



NCL Series

CNC Lathe

High performance Steel Bar/Part Turning Center

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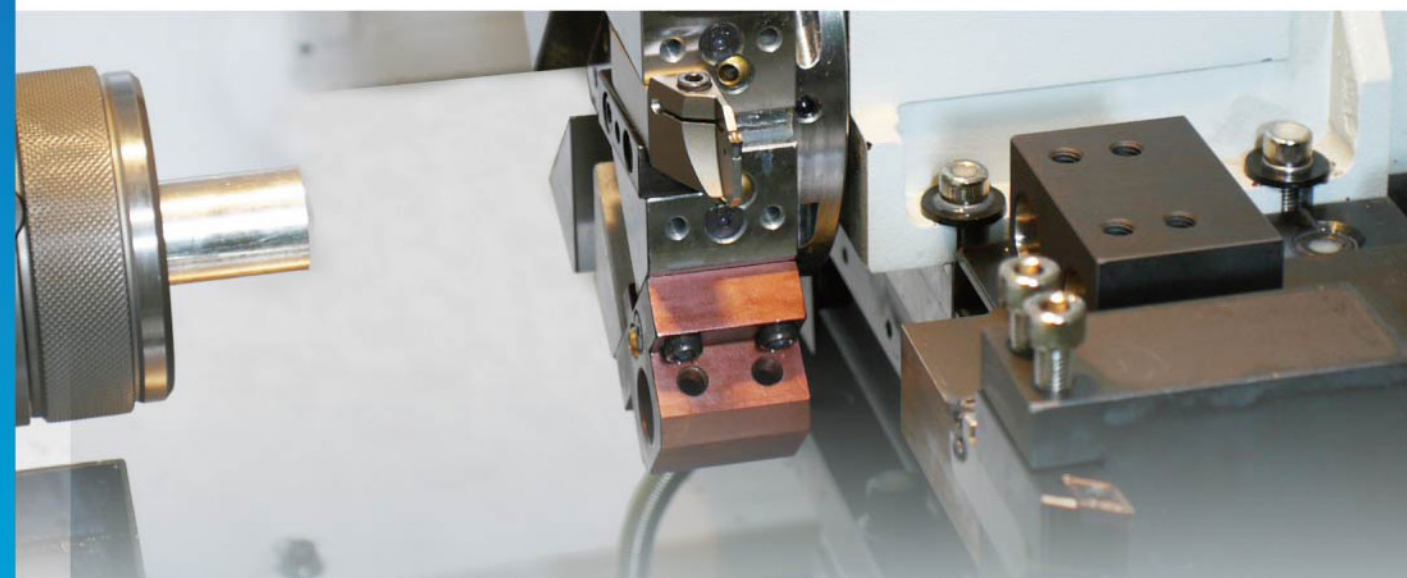


ISO9001



NCL SERIES

High performance Steel Bar/Part Turning Center



ARIX CNC Turning centers include the most innovative designs as the mineral stone filled base for high damping capacity, symmetrical ribs design for stability and rigidity, large headstock casting with a two pieces design for easy alignment; optional embedded chip conveyor that gives best sealing and efficient chip removal. The NN type bearings spindle design guarantees the best performance turning.

» Machines Features:

1. Interchangeable collets chuck and jaw chuck for different parts operation.
2. Standard gantry type turret provides the most fast and efficient turning.
3. Optional servo turret provides more flexible and faster tool change arrangement.
4. Mineral stone base generates the super finish surface and longer tool life.
5. Powerful vector torque motor option let the power up to 10HP.
6. High rigid spindle head unit can bear the spindle up to 60mm capacity.
7. The linear guides up to 30mm and 25mm ball screws guarantee the long-term rigidity and accuracy.
8. Coolant through drill option provides efficient and smooth drilling.

Company Profile

» ARIX CNC founded in 1995, provides every user with the high-end, low-cost technology and high performance machines. As products continue to diversify, product life cycle continue to shorten, the demand for lower manufacturing cost grows rapidly. Manufacturers face a growing need of increasing productivity with lower cost from market place. ARIX CMC machines have refined to meet the growing demand by high speed and high accuracy milling machines and also the CNC turning & milling machines.

The multi-purpose TMA series that can handle both turning and milling within one machine without any setup. TMA 42 can cut the bars (like copper, steel and stainless steel) up to 42mm. The complicated parts including turning, threading, drilling, tapping and milling operations can be done without any fixture. This can speed up the small lot and diversified part machining by an economic solution.

The new economic CNC lathe NCL series fill the expensive slanted bed lathe. Gap between mini bar machine unable to cut steel and too the item base makes the 3 mm depth of cut turning easily and efficiently.

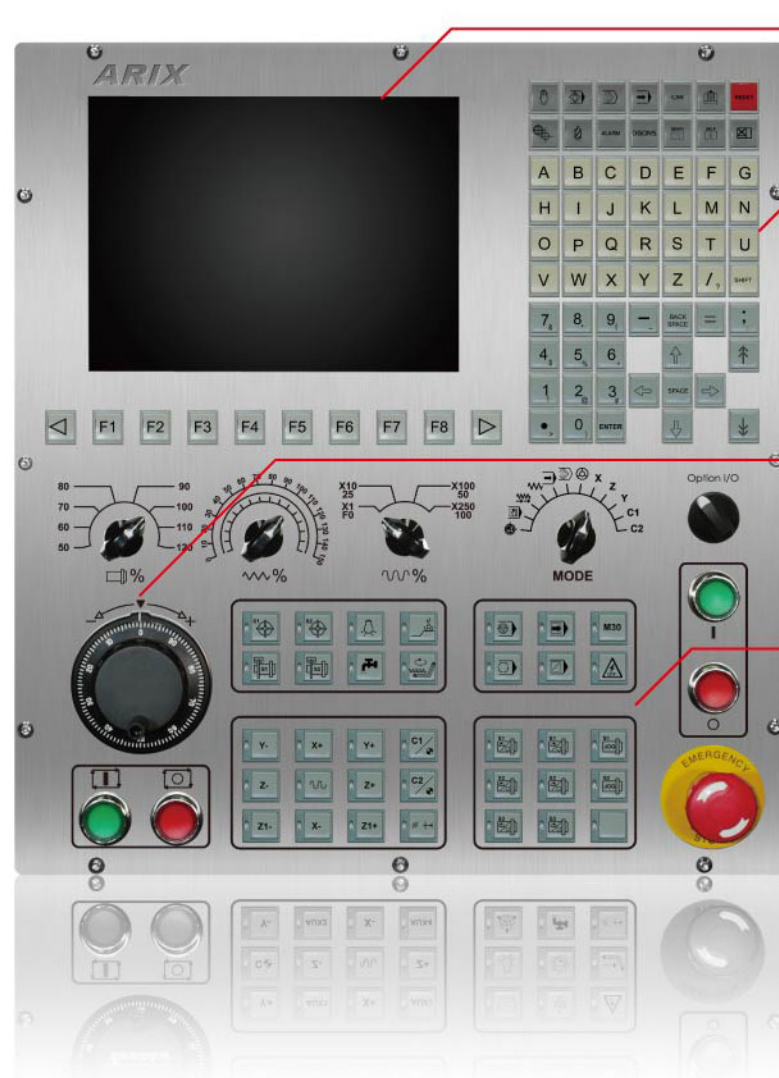
The cost effective high speed machining centers provide customers the advantages to reduce machining cost. This series has passed the on site test for more than ten years. We provide both good product and service.

The slant bed CNC TEACH-IN lathe TS series give extraordinary machining capacity, stability and precision. The specially designed structure enhances the heavy cutting capabilities and easy operation TEACH-IN controller makes the quick and simple setup and programming.



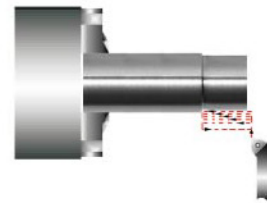
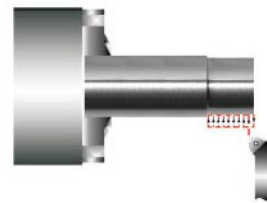
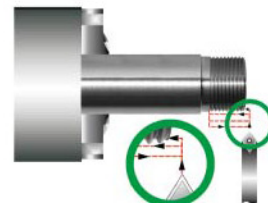
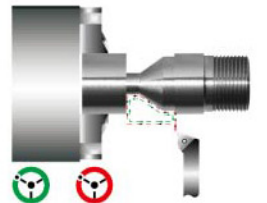
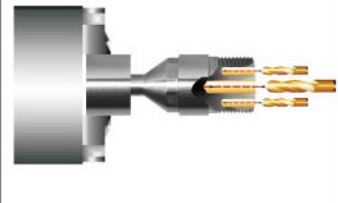
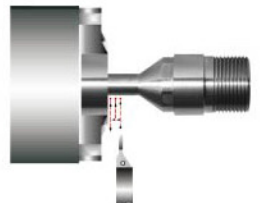
(Optional equipments included)

TMX55 CNC System for Turning Milling



- 10.4' Color LCD display**
Full color 10.4" LCD display designed to work in the oil mist environment and can last long life. It can be clearly read under the bright light with the anti-glare glass.
- Stainless Steel Panel**
The Stainless steel panel with fine-bushed surface is not only great look but also easy to clean. It resists any kind of scrap and corrosion.
- MPG unit:**
All the machine tools have MPG. But in ARIX TMX55, the MPG used as the controlling device for the speed of the feedrate in the NC programming execution. The speed is controller by the rotation speed of the MPG and even can reverse the movement by CCW rotation.
- Integrated Operation Panel**
The Operation panel provides one button operation to simplify the accessories operation.
- Compact Dedicated IPC System**
The robust compact and durable industrial PC is the foundation of reliability. TMX55 is not a common desktop PC or NC from others. This means we can service the entire CNC machines with full responsibility. The service cost is low and in real time without delay.
- CF card reader/ Network interface**
These allow user to access the NC program for store easily.

Easy Progmming Teach-In Functions

 <p>TURNING (STRAIGHT AND TAPER)</p> <p>Input the profile data from the blueprint. Press the simulation key to generate the graphic tool path.</p>	 <p>FACING (STRAIGHT AND TAPER)</p> <p>Input the specific parameters for this operation according to the graphic guide.</p>	 <p>THREADING (STRAIGHT, TAPER AND MULTIPLE)</p> <p>For straight, taper or facial type of threads can be multiple as well.</p>
 <p>MPG SIMULATION</p> <p>After the machining program is loaded, select the MPG mode to let the NC program be executed according to the MPG rotaion speed.</p>	 <p>END DRILLING</p> <p>Input the start, end point and drilling conditions to generate the NC program.</p>	 <p>GROOVING (LONGITTUDINAL AND AXIAL)</p> <p>Do both longitudinal and axial grooving combining roughing and finishing.</p>

Durable and Compact Hardwares

Arix CNC TMX 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 NCL series with bar feeder.



▲ 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.

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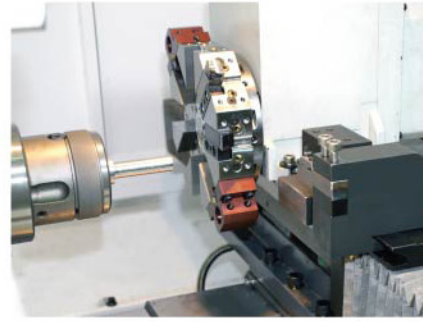
▲ Optional Mitsubishi rigid CNC unit.

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

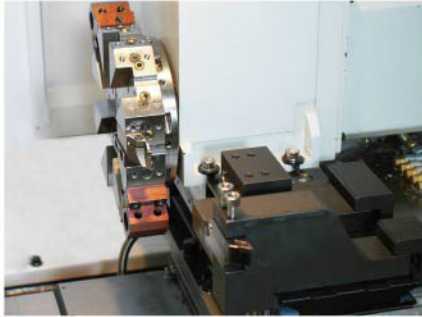
Standard



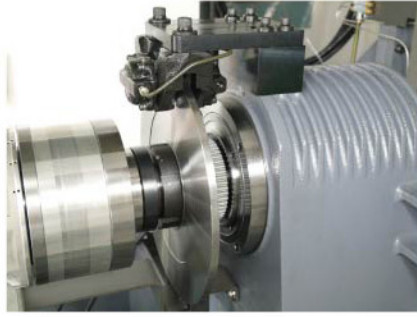
The Jaw chuck with gantry turret:
The jaw chuck of 5" and 6" optional give the cutting range more flexible.



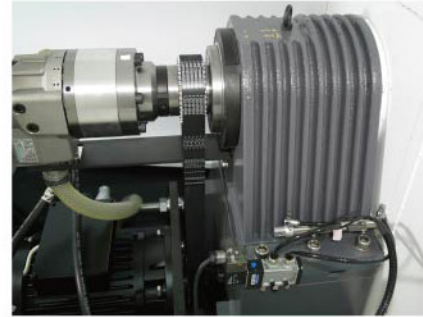
The optional servo turret gives a accurate and speedy tool change.



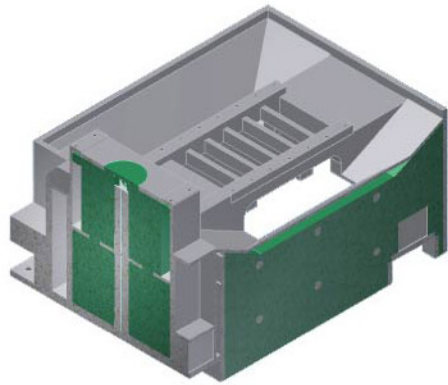
The combination of servo turret and gantry turret.



The two steps hydraulic brake that can ensure the smooth C axis motion for machining in light braking force. The heavy braking can stop and take all the vibration from milling operations.



The large symmetrical head stock can bear bigger spindle up to 60mm capacity.

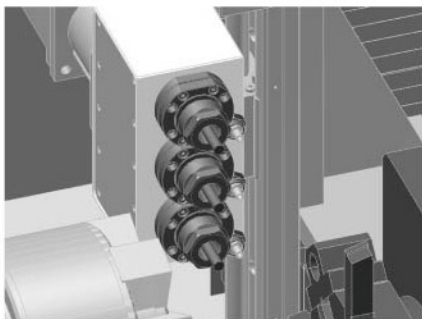


The mineral stone base absorbs all the cutting vibration and generate super finish surface.



The cooling system for Hydraulic system

Optional



Live Tools Turret give capacity of milling



The coolant through drill option cuts the good finish holes.



Oil Mister

NCL - 30 / 42 / 50 / 60 Gantry and Turret CNC TEACH-IN LATHE

Machine Specifications :

Specifications		Unit	NCL-30	NCL-42	NCL-50	NCL-60
Gantry	Max. Turning diameter	mm	Ø30	Ø42	Ø50	Ø60
Turret		mm	Ø130	Ø150	Ø150	Ø150
Max. Turning length		mm	220	220	220	220
Max. bar capacity		mm	30	42	50	60
Spindle bore		mm	42	56	66	76
Collect chuck			CR30A4	CR42A5	CR60A6	CR60A6
Spindle nose			A2-4	A2-5	A2-6	A2-6
Spindle bearing diameter		mm	70	80	100	100
Spindle speed		r.p.m	40~6000	40~6000	40~4000	40~4000
Spindle motor power		HP	5	5	5	5
Stroke of X		mm	380	380	380	380
Stroke of Z		mm	220	220	220	220
Rapid Transverse X/Z		M/min	15	15	15	15
X/Z axis servo motor		kw	1	1	1	1
X/Z Ballscrew diameter		mm	25	25	25	25
X/Z Linear guide		mm	30	30	30	30
Gantry	Number of fix tools	PCS.	6 turning+4 I.D	6 turning+4 I.D	6 turning+4 I.D	6 turning+4 I.D
	Turning of diameter	mm	16	16	16	16
	Boring tool diameter	mm	20	20	20	20
Servo turret	Number of fix tools		8	8	8	8
	Turning of diameter	mm	16	16	16	16
	Boring tool diameter	mm	20	20	20	20
Spindle run out		mm	0.005	0.005	0.005	0.005
Positioning of axis		mm	0.005	0.005	0.005	0.005
Repeatability of axis		mm	0.003	0.003	0.003	0.003
Min. setting unit		mm	0.001	0.001	0.001	0.001
Hydraulic Pump		HP	1	1	1	1
Coolant Tank Capacity		L	150	150	150	150
Coolant Pump		HP	1/4	1/4	1/4	1/4
Dimension(M)		M	2x1.5x1.8	2x 1.5x1.8	2x 1.5x1.8	2x 1.5x1.8
Machine weight		Kgs	3000	3500	3700	3700

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

Standard Accessories :

- Operative Lamp
- Tool Box
- Automatic Lubricant System

Optional Accessories :

- Auto Bar Feeder Machine
- Transformer
- Part Catcher
- Chip Conveyor

