YIPC new technologies are essential in developing and maintaining a successful CNC machining business, but it is exemplary service that will ultimately define most manufacturers.

YIPC is a professional designer, developer, manufacturer and supplier of CNC Machine Tools. The latest machining technology has been developed and applied in innovative ways to produce some of most complicated parts in the market. Every machine is designed and manufactured to give the clients outstanding accuracy and performance. This perfect technology is not just like pull out of a hat, nor does it grow on trees. The very aggressive team integrates more than 66 years experience and technology so as to make the finest CNC machines for international market.

YLM-10A

YANG IRON PRECISION CORP.

No.48, Alley 78, Lane 699, Guangsing Rd., Taiping Dist., Taichung City 411 Taiwan.

Tel: 886-4-2270-1170 Fax: 886-4-2270-1160

http://www.yipc.com.tw

mail:business@yangcnc.com

POWERED BY EXPERIENCE

Products Range:

- CNC Horizontal Machining Center
- CNC Double Column Vertical Machining Center
- CNC Vertical Machining Center
- CNC Turning Center
- CNC Lathe

WORKING HARD TO EARN TRUST

High Speed, Accuracy, Productivity & Reliability

CNC Lathe

YLM series

ED180510

PRECISION COMES FROM RIGIDITY, AND RIGIDITY COMES FROM STRUCTURAL STRENGTH.

YLM-6

CNC Lathe
YLM-6 / 8A

Max. spindle speed: 6000/4500 rpm
Spindle speed (full power output): 750/563 rpm
Swing over bed: 460mm
Max turning length: 412/400 mm

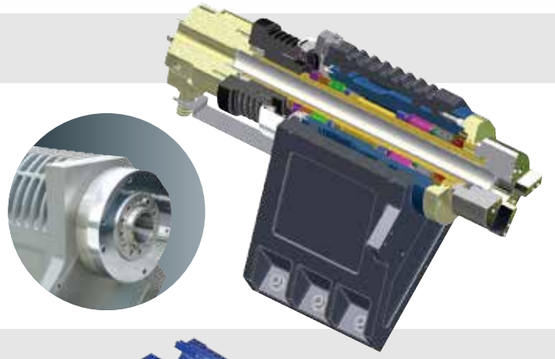
Friendly Control Panel

The unique push buttons with pellucid LCD back lights display makes operate easily.

The ergonomically rotating control panel box design provides convenient use.

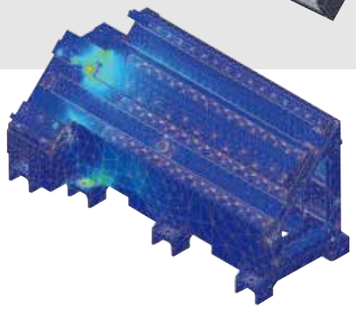
YLM-8A

Rigid & Precise Spindle



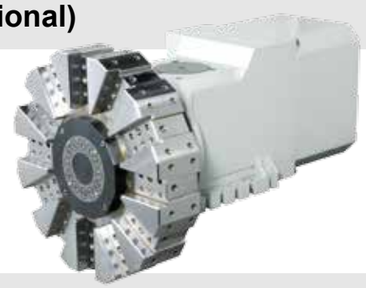
- The maximum spindle speed is up to 6000rpm.(YLM-6)
- Spindle front side is specially adopted large diameter roller bearings and angular contact ball bearing to achieve the best cutting capacity. There`s optimal span and balancing support between the front and rear roller bearings. This design resists the radial load and provides excellent cutting condition in high and low speed.
- Strong headstock utilizes heat symmetrical and dissipation slot design to reduce thermal deformation value and raise stable cutting accuracy.

Rugged & Stable Base



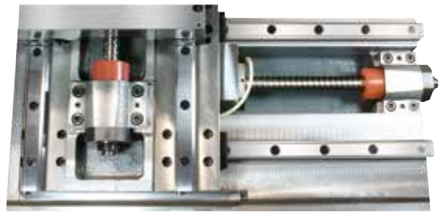
- The powerful one-unity-shaped base structure is professionally developed by 3D-CAD and FEM analysis to let the inner walls be perfectly strengthened with rigid ribs. It increases whole machine`s rigidity and stability, keeps long term of reliable cutting accuracy and extends tooling life.
- Low gravity center of 45° slant bed design makes chips remove easily, load and unload conveniently. It also boosts machining capacity and decreases deformation.

High Speed Servo Turret / *Hydraulic Turret (Optional)



- The turret rotation and indexing is driven by a powerful servo motor which provides accurate positioning, fast and stable tool change.
- Servo turret deploys three curvic couplings clutch and hydraulic clamping system to gain high torque output and low noise.
- It provides bi-directional random tool selection with approx. 0.7 second in tool to tool, and 1.1 second in 180° tool.

High Precision Ball Screw & Linear Guide / *Roller Type Linear Guide (Optional)



- Heat treatment and precision ground ball screw assures excellent and longer sustained accuracy. Each axis has pre-extension design which offers greater machining rigidity and reliability.
- Latest and durable linear guide provides smooth and fast movement.
- 30 m/min.(1181 ipm) rapid traverse reduces non-cutting time and increases productivity

Linear Guide Tailstock

The whole stiff tailstock is controlled by M-code and hydraulic cylinder to reach smooth and fast movement along the linear guides, and it gains steady clamping force and convenient operation.

*Square Way Tailstock (Optional)

High rigidity of square way tailstock is designed to clamp long and heavy workpiece firmly. The whole set of tailstock main body and quill are automatically movable through hydraulic oil system which is operated by M-code and push button easily. The quill travel is 118mm and its thrust is adjustable by hydraulic oil cylinder.

PRECISION COMES FROM RIGIDITY, AND RIGIDITY COMES FROM STRUCTURAL STRENGTH.

YLM-8B

CNC Lathe YLM-8B / 10A

Max. spindle speed: 4500/3500 rpm

Spindle speed(full power output): 375/233 rpm

Swing over bed: 700mm

Max turning length: 600/586 mm

Friendly Control Panel

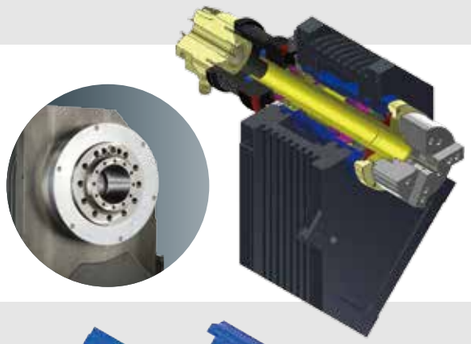
The unique push buttons with pellucid LCD back lights display makes operate easily.

The ergonomically rotating control panel box design provides convenient use.

YLM-10A

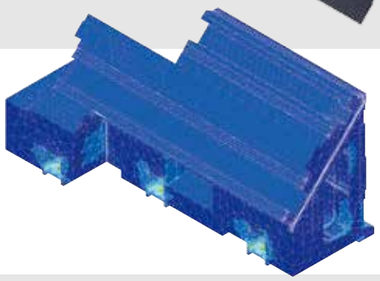
Rigid & Precise Spindle

- The maximum spindle speed is up to 4500rpm.(YLM-8B)
- Spindle front side is specially adopted large diameter roller bearings and angular contact ball bearing to achieve the best cutting capacity. There`s optimal span and balancing support between the front and rear roller bearings. This design resists the radial load and provides excellent cutting condition in high and low speed.
- Strong headstock utilizes heat symmetrical and dissipation slot design to reduce thermal deformation value and raise stable cutting accuracy.



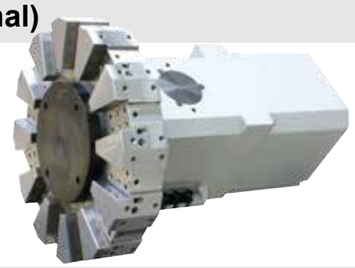
Rugged & Stable Base

- The powerful one-unity-shaped base structure is professionally developed by 3D-CAD and FEM analysis to let the inner walls be perfectly strengthened with rigid ribs. It increases whole machine`s rigidity and stability, keeps long term of reliable cutting accuracy and extends tooling life.
- Low gravity center of 45° slant bed design makes chips remove easily, load and unload conveniently. It also boosts machining capacity and decreases deformation.



High Speed Servo Turret / *Hydraulic Turret (Optional)

- The turret rotation and indexing is driven by a powerful servo motor which provides accurate positioning, fast and stable tool change.
- Servo turret deploys three curvic couplings clutch and hydraulic clamping system to gain high torque output and low noise.
- It provides bi-directional random tool selection with approx. 0.8 second in tool to tool, and 1.2 second in 180° tool.



High Precision Ball Screw & Linear Guide / *Roller Type Linear Guide (Optional)

- Heat treatment and precision ground ball screw assures excellent and longer sustained accuracy. Each axis has pre-extension design which offers greater machining rigidity and reliability.
- Latest and durable linear guide provides smooth and fast movement.
- 30 m/min.(1181 ipm) rapid traverse reduces non-cutting time and increases productivity

Linear Guide Tailstock

The whole stiff tailstock is controlled by M-code and hydraulic cylinder to reach smooth and fast movement along the linear guides, and it gains steady clamping force and convenient operation.

*Square Way Tailstock (Optional)

High rigidity of square way tailstock is designed to clamp long and heavy workpiece firmly. The whole set of tailstock main body and quill are automatically movable through hydraulic oil system which is operated by M-code and push button easily. The quill travel is 118mm and its thrust is adjustable by hydraulic oil cylinder.

Remarkable Machining Performance

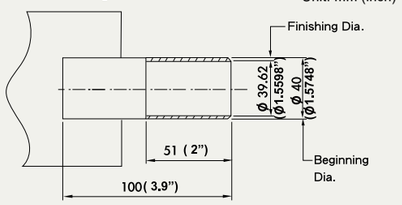
Continuous Machining Accuracy (Example) CMA Test

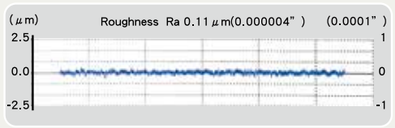
Machinng Condition — YLM-6

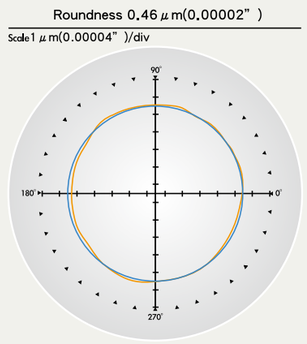
	Rough	Finish
Material	Brass (C5191)	Brass (C5191)
Tool	DNMG110408MS KC5510	VBGT110304LF PCD
Sindle Speed	3000 rpm	1200 rpm
Cutting Depth	0.125 mm(0.0049")	0.065 mm(0.0026")
Feedrate	0.13 mm/rev(0.0051")	0.013 mm/rev(0.00051")
Coolant	ON	ON

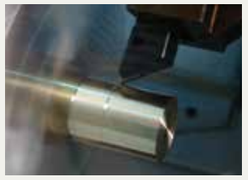
- Ambient Temperatuer: 26˚±1˚C
- Cutting Condition: Started without warm up
- Total Workpiece: 80 Pcs
- Total Cutting Time: 5 Hours

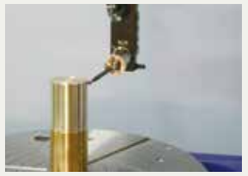
Unit: mm (inch)

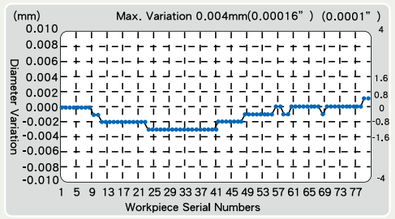










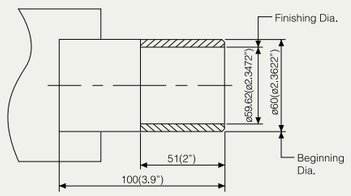


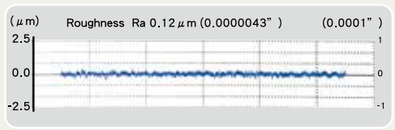
Machinng Condition — YLM-8B

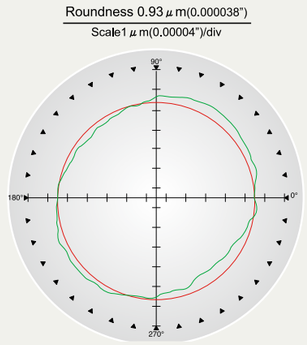
	Rough	Finish
Material	Brass (C3604)	Brass (C3604)
Tool	DNMG110408MS KC5510	VBGT110304LF PCD
Sindle Speed	3000 rpm	1200 rpm
Cutting Depth	0.125 mm(0.0049")	0.065 mm(0.0026")
Feedrate	0.13 mm/rev(0.0051")	0.013 mm/rev(0.00051")
Coolant	ON	ON

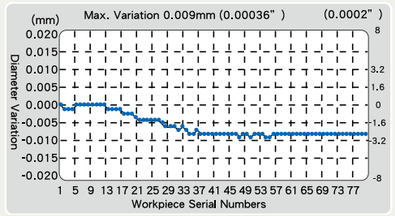
- Ambient Temperatuer: 21˚±1˚C
- Cutting Condition: Started without warm up
- Total Workpiece: 80 Pcs
- Total Cutting Time: 5 Hours

Unit: mm (inch)

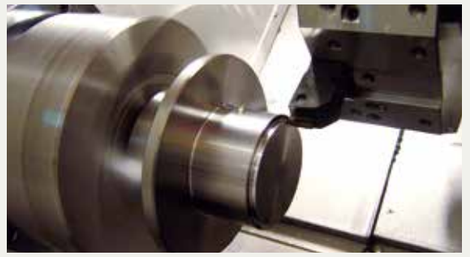








Super & High Cutting Stability



Model	YLM-6	YLM-8B
Tool	KENNAMETAL DCLNR2020K12KC04	KENNAMETAL DCLNR2525M16KC06
Material	S45C(Carbide Steel)	S45C(Carbide Steel)
Cutting Speed	140m(5.51")/min	162m(6.378")/min
Feedrate	0.3mm(0.011")/rev	0.4mm(0.016")/rev
Cutting Depth	5 mm(0.20")/One Side	6.5mm(0.26")/One Side
Cutting Capacity	210cc(8.27in^3)/min	420cc(25.6in^3)/min

Outstanding Accuracy & Quality Control

To guarantee the superior accuracy, completely apply variety of precise instruments such as Taylor Hobson Roundness Measuring Instrument, Hommel Surface Roughness Measuring Instrument, Elcomat Vario Autocollimator, Tesa Niveltronic Electronic Level, ets.

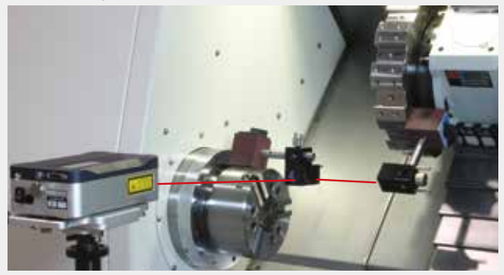
To ensure the best quality, strictly perform variety of inspection methods during manufacturing and finished machines such as Laser Interferometer Measurement System, Dynamic Balancing Measurement System, exact test cutting, etc.

Height Guage

Roundness Measuring Instrument

Dynamic Balancing Inspection

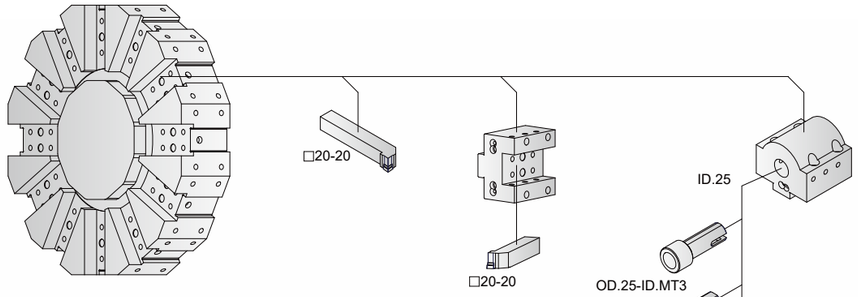
Laser Inspection



Tooling System

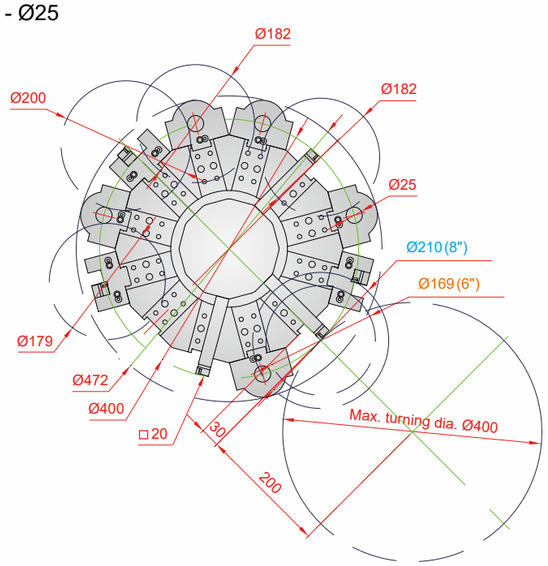
YLM-6 (12T)

Unit: mm

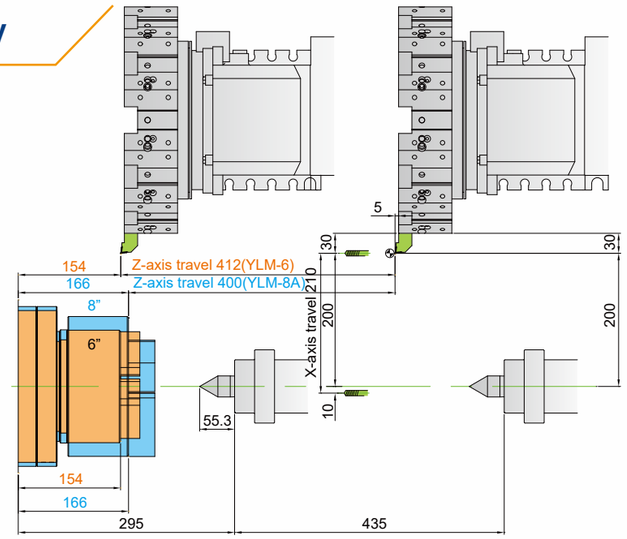


Tooling Interference

12T - Ø25



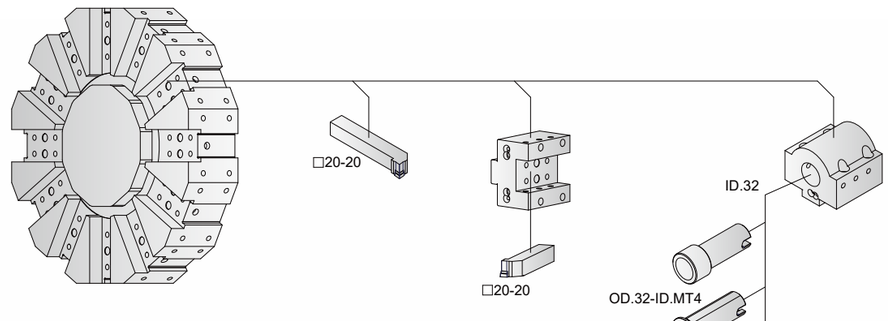
Working Capacity



Tooling System

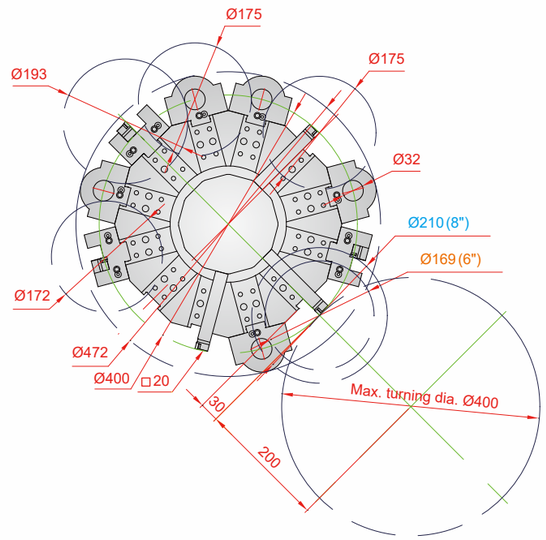
YLM-8A (12T)

Unit: mm

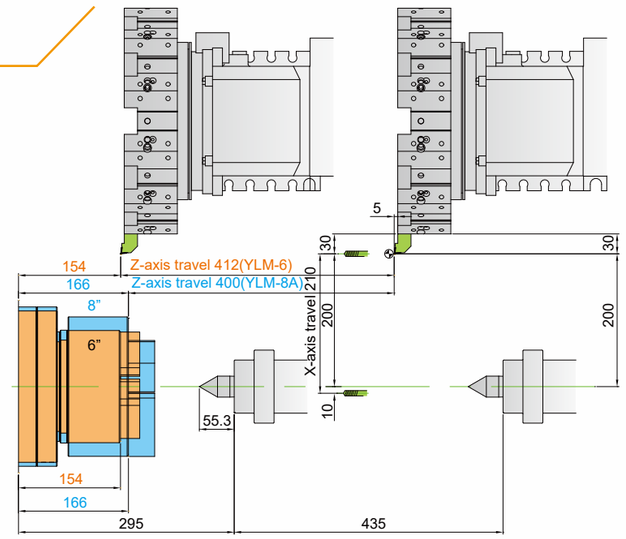


Tooling Interference

12T - Ø32



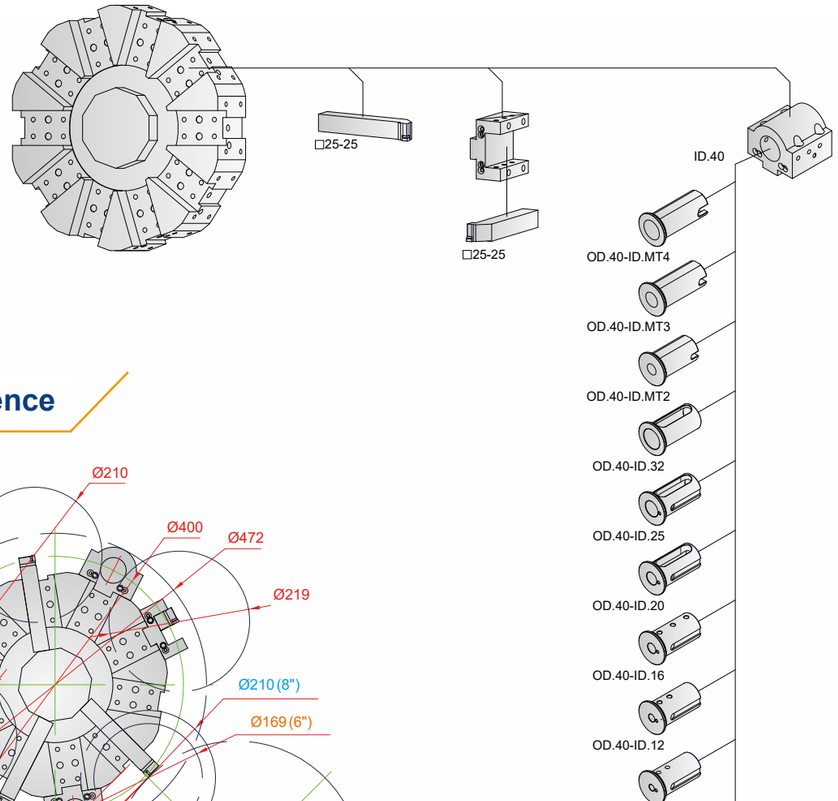
Working Capacity



Tooling System

YLM-6/8A (10T)

Unit: mm



Tooling Interference

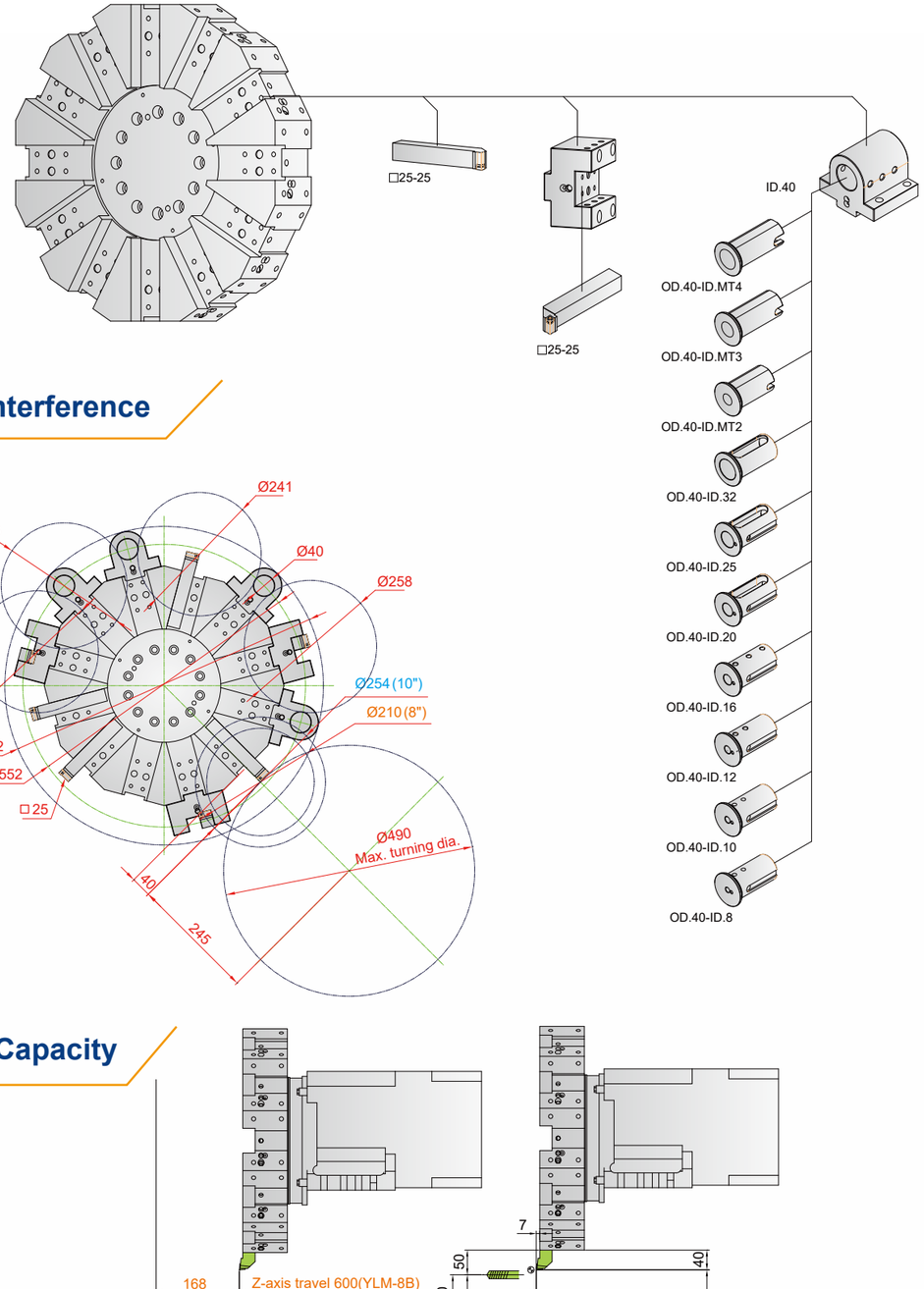
10T - Ø40

Working Capacity

Tooling System

YLM-8B/10A (12T)

Unit: mm



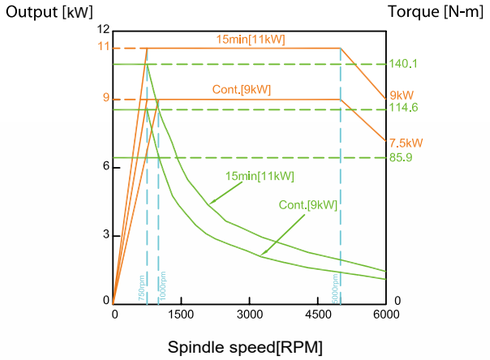
Tooling Interference

12T

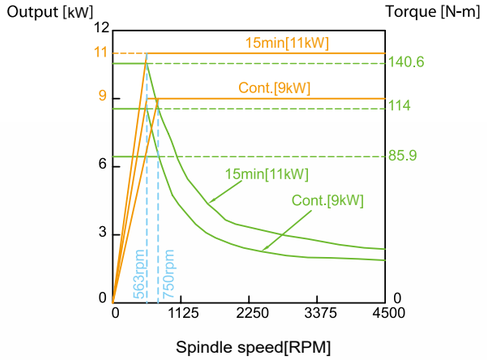
Working Capacity

Spindle Power & Torque Charts

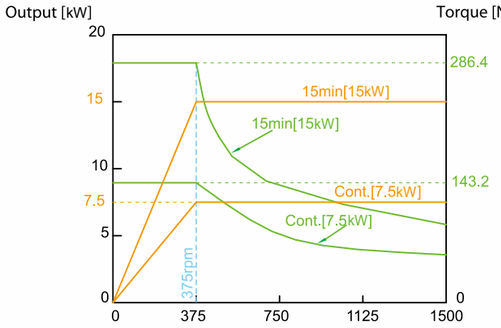
YLM-6 9/11kW



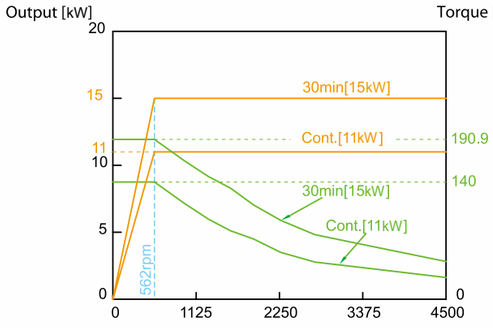
YLM-8A 9/11kW



YLM-8B 11/15kW

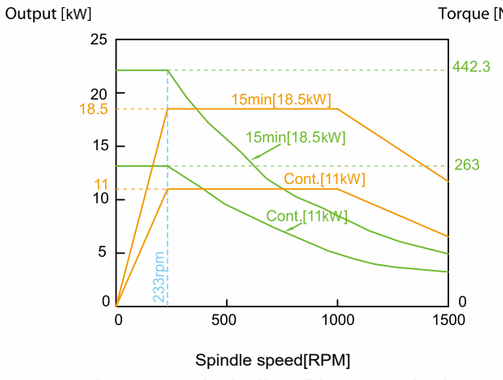


Low-speed winding (Y connection)

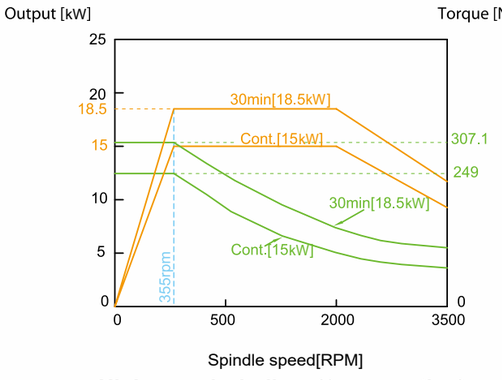


High-speed winding (Δ connection)

YLM-10A 15/18.5kW



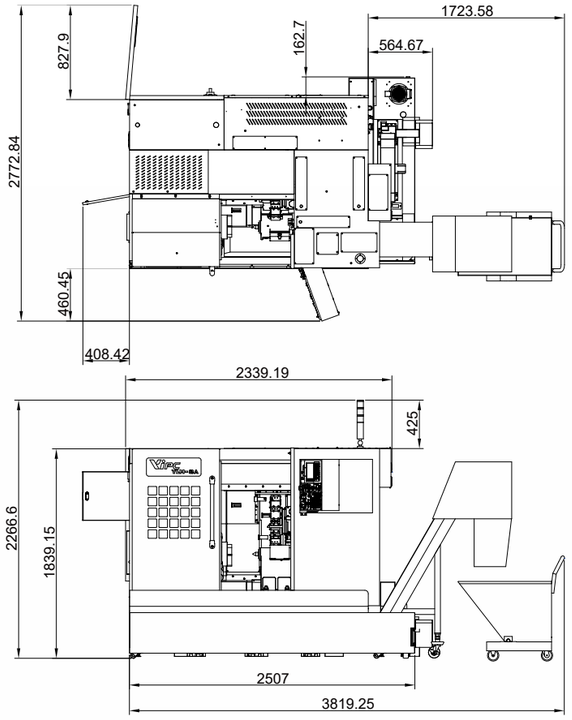
Low-speed winding (Y connection)



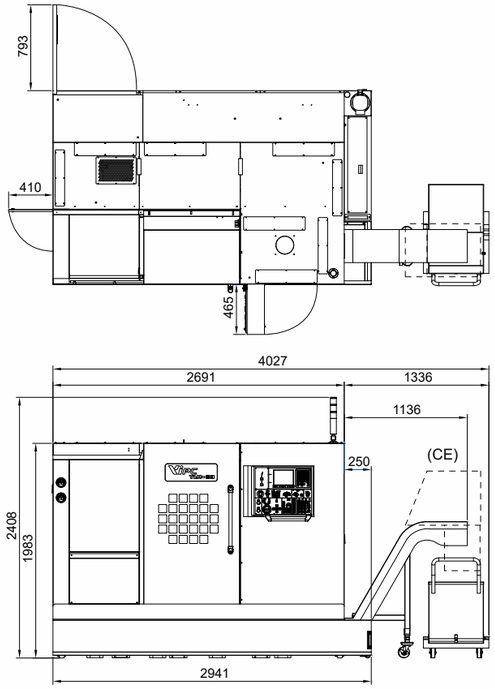
High-speed winding (Δ connection)

Dimensional Drawing Unit: mm

YLM-6&8A



YLM-8B&10A



CNC Lathe

YLM-6&8A / YLM-8B&10A

ITEM	SPECIFICATION	YLM-6	YLM-8A	YLM-8B	YLM-10A
CNC Controller		Fanuc 0iT/*Mitsubishi M80/*Siemens 828D		Fanuc 0iT/*Mitsubishi M80/*Siemens 828D	
Capacity	Swing over bed	ø550mm(ø21.7")		ø700mm(ø27.6")	
	Swing over cross slide	ø320mm(ø12.6")		ø495mm(ø19.5")	
	Std. turning dia.	ø200mm(ø7.9")		ø465mm(ø18.3")	
	Max turning dia.	ø400mm(ø15.7")		ø490mm(ø19.3")	
	Max turning length	412mm(16.2")	400mm(15.7")	600mm(23.6")	586mm(23")
	Distance between center	490mm(19.3")		710mm(28")	
Travel	X axis	210(200+10)mm/8.3"(7.9"+0.4")		260(235+25)mm/10.2"(9.3"+0.9")	
	Z axis	412mm(16.2")	400mm(15.7")	600mm(23.6")	586mm(23")
	Guide way	Linear guides/*Roller type linear guide		Linear guides/*Roller type linear guide	
Spindle	Spindle nose	A2-5	A2-6	A2-6	A2-8
	Spindle bearing dia.	ø90mm(ø3.5")	ø100mm(ø3.9")	ø100mm(ø3.9")	ø130mm(ø5.1")
	Max spindle speed	6000rpm	4500rpm	4500rpm	3500/*2500rpm(12")
	Spindle bore	56mm(2.2")	62mm(2.4")	62mm(2.4")	90mm(3.5")
	Draw tube bore	45mm(1.77")	52mm(2")	52mm(2")	75mm(3")
	Chuck size	6 inch / 3-Jaw	8 inch / 3-Jaw	8 inch / 3-Jaw	10/*12 inch / 3-Jaw
Turret	Turret type	mm/inch/*VDI-30		mm/inch/*VDI-40	
	Driven way	Servo motor/*Hydraulic motor		Servo motor/*Hydraulic motor	
	No. of tools	12 / *10 / *8		12	
	Tool shank size	□20mm(0.79") / *□25mm(0.98")		□25mm(0.98")	
	Max. boring bar dia.	ø25mm / *ø40mm	ø32mm / *ø40mm	ø40mm(1.57")	
Tailstock	Driven way	Hydraulic		Hydraulic	
	Guide way	Linear guide / *Square way: Quill travel is 118mm		Linear guide / *Square way: Quill travel is 118mm	
	Center MT#	MT#4		MT#4	MT#5
	Travel	435mm(17.1")		680mm(26.7")	
Feedrate	X/Z axis rapid feedrate	30m/min.(1181ipm)		30m/min(1181ipm)	
	Cutting feedrate	1260mm/min.(49.6ipm)		1260mm/min(49.6ipm)	
Servo Motor	Spindle motor (P-type)	9 / 11 kW		11 / 15 kW	15 / 18.5 kW
	Spindle speed (full power output)	750rpm	563rpm	375rpm	233rpm
	Axis motor	X:1.2kW, Z:1.8kW		X,Z:3.0 kW	
	Servo motor	500W(0.67hp)		850W(1.1hp)	
Coolant tank	Tank capacity	250L		320L	
Motor	Chip conveyor motor	188W(0.25hp)		188W(0.25hp)	
	Coolant pump motor	550W(0.73hp)		550W(0.73hp)	
	Hydraulic pump motor	1500W(2hp)		1500W(2hp)	
Dimension	Floor space(LxWxH)	2510x1610x1850mm(98.8"x63.4"x72.8")		2950x1890x1990mm(116.1"x74.4"x78.3")	
	Net weight	3000kg(6600lbs)		4650kg(10230lbs)	
	Gross weight	3400kg(7480lbs)		5200kg(11440lbs)	

(220V/60HZ)

*Optional

To keep improvement new design, the specifications will change without prior notice.

▲ 70bar High Pressure Coolant System

▲ Gantry Robot

▲ Auto. Tool Length Measurement

▲ Oil Skimmer (Disc Type)

▲ Oil Mist Collector

▲ Bar Feeder

▲ Power Turret (VDI)

Standard accessories

1. FANUC 0iT controller
   * MITSUBISHI M80 controller
   * SIEMENS 828D controller
2. 3-jaw hydraulic chuck
   • Soft jaw 1 set
   • Hard jaw 1 set
3. Servo turret (cap. 12T)
4. Fully enclosed splash guard
5. Working light
6. Warning light
7. Hydraulic system
8. Coolant system
9. Auto.lubrication system
10. Tool kit
11. Leveling bolt and pad
12. Cutting tool holder (12T)
    • 1 PCS (YLM-6&8A)
    • 1 PCS (YLM-8B&10A)
13. Boring bar holder (12T)
    • 6 PCS(YLM-6&8A)
    • 6 PCS(YLM-8B&10A)
14. Boring bar bushing 1 set
15. Driller bushing 1 set

Optional accessories

1. Collet chuck & collets
2. Auto. tool length measurement
3. Parts catcher (simple type)
4. Bar feeder
5. Linear guide tailstock
6. Square way tailstock
7. Chain type chip conveyor with chip cart
8. Auto. door
9. Auto. sunroof
10. Oil mist collector
11. Oil skimmer (disc type)
12. Gantry robot
13. Live center
14. Air conditioner (electrical cabinet)
15. Servo turret (cap. 10T/8T)(YLM-6/8A)
16. Hydraulic turret
17. X/Z axes roller type linear guide
18. 70bar high pressure coolant system
19. Power turret(Duplomatic) & Cs axis(0.001°)