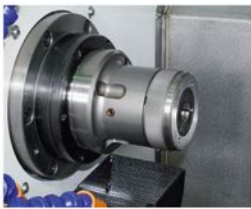


TMA42 Series
Machining Integration

Turning Milling CNC Lathe

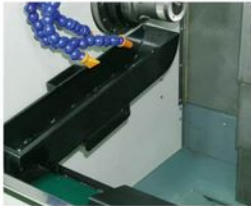
Cutting the Complex Parts through both Turning and Milling
by One Setup and skip any Fixtures.





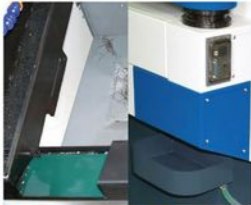
Hydraulic Chuck

The standard hydraulic collect chuck controlled by a foot switch for efficient clamping. For the optional jaws chuck, inward or outward clamping can be set by parameters.



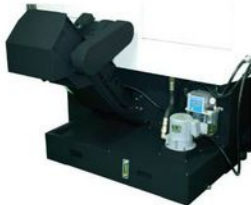
Part Catcher

The standard part catcher makes the whole process more smoothly.



Part Conveyor and Collector

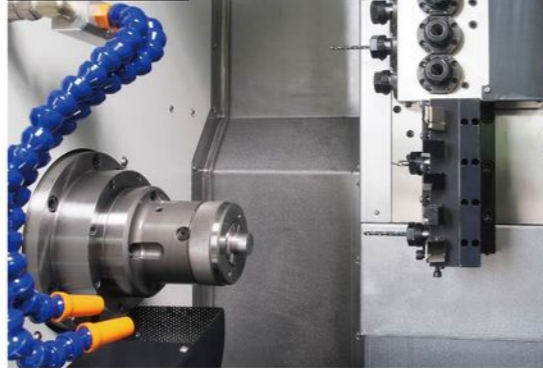
The standard part conveyor gets the production fully automation.



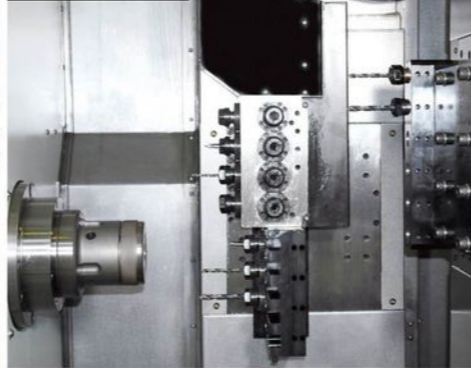
Chip Conveyor

The standard chip conveyor brings out all the chips efficiently and let the cutting area clean.

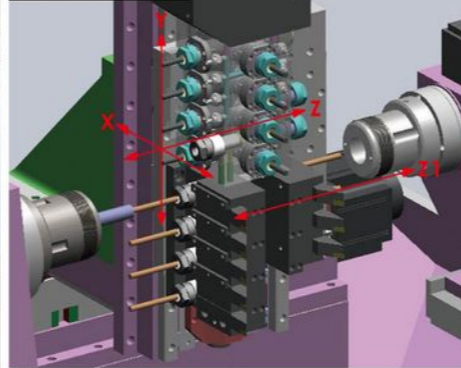
TMA42CL



TMS42CL



TMD42CL



Simultaneous five axes control and twin synchronous spindles.

The simultaneous control of 5 axes gets machining part production times by full synchronization of main and back spindles.

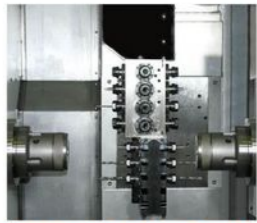
Special features:

- 1.The simultaneous control of 5 axes permits minimum part production times.
- 2.Flexible vertical tool holder system with 5 turning and 12 live tools.
- 4 stations for front machining and 4 stations for back machining.
- 3.Main spindle with C axis function
- 4.The 3 axes linear turret is ideal for chip discharge and offers an extreme rigidity.

▶ The twin spindles can cut from both sides together with milling functions that can generate the most complex part.



▶ The full synchronization of main and back spindles can cut both end and finished part without any fixture.



Linear Life Tools Turret

The turret provides quick tool change and reduces no-cutting time by linear transverse. The live tools are powerful enough to cut even stainless steel bar up to 42mm.



All axes are rigid linear guides

The six blocks support gives the highest rigidity and accuracy among similar specifications machines.



Network/ CF card reader

The 100 Mbps network with firewall can speed up the connection to external devices. The CF card that can be used as large as 2 GB is more convenient than conventional memory storage. It is easy to access and upgrade.

Bar Feeder Optional Accessories

Machining from the bar is made easier with the bar feeder. The hollow cylinder can clamp the bar of 42mm diameter.



▶ The basic turning and milling machine that can handle single part or small lot complex parts.



TMS42CL for Synchronous Internal Turning Tailstock

For the short cycling time parts, the tailstock can cut the internal part simultaneously to reduce the machine time about 40%.

The inclined bed is ideal for chip discharge and offers an extreme rigidity.



Swiveling operating panel with LCD display

Durable and Compact Hardwares

Arix CNC MX5 hardware has become more compact and reliable. The slimline operator panel has an extremely low mounting depth. High contrast and good readability even from extreme angle of vision make operation easier. All the keys arrangement is optimized for the operation on the TM series with bar feeder.



- ▲ The operation panel with MPG, override switches, and splash proof keys provides the excellent user-friendly operation feeling.




- ▶ The rigid IPC unit equips with the low power dissipation industrial Pentium CPU, reliable servo boards and I/O boards.




- ▲ All the spindle inverter, AC servo drivers and motors are durable and permit the best reliability.

Easy Programming Teach-In Functions




TURNING
(STRAIGHT AND TAPER)

Input the profile data from the blueprint. Press the simulation key to generate the graphic tool path.




FACING
(STRAIGHT AND TAPER)

Input the specific parameters for this operation according to the graphic guide.




THREADING
(STRAIGHT, TAPER AND MULTIPLE)

For straight, taper or facial type of threads can be multiple as well.



MPG SIMULATION

After the machining program is loaded, select the MPG mode to let the NC program be executed according to the MPG rotation speed.



END DRILLING

Input the start, end point and drilling conditions to generate the NC program.



GROOVING
(LONGITUDINAL AND AXIAL)

Do both longitudinal and axial grooving combining roughing and finishing.

Turning Milling Machine Specifications :

Specifications	UNIT	TMA42CL	TMS42CL	TMD42CL
Max. Turning Diameter	mm	130	130	130
Max. Turning Length	mm	160	160	160
Stroke of X	mm	225	225	225
Stroke of Z	mm	235	235	235
Stroke of Y	mm	385	385	385
Stroke of X1	mm	N/A	460	N/A
Stroke of Z1	mm	N/A	350	350
Main Spindle Bore	mm	42	42	42
Main Spindle Nose		A2-5	A2-5	A2-5
Main Spindle speed	r.p.m	40-6,000	40-6,000	40-6,000
Main Spindle Power	Kw	7.5	7.5	7.5
Sub Spindle Bore	mm	N/A	N/A	30
Sub Spindle Nose		N/A	N/A	A2-4
Sub Spindle speed	r.p.m	N/A	N/A	40-3,000
Sub Spindle Power	Kw	N/A	N/A	3
Number of fixed tools		5 Turning+10 I.D	5 Turning+10 I.D	5 Turning+10 I.D
Turning tool diameter	mm	16 & 20	16 & 20	16 & 20
Boring tool diameter	mm	25	25	25
Number of live tools		8	8	9
Power of live tools	Kw	1	1	1
Tailstock		N/A	5 I.D Tools	N/A
X axis servo motor	Kw	1	1	1
Y axis servo motor	Kw	1	1	1
Z axis servo motor	Kw	1	1	1
X1 axis servo motor	Kw	1	1	1
Z1 axis servo motor	W	N/A	500W	N/A
Rapid Transverse	M/min	17	17	17
Coolant Tank Capacity	L	40	40	40
Coolant Pump	HP	1/2	1/2	1/2
Hydraulic Pump	HP	1	1	1
Dimension	M	2.5 x 1.9 x 1.8	2.5 x 1.9 x 1.8	2.5 x 1.9 x 1.8
Machine Weight	Kgs	3000Kgs	3200Kgs	3500Kgs

■ Design and specifications are subject to change without prior notice.

Standard Accessories:

- Operative Lamp
- Tool Box
- Tapping Shaft
- Drilling Shaft
- Automatic Lubricant System
- Part Catcher
- Chip Conveyor
- Servo Motor 1000W
- Side Milling 4PCS +
- Front Side Milling 4 PCS

Optional Accessories:

- Auto Bar Feeder Machine
- Automatic Transformer & Stabilizer (15Kva)

