

TURNING, MILLING AND BORING MACHINING CENTRE

GGTRONIC 3000 TRIPLE X CNC 1350 x 12000

Technical Data

CAPACITY

- Center height	mm	1350
- Center distance	mm	12000
- Swing over bed	mm	2600
- Swing over saddle	mm	2600
- Width guideways of carriage bed	mm	1490
- Width guideways of taistock bed	mm	1090
- Allowed weight between centers without steadies	kg	40000

HEAD

- Spindle motor power in a.c. Brushless SIEMENS	kW	S1	100(*)
- Spindle nose	ASA		20"
- Diameter of spindle at front bearing	mm		304,8
- Spindle bore	mm		155
- Infinitely variable speed range	r.p.m.		1...350
- Speed range in constant power	r.p.m.		17...350
- Number of speed	N.		3
- Torque	Nm		80000

(*) more capacity on request

TAILSTOCK

- Tailstock sleeve diameter	mm	460
- Tailstock sleeve stroke	mm	200
- Center cone	ø mm	190
- ASA 11"		
- N° 2 special centre for fixing special centre disk		

Technical Data

N° 1 CARRIAGE FOR OPERATIONS OF: TURNING, INTERNAL LONG BORING, TAPPING, BORING AND MILLING

LONGITUDINAL CARRIAGE AXIS Z

- Carriage stroke	approx mm	12000
- Infinitely variable feed speed	mm/min	1...12000
- Rapid movement speed	mm/min	12000

1° TRANSVERSAL CARRIAGE - AXIS X FOR TURNING OPERATIONS AND INTERNAL LONG BORING OPERATIONS

- Slide stroke	approx mm	1580
- Infinitely variable feed speed	mm/min	1...12000
- Rapid movement speed	mm/min	12000

2° TRANSVERSAL CARRIAGE - AXIS X FOR MILLING, BORING, TAPPING AND TURNING OPERATIONS

- Slide stroke	approx mm	1580
- Infinitely variable feed speed	mm/min	1...12000
- Rapid movement speed	mm/min	12000

3° TRANSVERSAL CARRIAGE - AXIS X FOR INTERNAL LONG BORING OPERATIONS

- Slide stroke	approx mm	1580
- Infinitely variable feed speed	mm/min	1...12000
- Rapid movement speed	mm/min	12000
- Remuveble boring bar holder capacity	mm	250
- Possibility too feet olso on turret support		
- <u>(BORING BAR HOLDER YOURS SUPPLY)</u>		

Technical Data

SPECIAL COLUMN FOR MILLING BORING TAPPING TURNING OPERATIONS

It is a milling column equipped with Y axis and milling head "B spindle"
Axis drive by govern unit and measure system by precision transducer

- CNC head "B spindle" vertical stroke
(on **axial** spindle) mm 1235 (- 765 mm + 470mm)
- CNC head "B spindle" vertical stroke
(on **radial** spindle) mm 1235 (- 640 mm + 595mm)
- Spindle nose ISO 50
- Infinitely variable speed range r.p.m. 1...3000
- Number of speed N° 2
- Speed range in constant power 1° step r.p.m. 181... 1000 (to define)
- Speed range in constant power 2° step r.p.m. 1000...3000 (to define)
- Speed MAX continuous r.p.m. 2000
- Speed MAX duty cycles 50% r.p.m. 3000
- Spindle motor Siemens Brushless kW S1 28
- Spindle motor Siemens Brushless kW S6-60% 34,5
- Torque MAX Nm S1 1170 (to define)
- Torque MAX Nm S6-60% 1451 (to define)
- Infinitely variable feed speed mm/min 1...12000
- Rapid movement speed mm/min 12000
- Screw diameter mm 63
- Pitch diameter mm 16
- Feed force N 35000
- Coolant trough tool
- Tool automatic release, hydraulic type
- Synchron tapping

Technical Data

< C > AXIS - This axis controls the slow spindle rotation and it is able to interpolate at the same time with other axes X, Y, Z. Transmission is obtained by Double reductor and double motor with electronic recovery of backlash C axes (**MASTER & SLAVE**). With this device it is possible to fit on carriage milling head or motorized turrets with rotating toolholders suitable for milling and boring operations. With this axis it is possible to execute variable pitch springs.

Axis drive by Govern Unit and measuring system with accuracy transducer.

• Accuracy of repeatability degrees	±	12"
• Number of revolutions	rpm/1'	2
• Max Torque	Nm	30000

APPROX MACHINE DIMENSIONS

- Length	mm	30000
- Width	mm	6000
- Height	mm	4500
- Theoretical weight	kg	130000

Standard Equipment

- N° 1 cast iron bed laying on floor over its entire length, with roller linear guide for carriage size 65.
- N° 1 cast iron bed laying on floor over its entire length, with induction hardened and ground ways for sliding of tailstock and main head support
- **The carriage slide on roller pre-loaded guides. The advantages of this system are: absence of stick-slip, max stiffness with severe removal, high working degrees, absence of plays, no maintenance, max cleaning, min. lubrication, very high translation speed**
- Head with automatic speed transmission, hydraulically operated by numerical control.
- Spindle mounted on **TIMKEN** precision bearings
- Continuous lubrication system of head units with relative **flow switch**.
- Transmission system in absence of plays on both axis.
- Precision recirculation ball screws with double pre-loaded lead nuts for X - Y axis
- Double reductor and double motor with electronic recovery of backlash Z axes (**MASTER & SLAVE**)
- 5 position transducers for linear axis
- Spindle position transducer consisting of an encoder
- Carriage and slide with timed automatic lubrication system **control level and thrust meter**
- A.C. Brushless axis motor driver **SIEMENS**
- A.C. Brushless spindle motor **SIEMENS**
- **Cable carrier chains with protected cables under steel cover.**
- Electrical equipment (**cabinet with air conditioner**).
- **Safety guard: chuck**
- **Safety guard: operator shields**

Standard Equipment

- Motorized of tailstock base on bed
- Motorized movement of tailstock sleeve
- Rotating incorporated tailstock center
- Automatic unclamping of tailstock on bed, hydraulic type
- Hydraulic clamping of tailstock sleeve
- Tailstock with automatic compensation for thermal elongation of workpiece
- Low pressure for turning tube (approx 1000 daN)
- Hydraulic power unit with Rexroth components
- Telescopic cover guard, steel made, on back and front side of transversal carriages
- Telescopic cover guard, steel made, on slide ways of carriage on bed
- Telescopic cover guard on slide ways of Y axes (better constructions)
- Electromechanical turret SAUTER type 0.5.480.540 (yours supply) fastening VDI 60 4 axial and 4 radial manual type (disk ø 998 mm). (like yours drawing). On the side of turret support there is hole for fixing the boring bar support.