

# ▶ ST

**MODELS** ST 180 > ST 225 > ST 285 > ST 310

## High precision flatbed CNC lathes.

The ST is Pinacho's most sophisticated numerical control lathe, with great rigidity and working precision. Developed with components of the highest quality and manufactured under strict and demanding control standards. ST parallel lathes incorporate the most advanced technology developed from experience provided by more than 70 years of history.

Our CNC flatbed lathes are silent, easy to use machines, with a headstock composed of a servo-motor and direct transmission to the main axis, providing a high speed of rotation and an excellent quality surface finish on the component.

The Pinacho ST are lathes with up to 3 axes that provide an extraordinary versatility in the world of machine tools.



### STANDARD EQUIPMENT

- Fanuc Oi-TF Control
- Dynamic graphics / trajectory
- Profile Editor
- Electronic handwheel for X and Z axes
- Direct drive headstock with servomotor
- Reducing bush of main shaft and dead centers
- 8-position automatic turret with 4 toolholders
- Automatic lubrication of the guideways
- Refrigeration equipment
- Cast iron pedestals
- Precision Levellers
- Work light
- Instruction manual
- Verification standard DIN 8605
- CE Standard

### OPTIONAL EXTRAS

- Control Fagor 8055T, Siemens 828D
- Chucks with 3 and 4 jaws
- Rear chuck
- Hydraulic power chuck
- Hydraulic collect chuck
- Hydraulic tailstock
- Fixed Steady Rest
- Large capacity fixed steady rest
- Follow Rest
- Livetool 12 positions
- Live center
- Chip conveyor
- Electric transformer
- Higher pressure cooling system
- Electric panel refrigeration
- Anti-vibration kit
- Remote jog unit
- Tool Presetter
- Bar feeder



**TECHNICAL DATA SHEET**

Working capacity		ST-180		ST-225		ST-285				ST-310			
Center distance	mm/in	750/30	1000/40	1000/40	1500/60	1000/40	1500/60	2000/80	3000/120	1000/40	1500/60	2000/80	3000/120
Bed width	mm/in	250 / 10		300 / 12		350 / 14				350 / 14			
Centre height	mm/in	180 / 7		225 / 9		285 / 11				310 / 12			
Ø max. swing over bed	mm/in	360 / 14		450 / 18		570 / 22 1/2				620 / 24			
Ø max. swing over carriage	mm/in	300 / 12		370 / 15		510 / 20				550 / 21 1/2			
Ø max. over cross slide	mm/in	190 / 7		260 / 10		360 / 14				410 / 16			
Cross slide travel	mm/in	185 / 7 1/4		235 / 9 1/4		260 / 10				310 / 12			
Longitudinal carriage travel	mm/in	600/23 1/2	840/33	930/36 1/2	1450/57	850/33	1450/53	1850/72 1/2	2850/112	850/33	1450/53	1850/72 1/2	2850/112

Headstock		ST-180		ST-225		ST-285				ST-310			
Main motor power	Fagor	kW	7.5	15	17	17				17			
	Fanuc	kW	11	15	15	15				15			
	Siemens	kW	7	9	11	11				11			
Headstock main spindle bore Valid for all centre distances	mm/in	42 / 1 1/2		65 / 2 1/2		80 / 3				105 / 4		155 / 6	
Main spindle nose	ASA / CAM-LOCK	A2 - 5 / D1 - 5		A2 - 6 / D1 - 6		A2 - 8 / D1 - 8				A2 - 8 / D1 - 8		A2 - 11 / --	
Main spindle nose taper	MT	4		4		5				5		5	
Speed ranges	r.p.m.	0-4000		0-3000		0-2500				0-2500		0-1000	

X-axis, Z-axis		ST-180		ST-225		ST-285				ST-310			
Working feeds Z	Fagor	m/min	0 - 10	0 - 10	0 - 10	0 - 10				0 - 10			
	Fanuc	m/min	0 - 10	0 - 10	0 - 10	0 - 10				0 - 10			
	Siemens	m/min	0 - 7	0 - 7	0 - 7	0 - 7				0 - 7			
Working feeds X	Fagor	m/min	0 - 12	0 - 12	0 - 12	0 - 12				0 - 12			
	Fanuc	m/min	0 - 12	0 - 12	0 - 12	0 - 12				0 - 12			
	Siemens	m/min	0 - 12	0 - 12	0 - 12	0 - 12				0 - 12			
Rapid traverse Z	Fagor	m/min	12.5	12.5	12.5	12.5				12.5			
	Fanuc	m/min	12.5	12.5	12.5	12.5				12.5			
	Siemens	m/min	9	9	9	9				9			
Rapid traverse X	Fagor	m/min	15	15	15	15				15			
	Fanuc	m/min	15	15	15	15				15			
	Siemens	m/min	15	15	15	15				15			
Z - Ball screw, Ø/pitch	mm					40 / 10							
X - Ball screw, Ø/pitch	mm					20 / 5							

Tailstock		ST-180		ST-225		ST-285				ST-310			
Tailstock barrel Ø	mm/in	58 / 2 1/4		68 / 2 1/2		95 / 3 3/4				95 / 3 3/4			
Tailstock barrel travel	mm/in	180 / 7		200 / 7 3/4		220 / 8 1/2				220 / 8 1/2			
Tailstock Morse taper	MT	4		4		5				5			

Turret		ST-180		ST-225		ST-285				ST-310			
Stations of standard turret		8		8		8				8			
Tool shank	mm	20x20		25x25		25x25				25x25			
Ø Boring bar	mm	32		40		40				40			

Dimensions and Weight		ST-180		ST-225		ST-285				ST-310			
Length	mm	2250	2520	2810	3325	2810	3320	3940	4750	2810	3325	3940	4750
Width	mm	1170		1270		1370		1450		1450		1700	
Height	mm	1820		1890		1930		2110		1930		2110	
Weight	kg	1200	1490	2230	2340	2250	2475	2970	3640	2300	2515	3010	3700

Options		ST-180		ST-225		ST-285				ST-310			
Fixed steady rest Ø	mm	10 - 125		10 - 140		10 - 180				10 - 180			
Large capacity fixed steady rest Ø	mm	110 - 200		140 - 250		180 - 350				180 - 400			
Follow rest Ø	mm	10 - 80		10 - 90		10 - 130				10 - 130			

Dimensions and weight with packaging		ST-180		ST-225		ST-285				ST-310			
Length	mm	2450	2720	3010	3525	3010	3520	4140	4950	3010	3525	4140	4950
Width	mm	1270		1370		1470		1550		1550		1800	
Height	mm	2020		2090		2130		2310		2130		2310	
Weight	kg	1500	1790	2530	2640	2650	2875	3370	3940	2700	2915	3410	4100