



Россия
Trade Technology
Ordzhonikidze ul. d.11, str. 11
115419, Moscow (Russia)
Tel. +7 499 - 650 5031
Fax +7 499 - 650 5031
Web ► www.trte.ru

CNC Turning Center



TC-210

TC-210

High Rigidity, High Accuracy Construction Design

- One-piece construction of main body. The 30 degrees low gravity slant bed assures the headstock, turret, and the tailstock as well an excellent standing and supporting.
- The reinforced ribs design enhances the one-piece mechanism construction with much capability to deal the extreme rigidity for heavy cutting or high speed cutting. It also provides the cost down advantage for the life extension of cutting tools .
- The one-piece FC30 Meehanite high tension cast iron making of the major constructive components, it gives structure long-lasting life and outstanding stability and precision.
- The X and Z axes are driven by AC servo motors. The powerful motor provides fast acceleration, deceleration movement and tremendous thrust force.



Hydraulic Turret Unit

- 12 stations hydraulic turret is standard equipment.
- Servo turret is offered for user's optional selection.
- Equipped with large disc for consideration of easy tool setting up.



➤ Spindle Unit 3-jaw Chuck

- The high precision P4 grade is adopted for the spindle bearings. The bearings configuration is designed at optimal span to satisfy the stable, heavy cutting as well as long working hours demand.
- The 3-jaw hydraulic chuck is standard equipment and comes with hard and soft jaws.



➤ High Accuracy Transmission Unit

- The servo motors and high precision ballscrews are direct coupled on X/Z axes.
- The ballscrews have been preloaded to increase its rigidity and to lower the thermal deformation and increase the precision.
- Lubrication system is applied onto the bearings mounted on the X/Z driving ballscrews which maintain accuracy constant. It is suitable for the high precision parts machining.
- The enlarged preloaded ballscrews diameter with C3 grade to assure the high rigidity and high precision.

TC-210



Bar Feeder

The bar feeder is very useful for the managing of the massive production.

The bar feeding system can be integrated with the parts catcher device for full automatic operation.



Auto Lubrication Unit

- The auto. lubrication device provides lubrication oil to all slideways, ball screws and tailstock to ensure smooth motions at all time.
- Oil flow and lubricating frequency is set as requirement.
- An alarm lamp will light on in case of running out of oil.



Hydraulic Tailstock Unit

- The heavy-duty tailstock is attached to the lower guide of the machine base. The heavy casting, large diameter quill, and precision Morse taper center provide outstanding rigidity. In addition, the quill adjustment is hydraulic adding to the rigidity of the machine.
- High rigidity tailstock to eliminate vibration.





Hydraulic Unit

The high efficiency and low temperature direct drive hydraulic motor.



High Efficient Chips Removal Device

The chips conveyor is laid on and under the front side of the machine. This chain type device can easily convey away the large volume of chips generated during the turning process.



Separated Coolant Tank

The divided coolant tank is designed for easy maintenance. The high pressure pump and the large coolant flow capacity can efficiently remove away the generated heat to assure the accurate machining job.



Parts Catcher

Workpiece is taken by parts catcher after machining. Productivity can be increased when connecting with barfeed units.



Deviation of Spindle Center & Turret Tool Holder

Every machine is inspected the deviation of spindle center & turret tool holder after turret is installed to ensure the cutting accuracy.



Standard Workpiece Test Cutting

The standard workpiece cutting-test is carrying to ensure the certain range of accuracy on machining and performing.

TC-210



Laser Inspection

- All the machines are manufactured and assembled in accordance with ISO9001 quality management system.
- Every machine has been statically and dynamically inspected and compensated by the laser measuring instrument.
- The 72 hours run-in test is strictly carried out as one of the standard procedure before delivery.



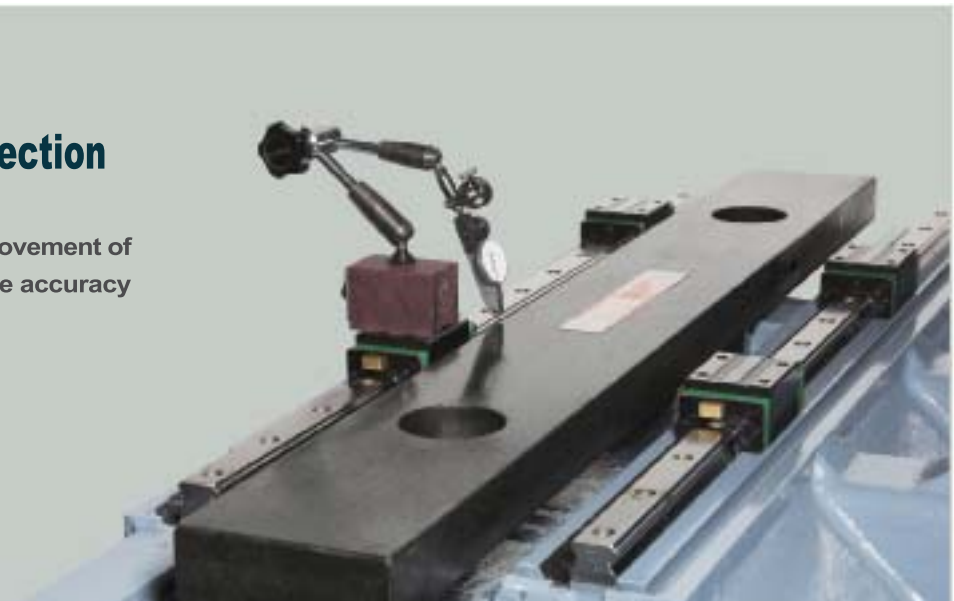
Tool Setter

The Renishaw HPMA automatic tool setter is one of optional accessories. The tool measure processing is fully automatic. The device is programmable to measure the tool automatically while the preset machining quantity is reached, the detective arm moves downward for the contact and gauge of problem against cutting tool. The non-stop operation of this device tremendously increases the good quality and productivity.



Rail Parallelism Inspection

The linear guideways are calibrated the movement of straightness and parallelism to ensure the accuracy during the assembly and installation.

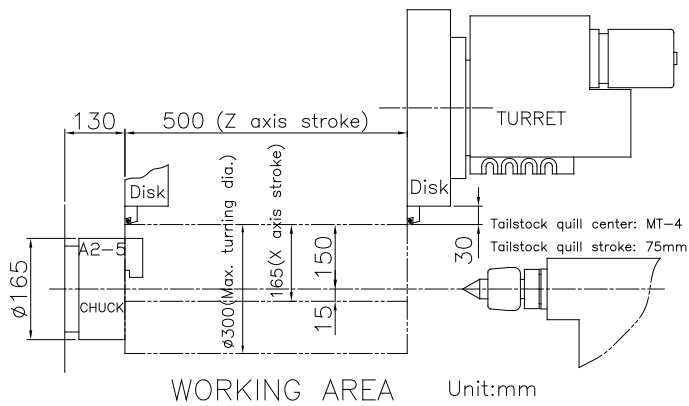


➤ Rail Straightness Measurement

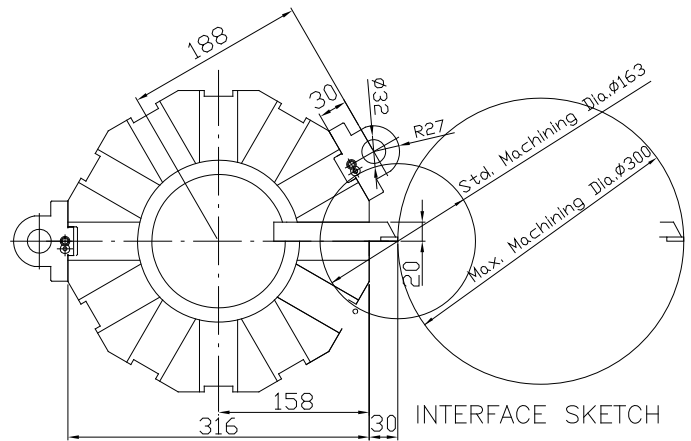
Every rail is inspected by the high-accurate electronic level gauge to ensure the linear guideway accuracy before assembly and installation.



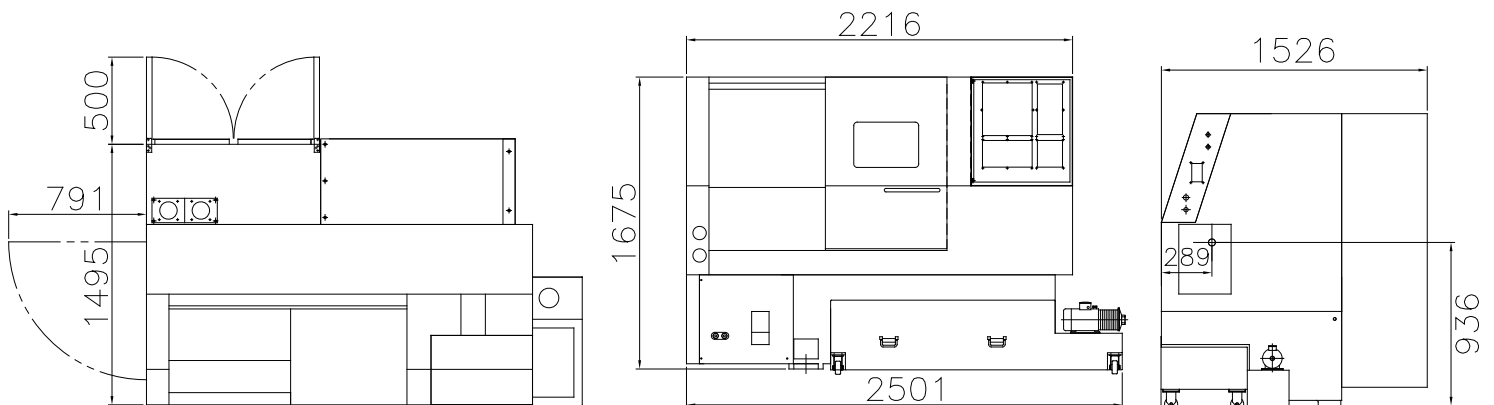
TOOL TURRET MOVABLE RANGE



TOOL INTERFERENCE DIAGRAM



MACHINE DIMENSION



Specifications

MODEL		TC-210
Capacity		
Max. swing over bed	mm(in)	ø450(17.7)
Swing over cross slide	mm(in)	ø290(11.4)
Max. turning diameter	mm(in)	ø210(8.3)
Max. turning length	mm(in)	420(16.5)
Bar capacity	mm(in)	ø51(2)
Max. workpiece weight (with tailstock)	kg	115
Travel		
X axis	mm(in)	150+15(6.5)
Z axis	mm(in)	500(19.7)
Spindle		
Spindle speed range	rpm	6000
Chuck size	inch	6
Type of spindle nose		A2-5
Spindle bore	mm(in)	ø62(2.4)
Spindle motor power	KW(HP)	11(14.7)
Turret		
Number of tool stations		12
Shank height for square tool	mm(in)	ø20(0.78)
Shank diameter for boring bar	mm(in)	ø32(1.25)
Rapid Feedrate		
X axis rapid traverse	M(in)/min	20(787.5)
Z axis rapid traverse	M(in)/min	24(944.9)
Feed motors		
X axis motor	KW(HP)	1(1.3)
Z axis motor	KW(HP)	1(1.3)
Hydraulic unit		
Pump motor	KW(HP)	1.5(2)
Tank capacity	L	46
Coolant system		
Tank capacity	L	82
Miscellaneous		
Power supply	KVA	20
Machine weight	KG	3000
Machine dimensions(L×W×H)	mm	2420×1550×1675

• All specifications, designs and characteristics shown in this catalogue are subject to change without prior notice.

STANDARD ACCESSORIES

- 12-Station hydraulic turret
- 3 jaw hydraulic chuck
- Hydraulic power unit
- Automatic lubrication system
- Splash guard
- Operator's & maintenance manuals
- Heat exchanger for electric cabinet
- Working condition indicating light
- Manual hydraulic tailstock
- Coolant supply system
- Hard jaws
- Soft jaws

OPTIONAL ACCESSORIES

- Tool presetter
- Auto door
- Bar feeder
- Collet chuck
- Parts catcher
- Power transformer
- Oil skimmer
- Chain type chip conveyor & bucket
- Air conditioner for electric cabinet



MACHTEK UNIX INC.

No.181-1,Dazun Rd., Shengang Village, Shengang Shiang,
Taichung County 429, Taiwan

Tel:886-4-24525650

Fax:886-4-24525657

Tel:886-4-25611114

Fax:886-4-25614433

http://www.machtek.com.tw E-mail:sale@machtek.com.tw

DISTRIBUTOR



Россия

Trade Technology
Ordzhonikidze ul. d.11, str. 11
115419, Moscow (Russia)
Tel. +7 499 - 650 5031
Fax +7 499 - 650 5031
Web ► www.trte.ru