

Contact

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CNC Lathe

Cutting the Complex Parts through both Turning and Milling

**TM Series
TTL Series
NCL Series
GTL Series**



ARIX Get U More...



ISO9001



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.
- 5.The mineral stone base guarantees the best damping capacity and best finishing surface.

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.



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TMS42CL
Machining Integration

► **TMS42CL for Synchous 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.



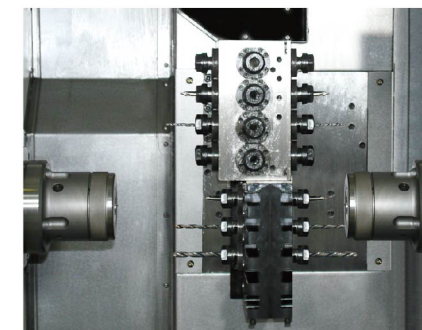
TMD42CL
Machining Integration

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

TMD60CL
Machining Integration

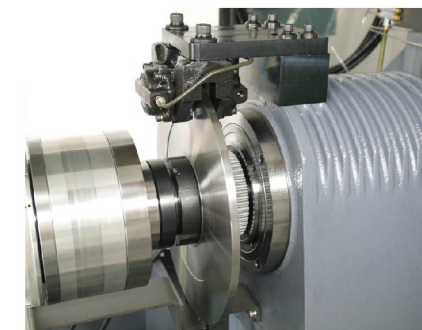


Standard



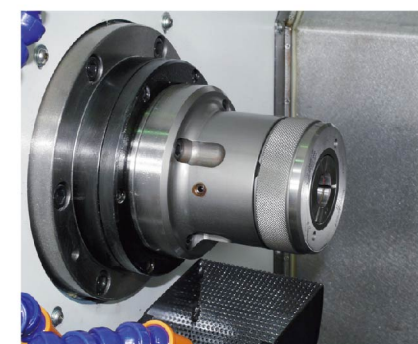
Linear Live Tools Turret

The turret provides quick tool change and reduces no-cutting time by linear transverse. Use er20 chuck and it can clamp Ø13 milling tool.



Spindle hydraulic brake

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.



Hydraulic Chuck

For the optional jaws chuck, inward or outward clamping can be set by parameters.



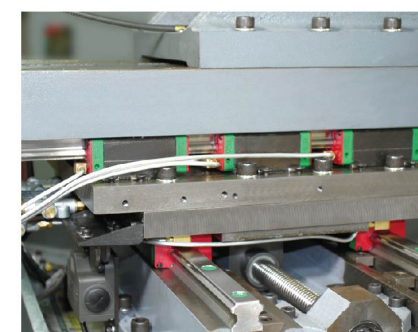
Precision Spindle

The cartridge type is conveniently removed allowing for convenient servicing. The spindle runs on class P4 precision bearings providing high axial thrust capability. This ensures high precision during heavy duty turning.



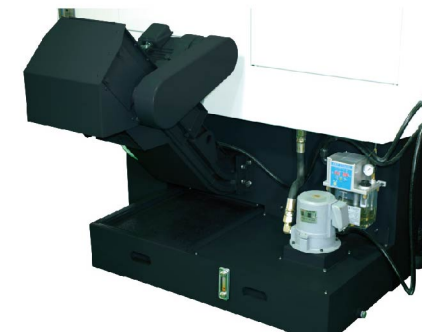
8" Hydraulic Jaws Chuck (For TMA60/TMD60)

The optional jaws chuck controlled by a foot switch for efficient clamping. The inward or outward clamping can be set by parameters.



All axes are rigid linear guides

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



Chip Conveyor

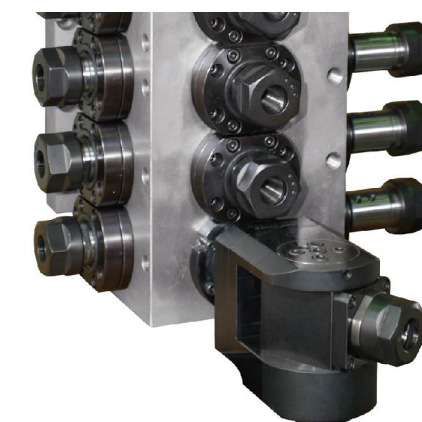
The standard chip conveyor brings out all the chips efficiently and let the cutting area clean.



Part Catcher

The standard part catcher makes the whole process more smoothly.

Optional



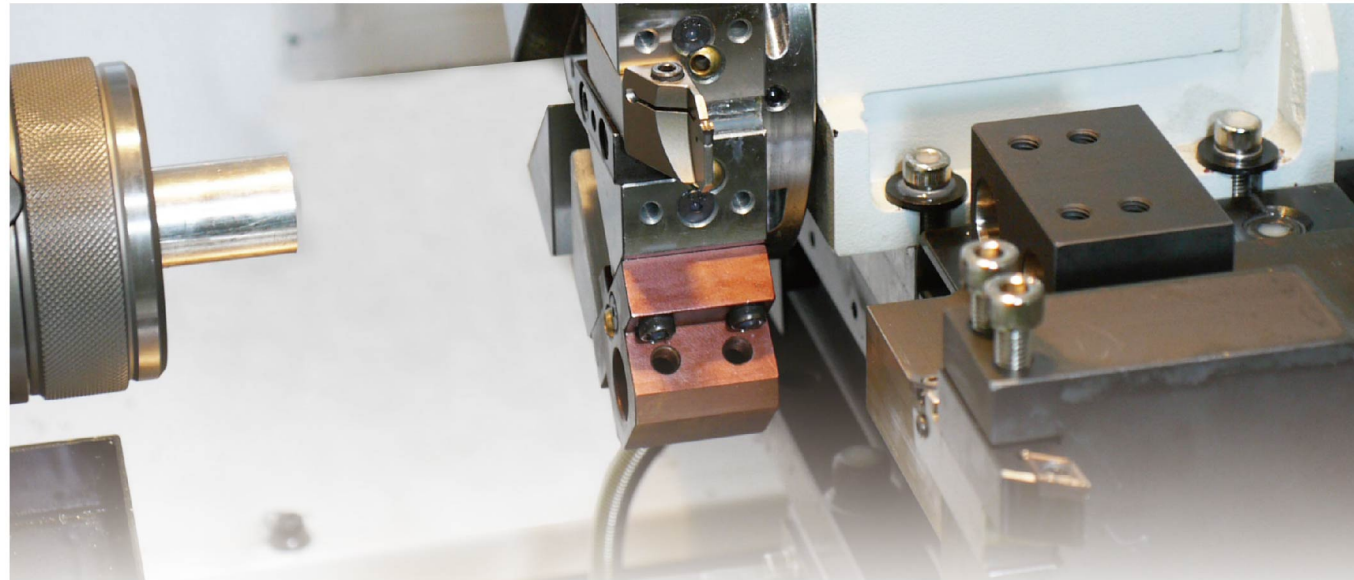
Adjustable Angular Heads



Oil Mister

ECL 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:

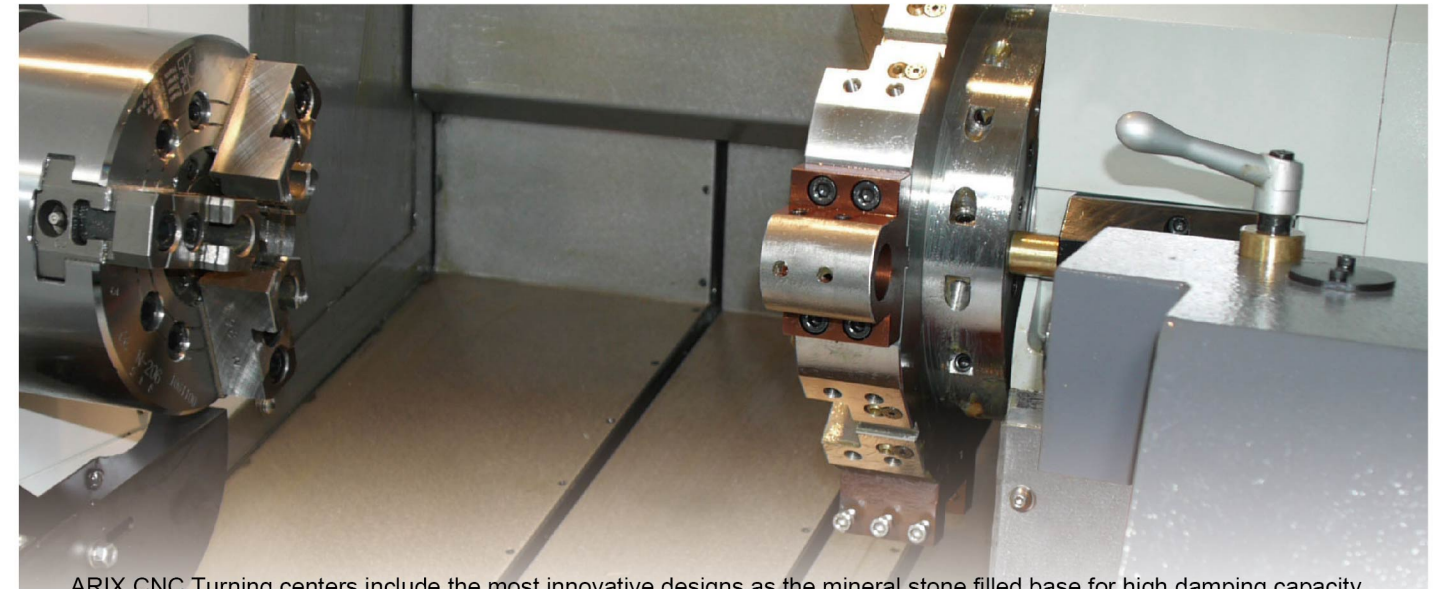
1. Interchangeable collets chuck and jaw chuck for different parts operation.
2. Standard gantry type turret provides the most fast and efficient turning.
3. Optional servo turret provides more flexible and faster tool change arrangement.
4. Mineral stone base generates the super finish surface and longer 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.



(Optional equipments included)

GTL SERIES

High performance Steel Bar/Part Turning Center

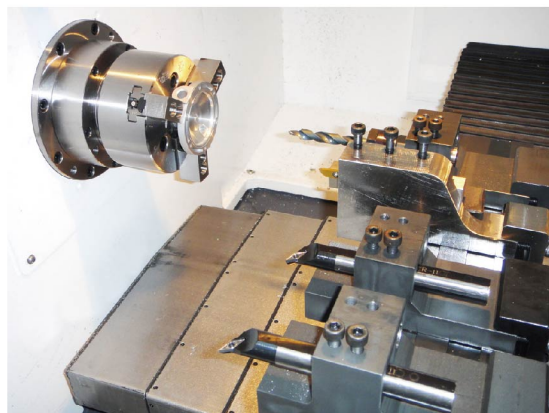


ARIX CNC Turning centers include the most innovative designs as the mineral stone filled base for high damping capacity, symmetrical ribs design for stability and rigidity, large headstock casting with a two pieces design for easy alignment; optional embedded chip conveyor that gives best sealing and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

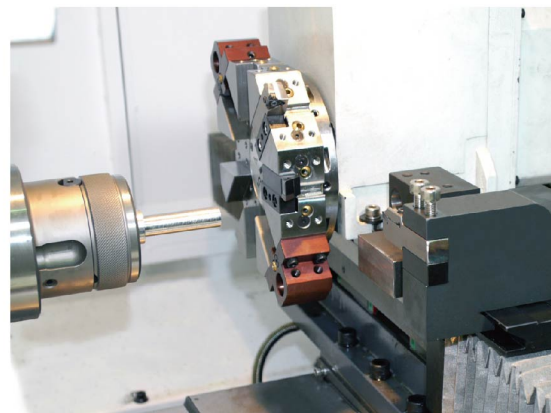
» Machines Features:

1. Interchangeable collets chuck and jaw chuck for different parts operation.
2. The Servo turret provides more flexible and faster tool change arrangement.
3. Mineral stone base generates the super finish surface and longer tool life.
4. Powerful vector torque motor option let the power up to 11KW.
5. High rigid spindle head unit can bear the spindle up to 60mm capacity.
6. The linear guides up to 30mm and 25mm ball screws guarantee the long-term rigidity and accuracy.





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



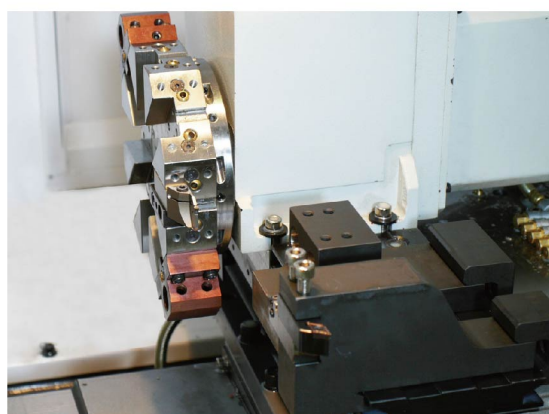
The optional servo turret gives a
accurate and speedy tool change.



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



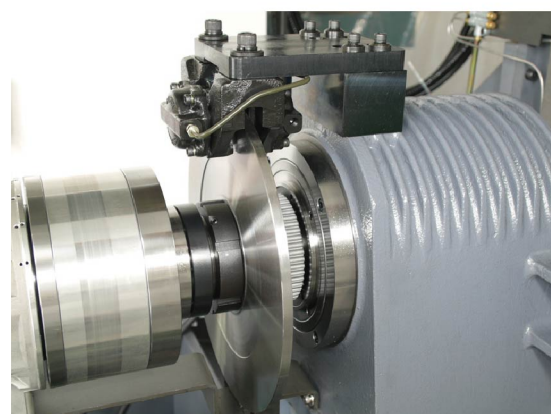
The Standard servo turret gives a
accurate and speedy tool change. The
hydraulic programmable tailstock with
150 mm manual stroke.



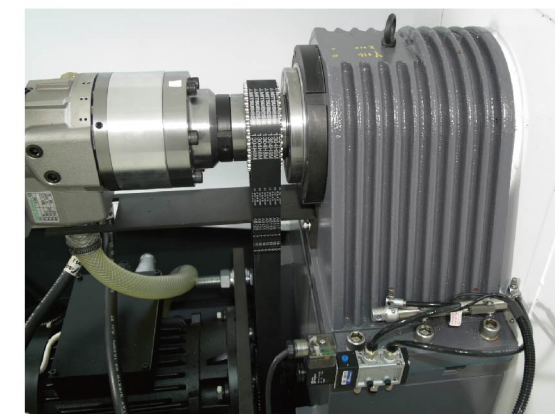
The combination of servo turret and
gantry turret.



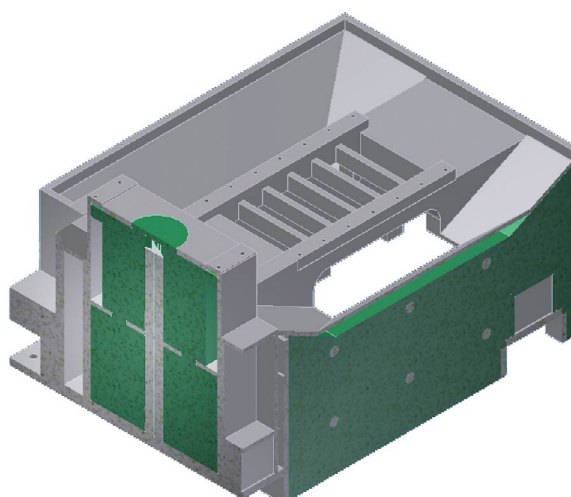
The coolant through drill option cuts
the good finish holes.



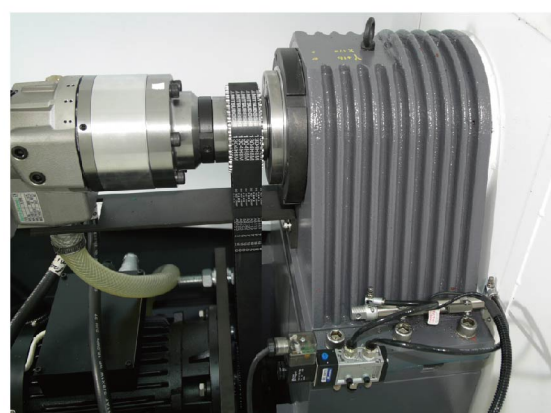
The two steps hydraulic brake that can
ensure the smooth C axis motion for
machining in light braking force. The
heavy braking can stop and take all the
vibration from milling operations. (Optional)



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



The standard part conveyor gets the
production fully automation.



The cooling system for Hydraulic
system

TM - 42 / 60 Turning Milling CNC LATHE

Machine Specifications :

Specifications	Unit	TMA42CL	TMS42CL	TMD42CL	TMA60CL	TMS60CL	TMD60CL
Max.Turning Diameter	mm	130	130	130	100	130	150
Max.Turning Length	mm	160	160	160	160	180	300
Stroke of X	mm	225	225	225	225	225	270
Stroke of Z	mm	235	235	235	235	235	410
Stroke of Y	mm	385	385	385	385	220	370
Stroke of X1	mm	N/A	220	N/A	N/A	380	N/A
Stroke of Z1	mm	N/A	350	350	N/A	460	460
Spindle Bore	mm	56	56	56	76	76	76
Spindle Bar Capacity	mm	42	42	42	60	60	60
Spindle Nose		A2-5	A2-5	A2-5	A2-6	A2-6	A2-6
Spindle speed	r.p.m	40-4,000	40-4,000	40-4,000	40-3,000	40-3,000	40-3,000
Spindle Power	Kw	7.5	7.5	7.5	11	11	11
Sub Spindle Bore	mm	N/A	N/A	39	N/A	N/A	52
Sub bar Capacity	mm	N/A	N/A	30	N/A	N/A	42
Sub Spindle Nose		N/A	N/A	A2-4	N/A	N/A	A2-5
Sub Spindle speed	r.p.m	N/A	N/A	40-3,000	N/A	N/A	40-3,000
Sub Spindle Power	Kw	N/A	N/A	3	N/A	N/A	3
Number of fixed tools	PCS.	5 Turning + 4 I.D	5 Turning + 4 I.D	8 Turning + 7 I.D	5 Turning + 4 I.D	5 Turning + 4 I.D	8 Turning + 7 I.D
Turning tool diameter	mm	20	20	20	20	20	20
Boring tool diameter	mm	25	25	25	25	25	25
Number of live tools	PCS.	8 (ER20)	8 (ER20)	10 (ER20)	8 (ER20)	8 (ER20)	10 (ER20)
Power of live tools	Kw	1.5 / 2	1.5 / 2	1.5 / 2	1.5 / 2	1.5 / 2	1.5 / 2
Tailstock		N/A	5 I.D	N/A	N/A	5 I.D	N/A
X axis servo motor	Kw	1/2	1/2	1/2	1/2	1/2	1/2
Y axis servo motor	Kw	1/2	1/2	1/2	1/2	1/2	1/2
Z axis servo motor	Kw	1/2	1/2	1/2	1/2	1/2	1/2
X1 axis servo motor	Kw	N/A	1/2	N/A	N/A	1/2	N/A
Z1 axis servo motor	Kw	N/A	1/2	1/2	N/A	1/2	1/2
Rapid Transverse	M/min	15 / 24	15 / 24	15 / 24	15 / 24	15 / 24	15
Coolant Tank Capacity	L	140	140	150	140	140	150
Coolant Pump	HP	1/4	1/4	1/2	1/2	1/2	1/2
Hydraulic Pump	HP	1	1	2	1	1	2
Dimension	M	2.5 x 1.9 x 1.8	3 x 1.9 x 1.8	3 x 2.1 x 1.8	2.5 x 1.9 x 1.8	2.5 x 1.9 x 1.8	2.5 x 2.5 x 2
Machine Weight	Kgs	3000Kgs	3500Kgs	4000Kgs	3100Kgs	3600Kgs	4500Kgs

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

Standard Accessories:

- Operative Lamp
 - Tool Box
 - Tapping Shaft x 1
 - Drilling Shaft x 1
 - Automatic Lubricant System
- Part Catcher
 - Chip Conveyor
 - Side Milling
 - Front Side Milling

Optional Accessories:

- Auto Bar Feeder Machine
- Transformer
- Main Spindle speed upgrade 6000 rpm.

TTL - 42 Turning Milling CNC LATHE

Machine Specifications :

Specifications		Unit	TTL42CL
Max.Turning Diameter		mm	140
Max.Turning Length		mm	220
Stroke of X		mm	225
Stroke of Z		mm	235
Stroke of Y		mm	385
Stroke of X1		mm	470
Stroke of Z1		mm	250
Stroke of Y1			385
Spindle Bore		mm	56
Spindle Bar Capacity		mm	42
Spindle Nose			A2-5
Spindle speed		r.p.m	40-4,000
Spindle Power		Kw	7.5
Sub Spindle Bore		mm	39
Sub bar Capacity		mm	30
Sub Spindle Nose			A2-4
Sub Spindle speed		r.p.m	8,000
Sub Spindle Power		Kw	4.6
Number of fixed tools	Spindle	PCS.	5 Turning + 4 I.D
	Sub Spindle		3 Turning + 3 I.D
Turning tool diameter		mm	20
Boring tool diameter		mm	25
Number of live tools		PCS.	6
Power of live tools		Kw	1.5
Tailstock			N/A
X axis servo motor		Kw	1
Y axis servo motor		Kw	1
Z axis servo motor		Kw	1
X1 axis servo motor		Kw	1
Z1 axis servo motor		Kw	1
Y1 axis servo motor		Kw	1
Rapid Transverse		M/min	15 / 24
Coolant Tank Capacity		L	230
Coolant Pump		HP	1/2
Hydraulic Pump		HP	2
Dimension		M	2.6 x 2.3 x 2
Machine Weight		Kgs	4,500Kgs

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Standard Accessories:

- Operative Lamp
 - Tool Box
 - Tapping Shaft x 1
 - Drilling Shaft x 1
 - Automatic Lubricant System
- Part Catcher
 - Chip Conveyor
 - Side Milling
 - Front Side Milling

Optional Accessories:

- Auto Bar Feeder Machine
- Transformer
- Main Spindle speed upgrade 6000 rpm.

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

Machine Specifications :

Specifications		Unit	ECL-30	ECL-42	ECL-60
Collect chuck	Max. Turning diameter	mm	Ø30	Ø42	Ø60
3 Jaw		mm	Ø130	Ø150	Ø150
Max. Turning length		mm	220	220	220
Max. bar capacity		mm	30	42	60
Spindle bore		mm	42	56	76
Collect chuck			CR30A4	CR42A5	CR60A6
Spindle nose			A2-4	A2-5	A2-6
Spindle speed (Collet)		r.p.m	40~6000	40~6000	40~4000
Spindle speed (3 Jaws)		r.p.m	40~4000	40~4000	40~4000
Spindle motor power		HP	5	5	10
Stroke of X		mm	210	210	210
Stroke of Z		mm	365	365	365
Rapid Transverse X/Z		M/min	30	30	30
X/Z axis servo motor		kw	1	1	1
X/Z Ballscrew diameter		mm	25	25	25
X/Z Linear guide		mm	30	30	30
Gantry	Number of fix tools		3 Turning + 4 I.D	6 Turning + 4 I.D	6 Turning + 4 I.D
	Turning of diameter	mm	16	16	16
	Boring tool diameter	mm	20	20	20
Servo turret	Number of fix tools		8	8	8
	Turning of diameter	mm	20 & 20	20 & 20	20 & 20
	Boring tool diameter	mm	25	25	25
Spindle run out		mm	0.005	0.005	0.005
Positioning of axis		mm	0.005	0.005	0.005
Repeatability of axis		mm	0.003	0.003	0.003
Min. setting unit		mm	0.001	0.001	0.001
Hydraulic Pump		HP	1	1	1
Coolant Tank Capacity		L	150	150	150
Coolant Pump		HP	1/4	1/4	1/4
Dimension(M)		M	2x1.4x1.8	2x 1.4x1.8	2x 1.4x1.8
Machine weight		Kgs	3400	3700	4000

Design and specifications are subject to change without prior notice.

Standard Accessories :

- Operative Lamp
- Tool Box
- Automatic Lubricant System
- Tapping Shaft x 1
- Drilling Shaft x 1
- Turning x 2
- I.D x 2

- Part Catcher
- Chip Conveyor

Optional Accessories :

- Auto Bar Feeder Machine
- Transformer
- Chip Cart

GTL - 30 / 42 / 60 Servo and Turret CNC TEACH-IN LATHE

Machine Specifications :

Item		GTL-30	GTL-42	GTL-60
CAPACITY	Maximum turning diameter	Ø 130 mm	Ø 130 mm	Ø 130 mm
	Maximum turning length	200 mm	200 mm	200 mm
	Bar work capacity	Ø30 mm	Ø42 mm	Ø60 mm
	Chuck size	4 inch	6 inch	8 inch
SPINDLE	Spindle nose	A2-4	A2-5	A2-6
	Spindle speed (collet)	40~6000 rpm	40~6000 rpm	40~4000 rpm
	Spindle bore	Ø 42 mm	Ø 56 mm	Ø 76 mm
	Spindle front bearing inner diameter	Ø 80 mm	Ø 80 mm	Ø 80 mm
	Spindle motor power	5.5 kW	7.5 kW	7.5 kW / 11 KW
AXES	X-axis stroke	120mm	120mm	120mm
	Z-axis stroke	255mm	255mm	255mm
	X Axis rapid speed	30 M/min	30 M/min	30 M/min
	Z Axis rapid speed	30 M/min	30 M/min	30 M/min
	X Axis ball screw diameter x pitch	10mm	10mm	10mm
	Z Axis ball screw diameter x pitch	10mm	10mm	10mm
	X Axis linear guide size	25mm	25mm	25mm
	Z axis linear guide size	25mm	25mm	25mm
	X axis servo motor power	1 kW	1 kW	1 kW
	Z axis servo motor power	1 kW	1 kW	1 kW
TURRET	Turret type	Servo	Servo	Servo
	Number of stations	8	8	8
	O.D. tools shank size	20x20 mm	20x20 mm	20x20 mm
	I.D. tool shank size	Ø 25 mm	Ø 25 mm	Ø 25 mm
	Turret indexing time (1 station)	2 sec	2 sec	2 sec
TAILSTOCK	Quill diameter	55mm	55mm	55mm
	I.D. Taper	MT4	MT4	MT4
	Tailstock stroke	80mm	80mm	80mm
OTHERS	Hydraulic pump motor power	1 HP	1 HP	1 HP
	Coolant pump motor power	1/4hp	1/4hp	1/4hp
	Coolant tank capacity	170L	170L	170L
ACCURACY	Spindle runout	0.01	0.01	0.01
	Positioning accuracy	0.005	0.005	0.005
	Repatability	0.005	0.005	0.005
DIMENSIONS	Machine height	3Mx1.3Mx1.8M	3Mx1.3Mx1.8M	3Mx1.3Mx1.8M
	Machine weight	3400kg	3700kg	4000kg

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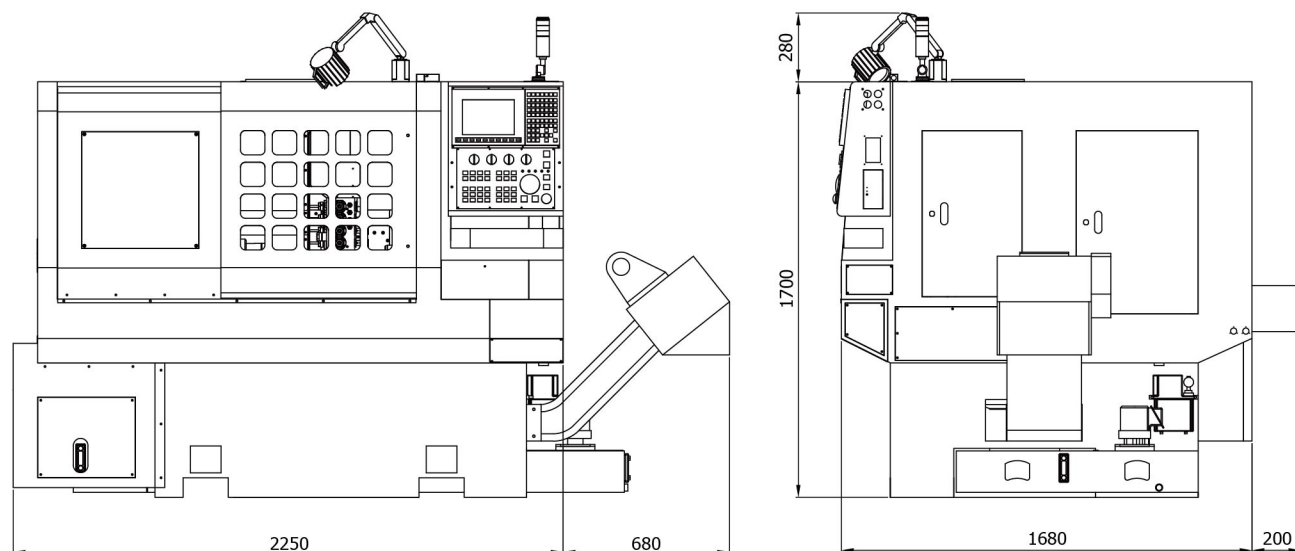
Standard Accessories :

- Operative Lamp
- Tool Box
- Automatic Lubricant System
- Chip Conveyor

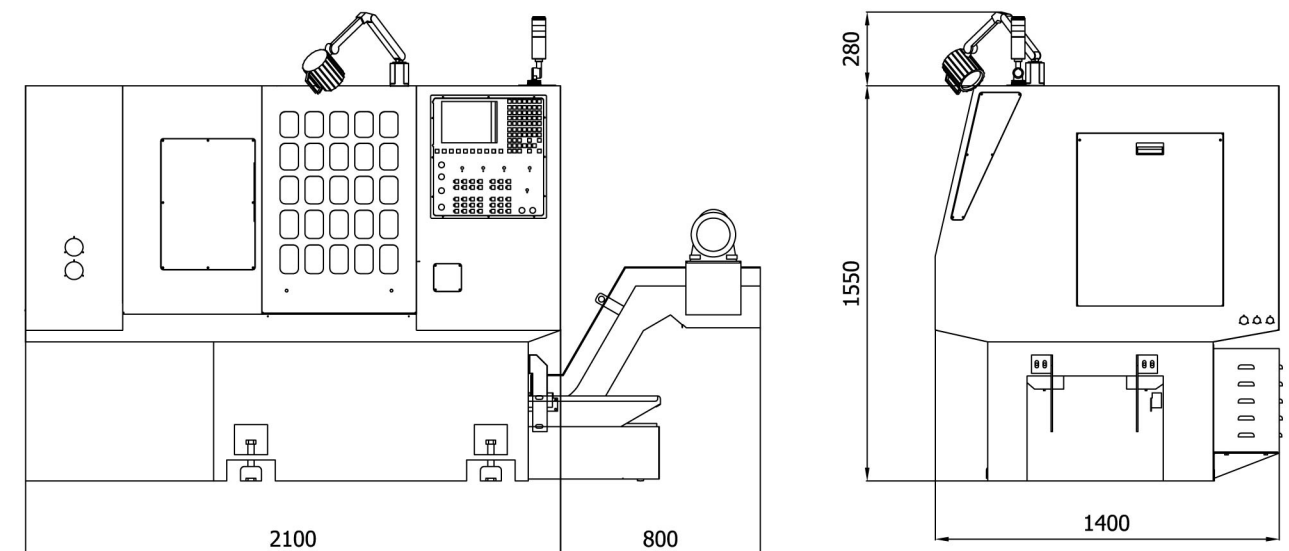
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- Auto Bar Feeder Machine
- Transformer
- Part Catcher

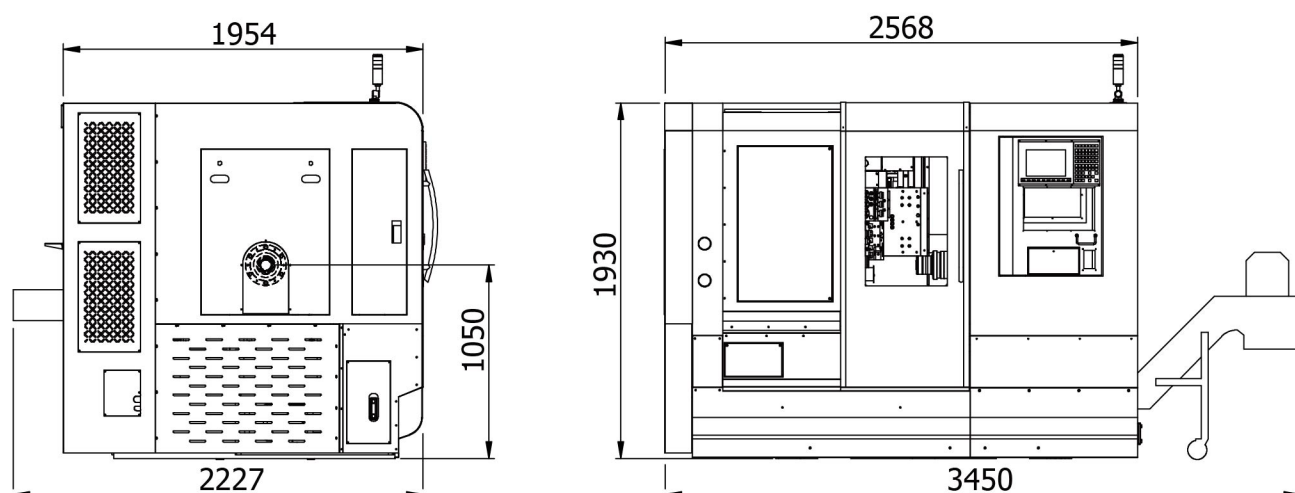
■ **TM - 42 / 60 Turning Milling CNC LATHE**



■ **ECL - 30 / 42 / 60 Gantry and Turret CNC TEACH-IN LATHE**



■ **TTL - 42 Turning Milling CNC LATHE**



■ **GTL - 30 / 42 / 60 Servo and Turret CNC TEACH-IN LATHE**

