



# CNC TURNING

## MY - TURN 34/42/52/65



**MING YANG MACHINERY CO., LTD.**

## SERIES INTRODUCTION

- Meet the demand for high quality of products and automatic production.
- 24 hours non-stop operation.
- 16 hours non-man operation.
- Auto tool length measurement and tool offset compensation.
- Main turret and sub-turret can work simultaneously.

### SPINDLE

Heavy duty spindle design features with three bevel angular ball bearings in the front and the rear supported by roller bearings to achieve high speed and high load.

All spindle bearings are class P4 (ABEC-7), AC spindle motor 3.7 / 5.5KW, Max. torque 37.6NM for 938rpm output.

### AXIAL FEEDING SYSTEM

Driven by AC servo motor, directly connected by flexible coupling and ball screw to eliminate noise and back play.

Class C3 ball screw is supported by class P4 bevel angular in the front and rear for high rigidity and high precision.

Better surface finish is obtained by the precision ground guideways hardened HRC 50 ~ 54 features high efficient lubrication system.

### TURRET SYSTEM

8-tool powerful turret features 140mm curves teeth coupling driven by hydraulic to achieve 14KN locking force. The turret is driven by AC servo motor, tool changing time (1 tool) is 0.2 seconds, (diagonal tool) is 0.5 seconds.



Hydraulic unit



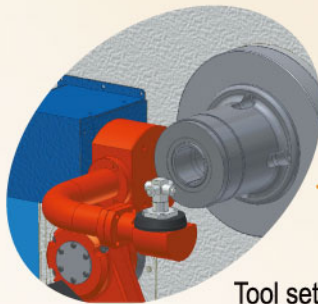
Chuck



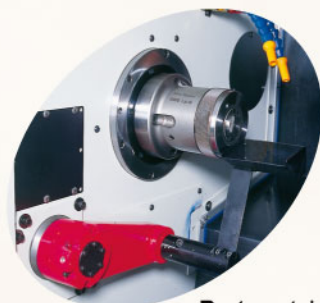
Mist collector



Spindle



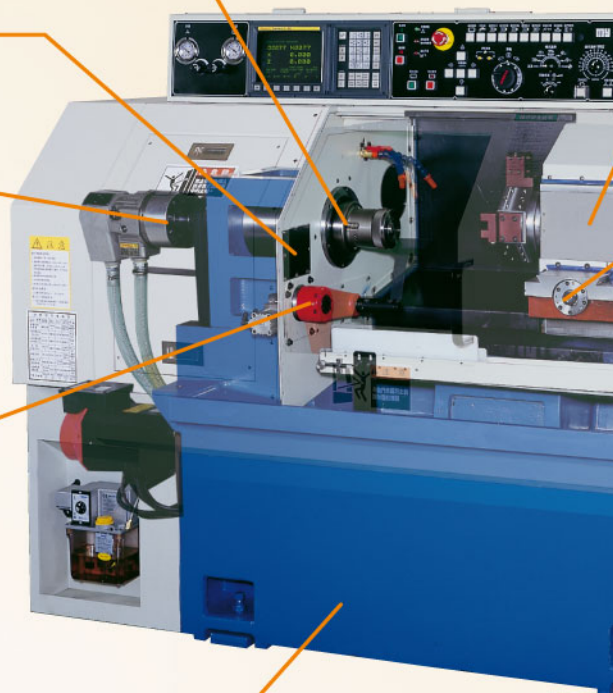
Tool setter



Parts catcher



Base





## AUTOMATATION SYSTEM

Solutions including bar feeder, parts catcher, products conveyor, chip conveyor, auto tool length measurement are offered for the demand of automatic production

Bar feeder connecting interface is standard with built-in control software, ready for operation after connecting to the power source.

Dual arm swing parts catcher puts the workpiece to the conveyor free from chips and cutting oil.

Standard products conveyor feeds the workpiece outside the machine, intermit turning time is set by parameters for energy saving.

4-point tool measurement system measures X and Z direction of the tool and auto compensates tool length and diameter and the wear.

Application range:

Tool measurement / auto tool compensation / tool tip compensation / tool damage detection / auto spare tool selection

## COOLANT AND CHIP DISPOSAL SYSTEM

Dual coolant pumps flushes out chips on Z axis guard with high flow of cutting fluid, high pressure pump connects with the turret solving deep hold problems.

Various types of chip disposal systems are available on request.

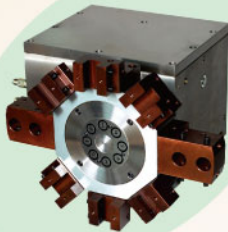


Hand scraping

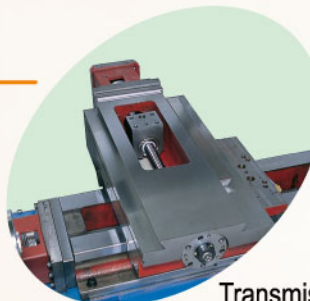


Base

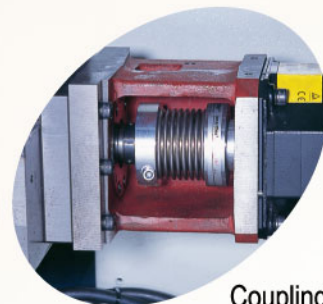
Main parts including the bed and saddle are made of high class Meehanite cast iron, rigid and solid construction, guideways are hardened HRC 50° ~ 54°, precision ground and hand scraped to achieve geometric tolerance beyond the standard.



Turret



Transmission



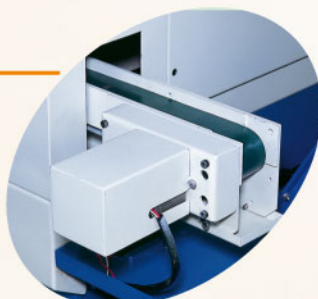
Coupling



Screw chip conveyor



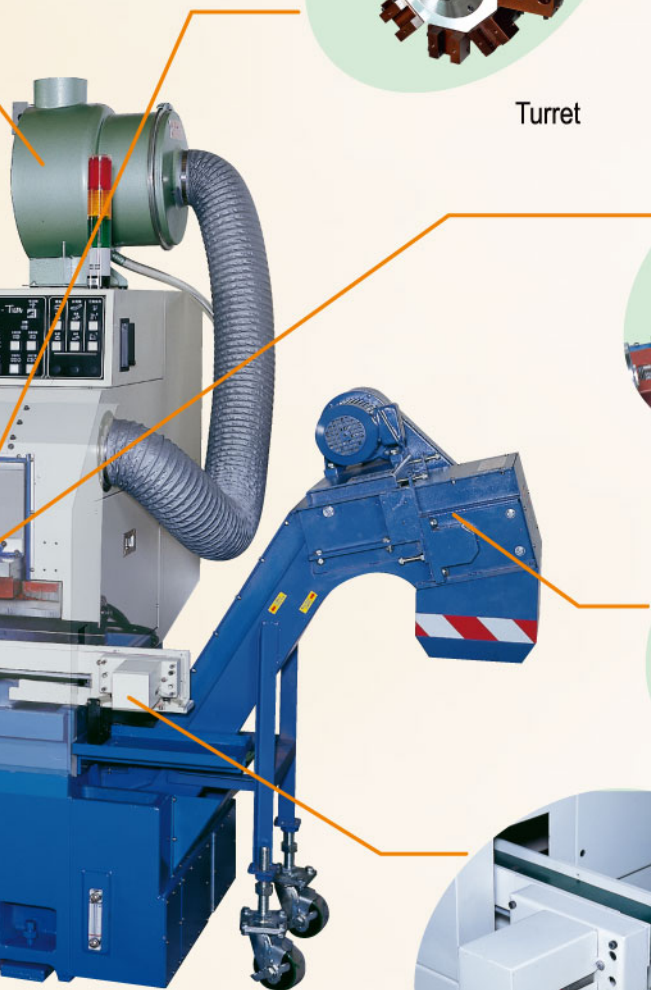
Chain plate chip conveyor



Products conveyor



Bar feeder





## Specification

Item		Unit	MY-Turn 34	MY-Turn 42	MY-Turn 52	MY-Turn 65
Capacity	Bar capacity	mm	34	42	52	65
	Max. working length	mm	150/175	150/175	150/175	150/175
Travel	X axis	mm	105( +96 )	105( +96 )	105( +96 )	105( +96 )
	Z axis	mm	200	200	200	200
Spindle	Chuck type		Collet chuck	Collet chuck	Collet chuck	Collet Chuck
	Chuck size	mm	150	150	150	150
	Spindle nose type		A2-5 Standard	A2-5 Standard	A2-6 Standard	A2-6 Standard
	Spindle speed	rpm	50 - 5,000	50 - 5,000	50-4500	50-4500
	Spindle torque	Nm	28	41.64	57.28	57.28
	Spindle feed through size	mm	36	45	52	65
	Spindle bearing size	mm	90	90	90	90
	Distance from the ground	mm	1010	1010	1010	1010
Turret	Turret type		Disc	Disc	Disc	Disc
	Nos. of tool rest		8	8	8	8
	Boring shank size	mm	25	25	25	25
	O.D. shank size	mm	20 x 20	20 x 20	20x20	20x20
	Index time (1 tool)	sec	0.2	0.2	0.2	0.2
	Index time (diagonal tool)	sec	0.5	0.5	0.5	0.5
Feed rate	Rapid feedrate X / Z	m/min.	18 / 18	18 / 18	18/18	18/18
	Cutting feed rate	m/min.	0.01-1,000	0.01-1,000	0.01-1,000	0.01-1,000
	Ball screw X-Dia/pitch	mm	25	25	25	25
	Ball screw Z-Dia/pitch	mm	25	25	25	25
Tailstock	Quill Dia	mm	45	45	45	45
	Quill travel	mm	100	100	100	100
	Distance between chuck and center	mm	130 - 230	130 - 230	130-230	130-230
	Bore taper		MT-3	MT-3	MT-3	MT-3
Power source	Spindle motor	KW	3.7 / 5.5	5.5/7.5	7.5/11.5	7.5/11.5
	Feed motor X / Z	KW	1.2/1.8	1.2/1.8	0.6/0.6	0.6/0.6
	Turret surveyor motor	KW	0.4	0.4	0.4	0.4
	Coolant pump	KW	0.9	0.9	0.9	0.9
	Hydraulic pump	KW	1.5	1.5	1.5	1.5
	Product conveyor	KW	0.03	0.03	0.03	0.03
	Chip conveyor	KW	0.2	0.2	0.2	0.2
	Lubrication pump	KW	0.003	0.003	0.003	0.003
	Mist collector	KW	0.75	0.75	0.75	0.75
	Bar feeder	KW	1.5	1.5	1.5	1.5
Tank capacity	Coolant tank	Liter	145	145	145	145
	Hydraulic tank	Liter	40	40	40	40
	Lubricant tank	Liter	2	2	2	2
Dimension	Machine dimensions	mm	L2330xW1500xH1650		L2336xW1500xH1650	
	Measurement	mm	L2180xW1600xH1900		L2240xW1600xH1900	
	Machine Weight	kg	2500		2550	
Equipment requirement	Power requirement (full equipment)	KVA	15	15	15	15

### Standard

Collet chuck  
Sevor-turret, 8-tools  
Parts catcher  
Parts conveyor  
Coolant system  
Hydraulic system  
Auto lubrication system  
Boring holder  
O.D Tool holer

3-color indicator lamp  
Bar feeder interface  
Auto power shut off  
Collet position sensor  
Work lamp  
Full enclosed guard  
Screw chip conveyor  
Power transformer  
Heat pipe heat exchanger

### Optional

Chain plate chip conveyor  
Chip trolley  
Mist collector  
Auto tailstock  
Tool setter  
Bar feeder

High pressure coolant system  
Constant Voltage regulator  
Air blow  
CE approved circuit  
Coolant flow sensor  
Coolant-cooler



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