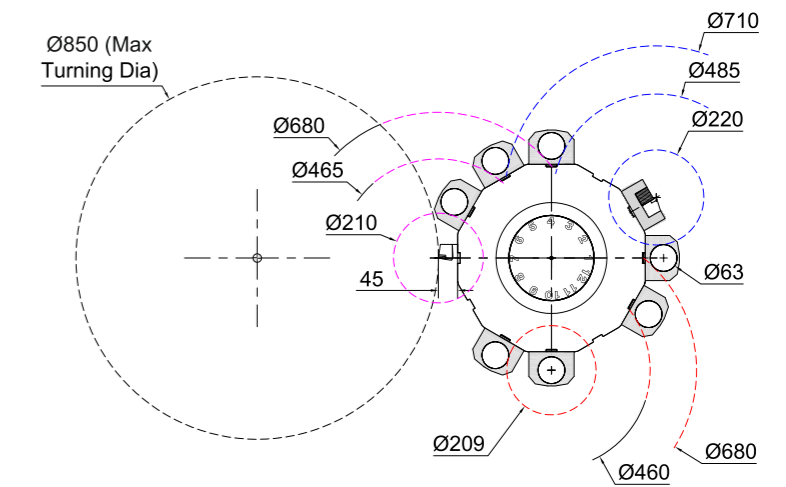
YCL 700

- 8 Station
- 50 dia. Boring Bar
- 32mm Sq Tool Shank



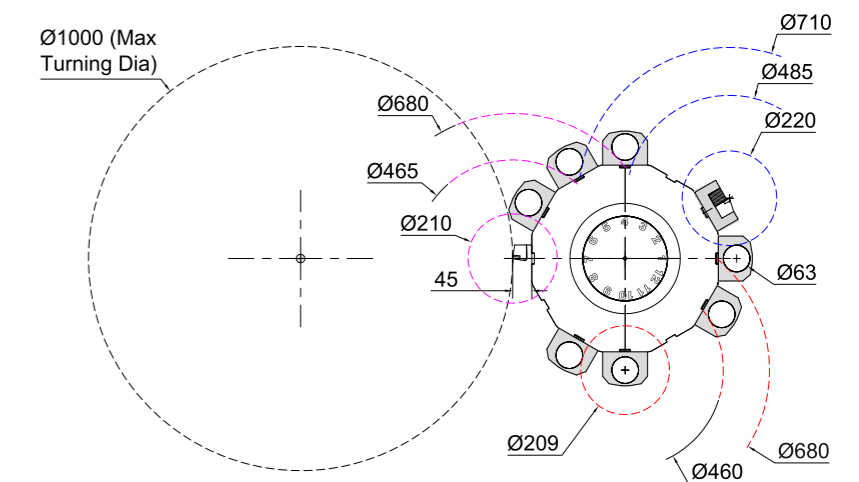
YCL 850

- 12 Station
- 63 dia. Boring Bar
- 32mm Sq Tool Shank



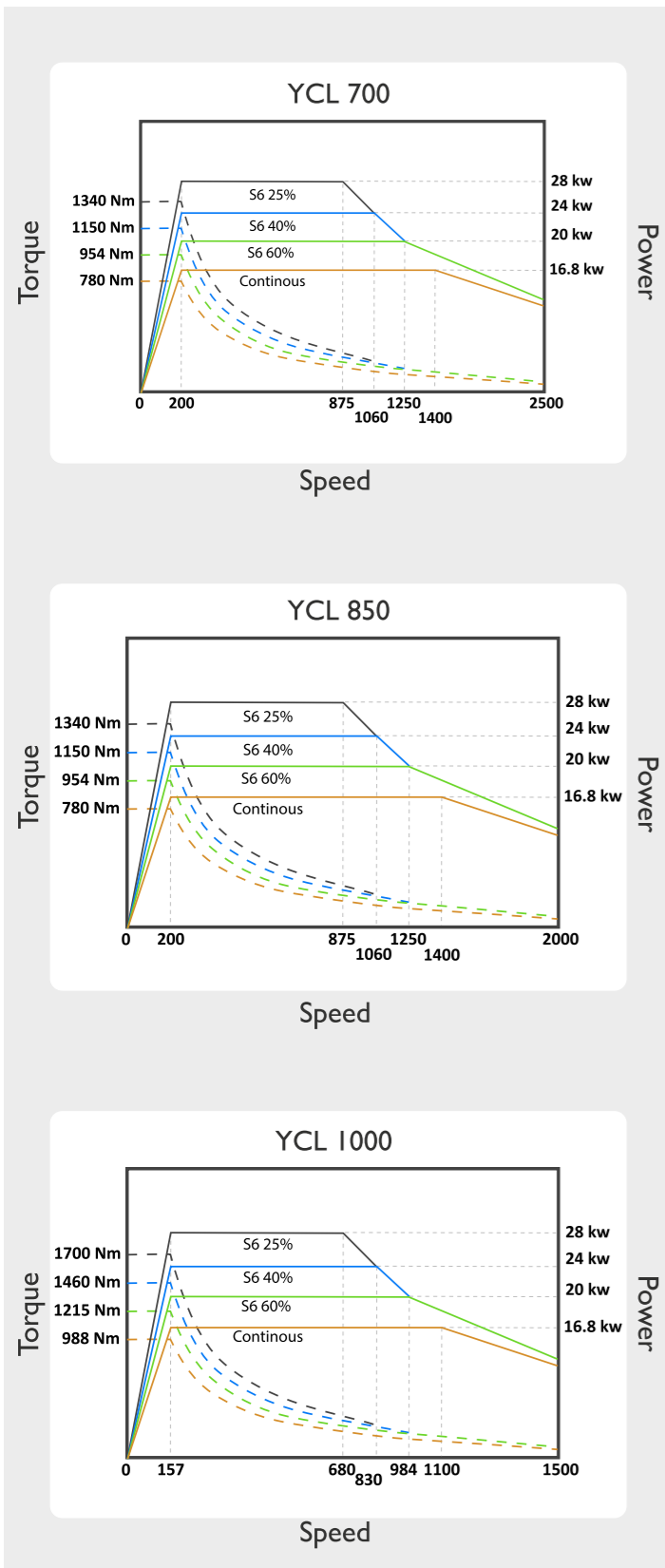
YCL 1000

- 12 Station
- 63 dia. Boring Bar
- 32mm Sq Tool Shank

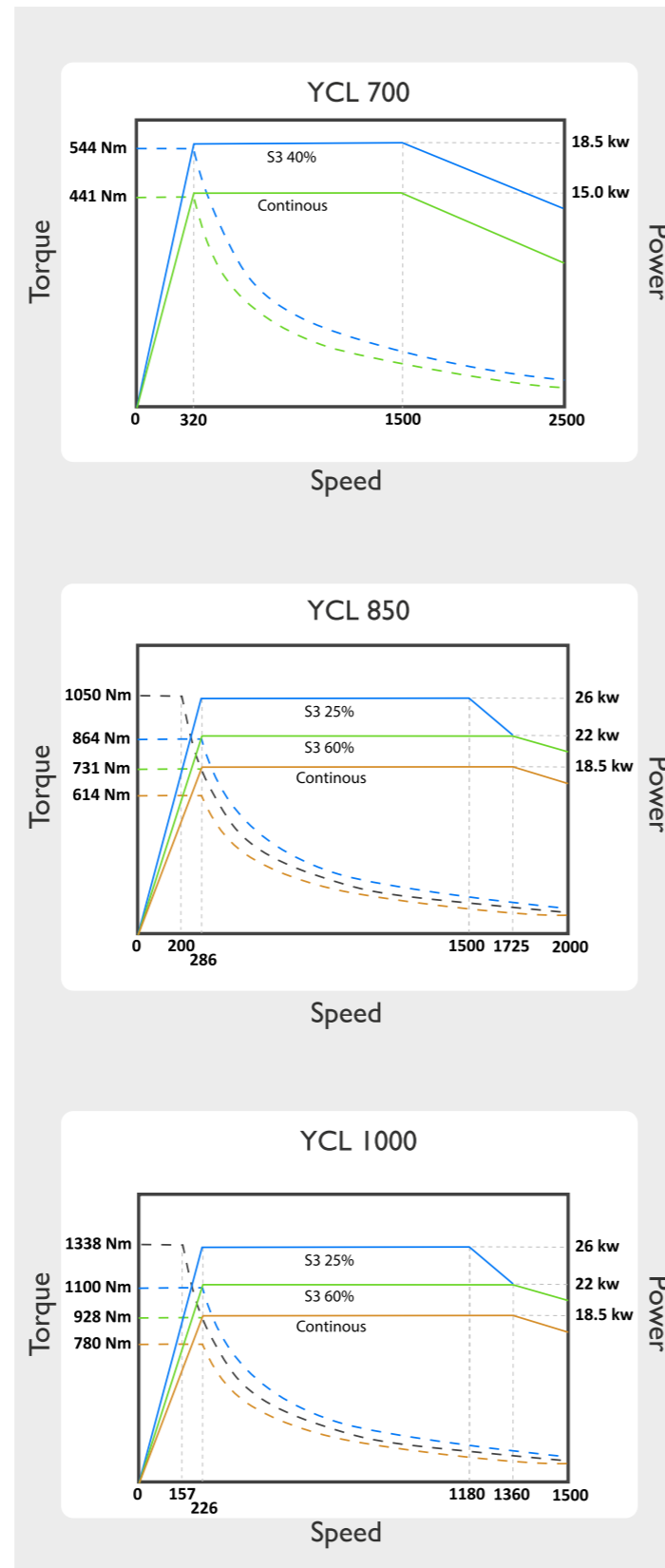


Torque Power Diagram

Siemens Controller



Fanuc Controller



Machine Specification

Description	Units	YCL 700	YCL 850	YCL 1000
Capacity				
Max. Swing Diameter	mm	800	1000	1200
Swing over saddle	mm	600	750	850
Max. Turning diameter	mm	Ø 700 / L 120	Ø 850 / L 120	Ø 1000 / L 120
Max. Turning height	mm	500	800	800
Chuck Size	mm	15"(18")	18"(21")	21"(24")
Traverse				
X-Axis	mm	-25/+355	-35/+430	-35/+530
Z-Axis	mm	520	820	820
Main Spindle				
Speed	mm	2500	2000	1500
Spindle Nose Taper	mm	A2-8	A2-11	A2-11
Max. weight capacity of Spindle (without chuck)	kg	600	1000	1200
Turrent				
Type	-	Hydraulic	Hydraulic	Hydraulic
No. of stations	-	8	12	12
OD tool size	mm	32	32	32
Boring bar diameter	mm	50	63	63
Axis Drive				
Rapid Traverse X - Axis	m/min	20	20	20
Rapid Traverse Z - Axis	m/min	20	20	20
Motor				
Spindle Power - Siemens	kw	16 / 28	16 / 28	16 / 28
Spindle Motor - Fanuc	kw	15 / 18.5	18.5 / 22	18.5 / 22
Others				
Machine Weight	kgs	6500	9500	10500
Power Supply	kva	40	40	40

Standard Features

- Siemens 828D, Fanuc 0iMF Controller (any one)
- 3 Jaw Hydraulic Chuck
- 1 Set Hard & Soft Jaw
- Chip Conveyor with Bucket
- Coolant Flushing
- Transformer
- Coolant Gun & Air Gun

- Automatic lubrication system
- Panel AC
- Hi-Lo Pressure Clamping
- Portable MPG
- LED Work Lamp
- Tool Kit
- Leveling Pad

Optional Features

- Chuck Upgrade (YCL 700-18", YCL 850-21", YCL 1000-24")
- Oil Skimmer
- Auto Door
- ZF Gear Box
- Turning Height Extension to 700mm (On YCL 700)
- Proximity for Chuck Clamp Detection

ALSO AVAILABLE LARGE MACHINE RANGE FROM YOUJI - TAIWAN



YV Series - CNC RAM Type VTL for Large Diameter Components

Table Diameter: 1000, 1200, 1600

Option: ATC, C Axis, Automatic Pallet Changer

In Photo: YVI200ATC+C-APC



VTL Series - CNC VTL for Complex Component Requirements

Table Diameter: 1000, 1200, 1600, 2000, 2500,
3000, 3500, 4000, 4500

Option: ATC, C Axis, Double RAM,
Automatic Pallet Changer

In Photo:

VTL 1200ATC+C & VTL2000ATC+C+APC



VTH Series - CNC VTL with Hydrostatic Bearing for Heavy Components

Table Diameter: 3000, 3500, 4000, 4500, 5000,
6000, 7000, 8000

Option: ATC, C Axis, Double RAM

In Photo: VTH4000ATC+C+2R



Manufactured by

YOUJI COSMOS MACHINE TOOLS LLP, INDIA

Sold by

COSMOS IMPEX INDIA PVT. LTD.

HEADQUARTERS.

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