

Pinacho

TORNOS · LATHES · TOURS · DREHMASCHINEN



smart-turn 6
electronic lathes

interactive graphic control

The electronic SMART-TURN 6 lathe maintains the ease of use of a manual lathe, provides increased productivity and flexibility by replacing mechanical controls with the latest touch screen numerical control technology.

operation

Operators accustomed to working with a manual lathe can work with this system without having any knowledge about CNC.

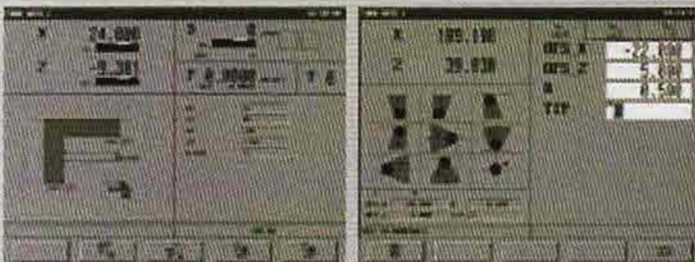
Easy machining operations can be made manually using just the handwheels, as in conventional lathes.

Machining is carried out by using a comprehensive choice of semiautomatic cycles selected through the touch screen.

MDI mode of ISO programming is also available for more complex operations.



By using the SMART TURN 6, any operator can gradually familiarize with the CNC for lathes. Pressing one key, the SMART TURN 6 can be handled as a full CNC programmable in ISO.



Every data for the machining in one single screen.

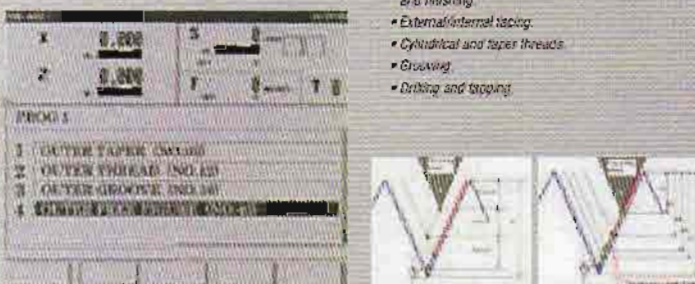
Easy definition of the tool dimensions.



Easy to use workpieces profile cycle.

Complete range of automatic turning cycles:

- Profile definition cycle for external/internal roughing and finishing.
- External/internal facing.
- Cylindrical and taper threads.
- Grooving.
- Drilling and tapping.



Linking of programmed cycles allows complete workpieces machining from start to finish.

Different threading methods selection.

including

- Complete range of automatic cycles.
 - Profile definition cycle for external/internal roughing and finishing, including graphic preview of the drawn shape in the screen.
 - External/internal facing.
 - Cylindrical and taper threads.
 - Grooving.
 - Drilling and tapping.
- Capacity to save up to 40 different operations that can be linked in a single program makes the machining of complex components fully automatic.
- 4 way automatic square toolpost.
- LCD Touch-screen of 7.2" with large graphic icons that guide the operator.
- Tool calibration – capacity for up to 16 tools.
- Inch or Metric display.
- Possibility to program cutting conditions (feed, spindle speed, tool) for each cycle.
- RS-232 port that can communicate with a PC and PCMCIA slot for memory cards.
- Machine is equipped with the CNC unit Di MATE-TC[®], AC motors and drives from FANUC[™].
- Automatic speed range change, including variable spindle speed with constant surface speed.

iso programming mode

ISO PROGRAMMING MODE

Possibility to program all type of operations and automatic movements.

Capacity up to 64 different offsets for tools.

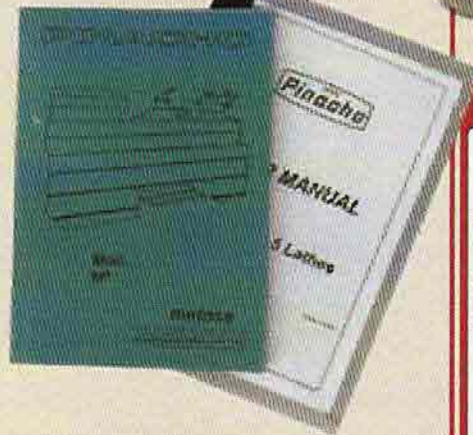
240 KB memory capacity for programs.

advantages

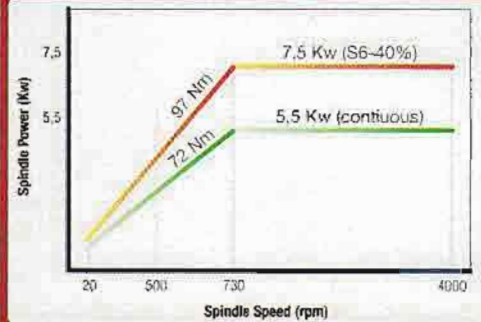
- Takes advantage of the possibilities that offers a CNC at the same time that maintaining the flexibility and ease of use and handling of a conventional lathe.
- Components of complicated geometries can be machined, without the setting of complicated attachments.
- A wide range of threads can be produced without having to preset any gear trains.
- Increased productivity and precision.
- Full automatic operations give reduced working time and increased productivity.

standard accessories

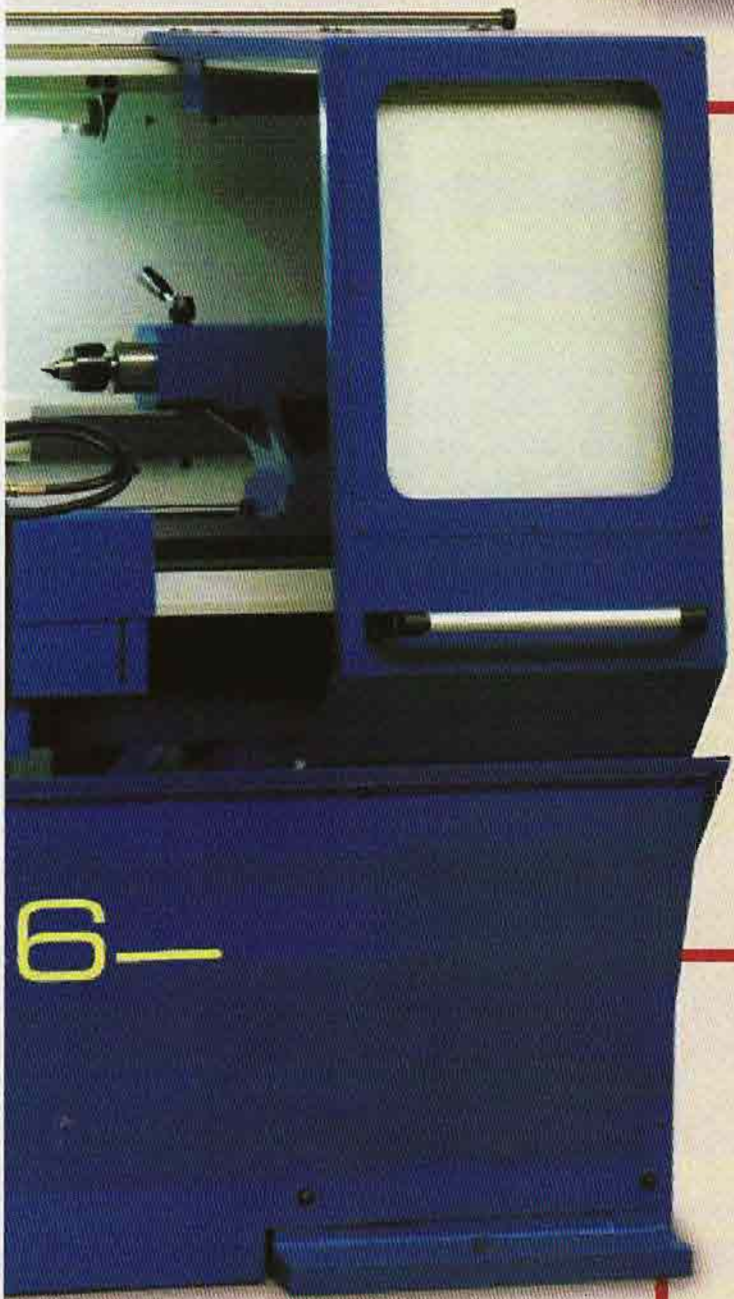
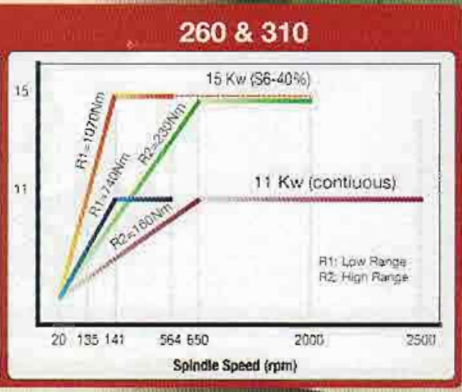
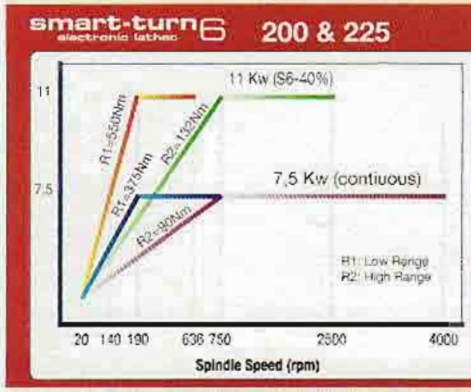
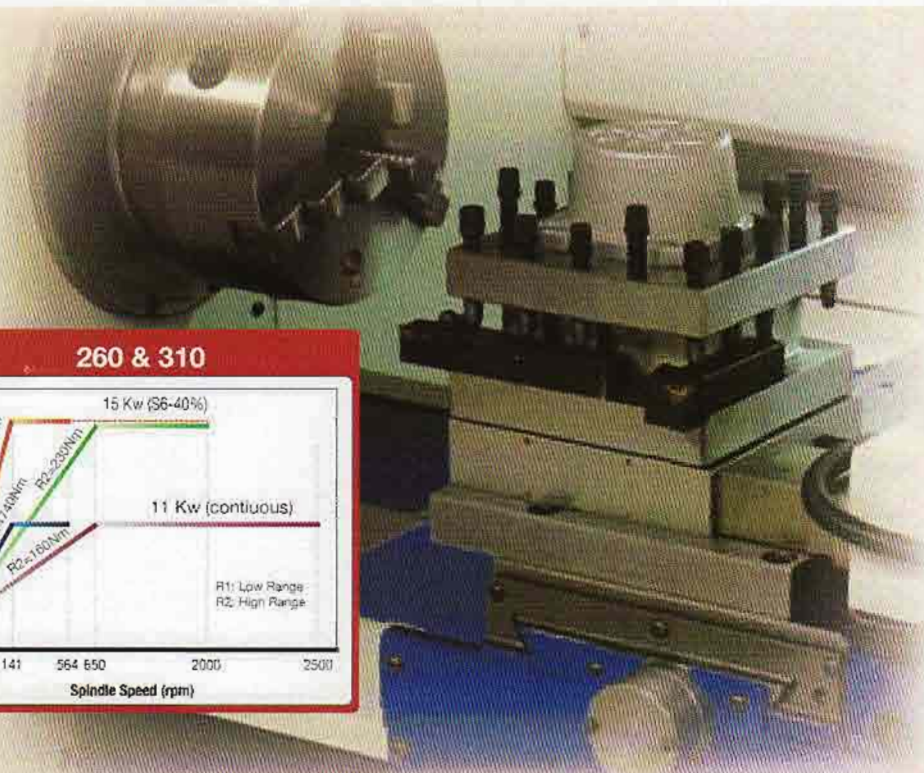
- 4 Way automatic square toolpost.
- Fully enclosed guarding and chip collecting tray.
- Automatic speed range change.
- Coolant equipment.
- Automatic lubrication of the slide ways.
- Constant surface speed.
- Electronic handwheels for the X and Z axis.
- Low voltage work light.
- Main spindle reducing bush and fixed centers.
- Instruction manual.
- CE compliant.



165 & 180



smart-turn



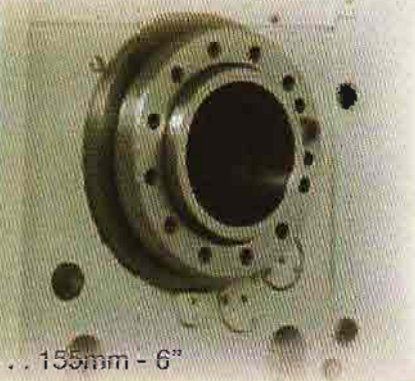
6-

optional accessories

- Steel universal 3-jaw chuck.
- Transformer for power supply different from 400V.
- DYFE communication program.
- Option Ø105mm spindle bore for models SMART 6 260 & 310.
- Chuck backplate.
- Driving plate.
- Independent 4-jaw chuck.
- Face plate.
- Steel universal 4-jaw chuck.
- Fixed steady rest.
- Traveling steady rest.
- Steady rest arms with rollers.
- Quick change rear toolpost.
- Tool holders for quick-change toolpost.
- Morse tape live center.
- Drillchuck.
- Collet chuck.
- Collets.
- Jaws for universal chucks.
- Set of spanners and keys.
- Leveling plates.

Further information about accessories in our website metosa-pinacho.com

large main spindle bore lathes




- Main spindle bore:**
- Smart-turn 6 310-155 155mm - 6"

technical specifications

smart-turn ⁶ electronic lathes		165	180	200	225	260	310	310-155	325
Centre height	mm	165	180	200	225	260	310	310	325
Distance between centres	mm	750 - 1000	750 - 1000	1000 - 1500	1000 - 1500	1000 - 1500 2000 - 3000	1000 - 1500 2000 - 3000	1000 - 1500 2000 - 3000	1000 2000 - 3000 4000 - 5000
Swing over bed	mm	335	360	400	450	530	620	620	660
Swing over carriage	mm	310	335	370	410	475	580	580	585
Swing over cross slide	mm	168	198	210	260	315	415	415	368
Bed width	mm	250	250	300	300	350	350	350	425
Main spindle bore	mm	42	42	65	65	STD = 80 / OPTION = 105		155	105
Main spindle nose		CAMLOCK Nº.5 DIN 55027 Nº.5		CAMLOCK Nº.6 DIN 55027 Nº.6		CAMLOCK Nº.8 DIN 55027 Nº.8		ASA B 5,9 Nº.11	CAMLOCK Nº.8 DIN 55027 Nº.8
Main spindle taper	MT	4	4	5	5	5	5	5	5
Speed range	mm	1	1	2	2	2	2	3	2
Variable spindle speed	r.p.m.	0 - 4000	0 - 4000	RANGE I 0 - 675 RANGE II 675 - 3000	RANGE I 0 - 675 RANGE II 675 - 3000	Ø 80 RANGE I 0 - 564 RANGE II 564 - 2500	Ø 105 RANGE I 0 - 564 RANGE II 564 - 2000	RANGE I 0 - 85 RANGE II 85 - 260 RANGE III 260 - 780	RANGE I 0 - 564 RANGE II 564 - 2000
Z, X working feed	mm/min	0 - 10000	0 - 10000	0 - 10000	0 - 10000	0 - 10000	0 - 10000	0 - 10000	0 - 10000
Z, X rapid feed	m/min	10	10	10	10	10	10	10	10
Tailstock shank diameter	mm	58	58	68	68	82	82	82	96
Tailstock shank travel	mm	200	200	220	220	235	235	235	215
Tailstock taper	MT	3	3	4	4	5	5	5	6
Main motor power	Kw.	5,5	5,5	7,5	7,5	11	11	11	11
Pump motor power	Kw.	0,57	0,57	0,57	0,57	0,57	0,57	0,57	0,57
Z axis motor force	N	9.047	9.047	9.047	9.047	9.047	9.047	9.047	9.047
X axis motor force	N	4.524	4.524	4.524	4.524	4.524	4.524	4.524	4.524

smart-turn⁶

electronic lathes

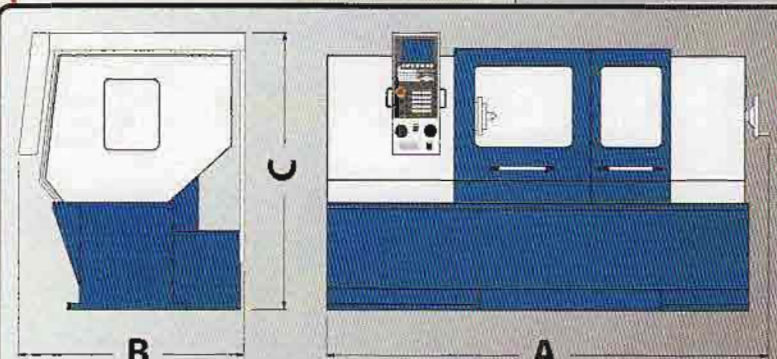



165
180
200
225
260
310
310-155
325

mm

A B C

1545	1595		750	2100	1325	1575
1630	1680		1000	2385		
2180	2380		1000	2570	1375	1675
2290	2650		1500	3280		
2875	3190	3275	1000	2580		
3095	3265	3350	1500	3320	1430	1840
3350	3510	3600	2000	3700		
3500	3725	3800	3000	4610		
4700	2000	4310				
5400	3000	5310			1730	1860
6500	4000	6310				
8000	5000	7310				

Net weight

In our constant efforts to improve our machines, we reserve the right to modify any of the technical details, design and color of the machines described in this catalogue.