



THE MOST COMPLETE, VERSATILE  
AND RELIABLE RANGE OF LATHES  
ON THE MARKET.

WE ARE MANUFACTURERS.



## The history of a benchmark brand in the manufacture of high-tech lathes.

For more than 75 years, the Pinacho brand has been recognized worldwide for its technologically innovative characteristics and for the precision and versatility of all its models.

Our objective as manufacturers is to unify the power and reliability of all our products; that is why we manufacture and design conventional parallel lathes and high precision CNC lathes. Our flatbed models are widely recognized worldwide and used in a multitude of industrial applications.

Pinacho lathes offer cost-effective solutions to simple and complex turned components for many industrial and engineering projects.

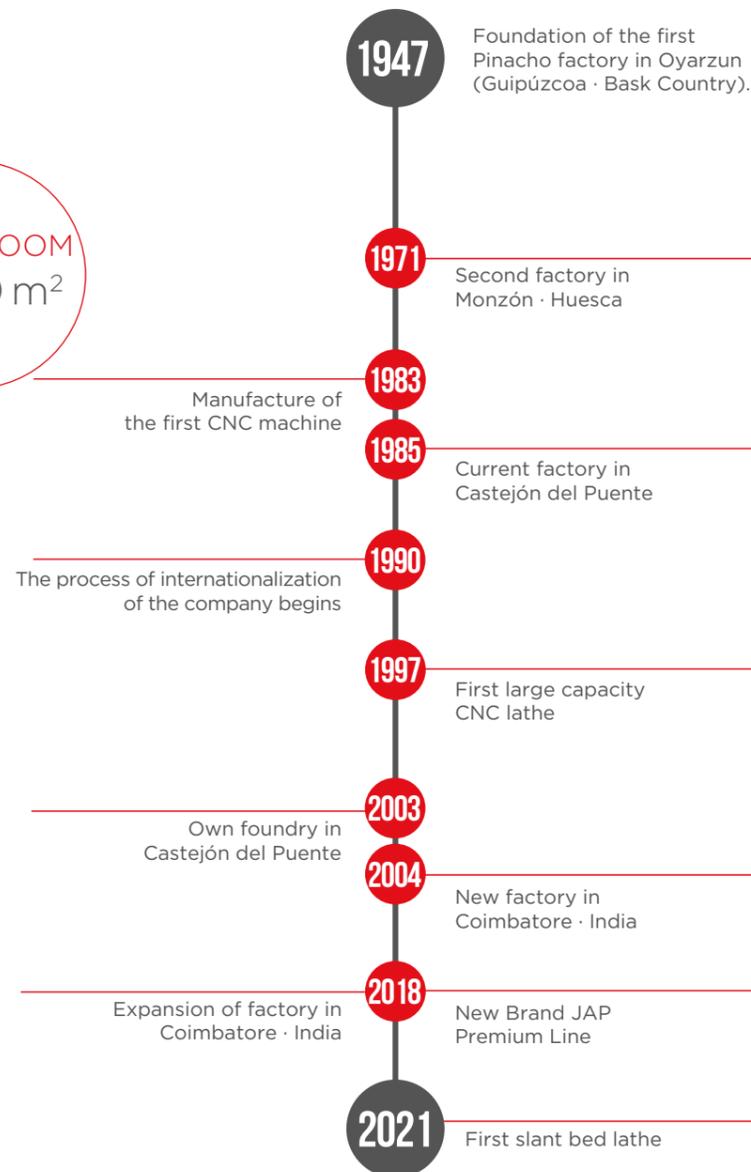
The Pinacho range is our solution to satisfy the demands of our customers worldwide.



200,000  
UNITS SOLD

SHOWROOM  
2.000 m<sup>2</sup>

FACTORY  
30.000 m<sup>2</sup>



## Manufacturers of lathes for 75 years.

**75**  
YEARS

### A reference brand in the sector

Pinacho was a pioneer in the machine tool sector worldwide. The company was founded in 1947 in Oyarzun and from the beginning became an example of design and efficiency shown in the results obtained by its customers, who quickly saw the importance of this type of product in its contribution toward the profitability of their companies and in the work in which they were involved.

Our main objective is to achieve the complete satisfaction of each client; for this reason, our efforts are centered in offering a range of products of high quality and performance products at a competitive price.

More than 200,000 lathes have been sold in more than 80 countries as an endorsement of our unwavering commitment to quality.





Experience the reliability of a brand with worldwide recognition and long history.

Since our foundation every step has been taken in pursuit of industrial excellence: we are manufacturers and control all design, production and assembly processes.

Our main offices and the central factory are located in Spain.

We have a showroom so that customers can learn about the wide range of CNC and conventional lathes offered by Pinacho. The factory in Spain has more than 20.000m<sup>2</sup> of facilities to satisfy customer requirements without delivery problems and with the maximum quality guarantees the great demand for our products worldwide.

## ▶ SL

CNC Slant bed lathe.

- > SL 250X500 > SL 250X500 M
- > SL 275X530 > SL 305X470 M
- > SL 275X1200 > SL 275X1200 M



## ▶ SH

Large capacity CNC lathes with up to 4 controlled axes.

- > SH 400 > SH 500



## ▶ ST

CNC lathes with a high-precision flatbed.

- > ST 180 > ST 225 > ST 285 > ST 310



## ▶ SE

User-friendly and intuitive CNC lathes.

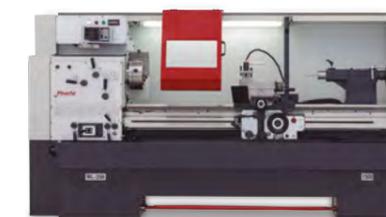
- > SE 200 > SE 250 > SE 325



## ▶ ML

New range of manual lathes with variable speed headstock.

- > ML 200 > ML 250 > ML 325

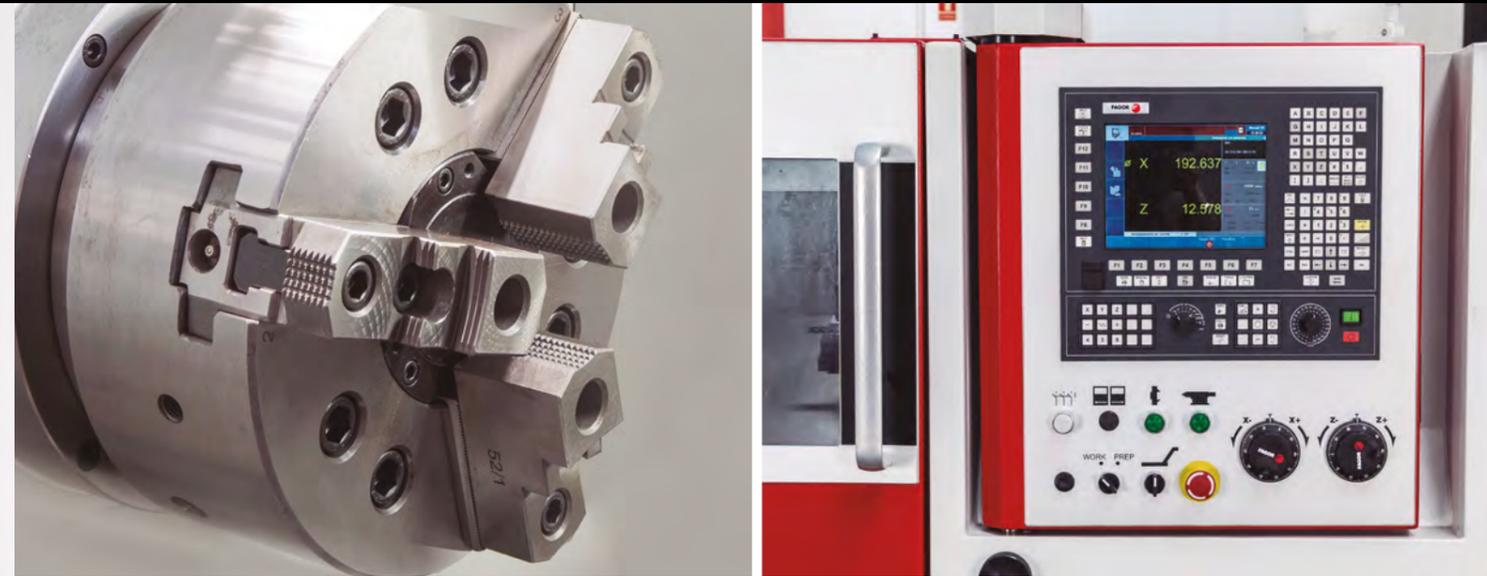




**MODELS:** > SL 250X500 > SL 250X500 M > SL 275X530  
> SL 305X470 M > SL 275X1200 > SL 275X1200 M

## CNC Slant bed lathe.

The SL series are up to 3-axes horizontal turning centres designed to provide a complete customization and component specific solutions to customers. Tailor made solutions with high degree of organization to adapt to the production of any type of part.



### STANDARD EQUIPMENT

- Fagor 8058 Control
- Dynamic graphics / trajectory
- Profile editor
- Electronic handwheel for X and Z
- Main spindle A2-6 with Ø63 mm bore
- Hydraulic power chuck
- 8-position automatic turret
- Linear motion guides on both axis
- Hydraulic tailstock
- Hydraulic system
- Coolant system (4 bar)
- Automatic lubrication system
- Heavy-duty cast-iron machine base
- Precision levelling bolts
- Work light
- Status signal light
- Control cabinet cooler with filtration
- Instruction manual
- CE standard

### OPTIONAL EXTRAS

- Fanuc Control 0i-TF Plus, Siemens 828D
- Main spindle with Ø 74 and 86 bore
- C-axis
- Automatic live tool turret with 12 or 16 positions VDI or BMT
- Hydraulic chuck with larger bar pitch
- Hydraulic steady rest
- Electric transformer
- Live center
- Chip conveyor
- Tool presetter
- Electric panel cooler
- Anti-vibration kit
- Auto parts catcher
- Bar feeder



## TECHNICAL DATA SHEET TORQUE AND POWER CURVES

		SL 250X500	SL 250X500 M	SL 275X530	SL 305X470 M	SL 275X1200	SL 275X1200 M
<b>Working capacity</b>							
Ø max. swing over bed	mm / in	500	500	550	610	550	550
Ø max. swing over carriage	mm / in	225	210	275	350	280	280
Ø max. turned die	mm / in	320	272	320	426	350	350
Max. turning length	mm / in	500	500	530	470	1200	1200
Longitudinal carriage travel	mm / in	500	500	530	500	1220	1220
Cross slide travel	mm / in	165	193	275	218	184	184

		SL 250X500								SL 250X500 M				SL 275X530				SL 305X470 M				SL 275X1200				SL 275X1200 M			
<b>Headstock</b>																													
Main motor power	FAGOR (S6/S1)	kW																											
	FANUC (S3/S1)	kW																											
	SIEMENS (S6/S1)	kW																											
Headstock main spindle bore	mm	63 74 63 74 63 74 63 74 63 86 63 86																											
Main spindle nose	ASA	A2-6																											
Ø max. Bar capacity	mm	51 63 51 63 51 63 51 63 51 75 51 75																											
Max. spindle speed	r.p.m.	5000 4500 5000 4500 3500 4000 3500 4000 3500																											

		SL 250X500								SL 250X500 M				SL 275X530				SL 305X470 M				SL 275X1200				SL 275X1200 M			
<b>X-axis, Z-axis</b>																													
Rapid traverse Z	m/min	30																											
Rapid traverse X	m/min	30																											
Z - Ball screw, Ø/pitch	mm	32/10																											
X - Ball screw, Ø/pitch	mm	32/10																											
X - MOTOR TORQUE	FAGOR	Nm																											
	FANUC	Nm																											
	SIEMENS	Nm																											
Z - MOTOR TORQUE	FAGOR	Nm																											
	FANUC	Nm																											
	SIEMENS	Nm																											

		SL 250X500								SL 250X500 M				SL 275X530				SL 305X470 M				SL 275X1200				SL 275X1200 M			
<b>Tailstock</b>																													
Tailstock barrel	mm	410 410 410 410 1080 1080																											
Tailstock barrel Ø	mm	80																											
Tailstock barrel travel	mm	100 100 100 100 120 120																											
Tailstock Morse taper	MT	4																											

		SL 250X500								SL 250X500 M				SL 275X530				SL 305X470 M				SL 275X1200				SL 275X1200 M			
<b>Turret</b>																													
Standard turret		PRAGATI BTP-80 SAUTER 0.5.436.216 PRAGATI BTP-80 SAUTER 0.5.450.416 PRAGATI BTP-80 SAUTER 0.5.436.216																											
Turret type		ELECTROMECHANICA SERVO ELECTROMECHANICA SERVO ELECTROMECHANICA SERVO																											
Stations of standard turret		8 12 8 12 8 12																											
Tool shank	mm	25X25 20X20 25X25 20X20 25X25 20X20																											
Ø Boring bar	mm	40 32 40 32 40 32																											

		SL 250X500								SL 250X500 M				SL 275X530				SL 305X470 M				SL 275X1200				SL 275X1200 M			
<b>Cooling system</b>																													
Coolant pump	bar	4																											
Tank capacity	l	110 110 110 110 205 205																											

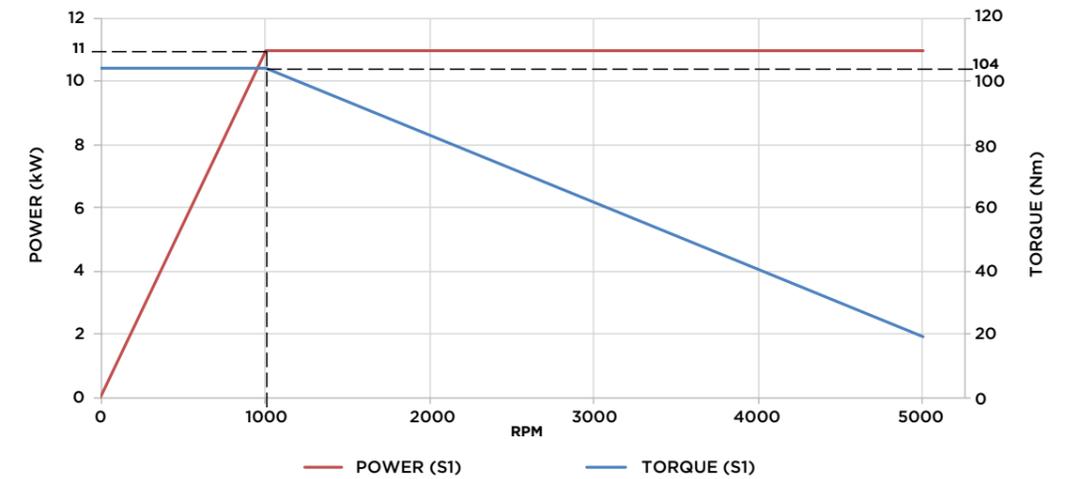
		SL 250X500								SL 250X500 M				SL 275X530				SL 305X470 M				SL 275X1200				SL 275X1200 M			
<b>Hydraulic system</b>																													
Hydraulic pump capacity	l.p.m.	14																											
Tank capacity	l	45																											
System pressure	Kg/cm <sup>2</sup>	30																											

		SL 250X500								SL 250X500 M				SL 275X530				SL 305X470 M				SL 275X1200				SL 275X1200 M			
<b>Dimensions and weight (chip conveyor included)</b>																													
Length	mm	3680 3680 3750 3700 5150 5150																											
Width	mm	1720 1720 1850 1950 1793 1793																											
Height	mm	1680 1680 1800 1880 1760 1760																											
Weight	kg	3750 4000 4000 4250 5500 5750																											

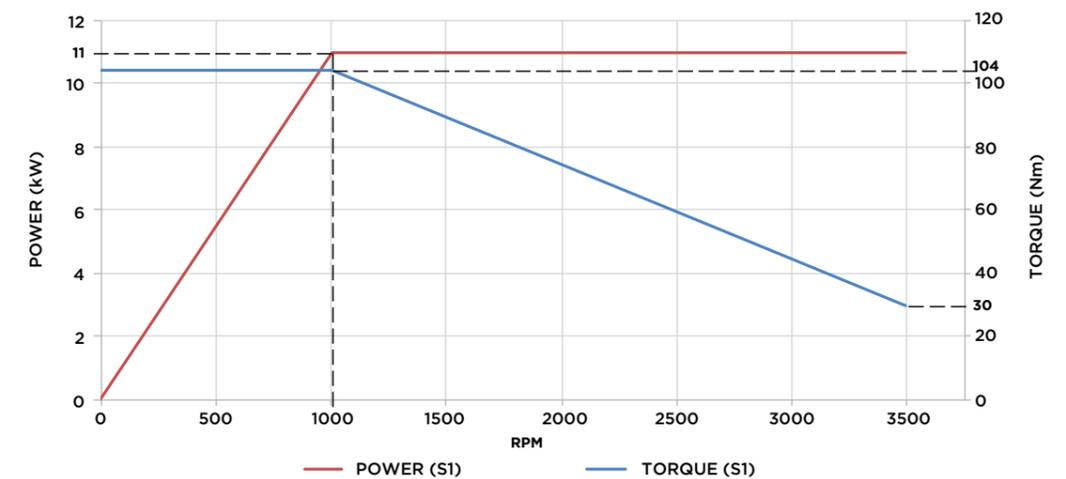
		SL 250X500								SL 250X500 M				SL 275X530				SL 305X470 M				SL 275X1200				SL 275X1200 M			
<b>Options</b>																													
Hydraulic steady rest Ø	mm	- - - - 12 - 125 12 - 125																											

		SL 250X500								SL 250X500 M				SL 275X530				SL 305X470 M				SL 275X1200				SL 275X1200 M			
<b>Dimensions and weight with packaging</b>																													
Length	mm	3880 3880 3950 3900 5350 5350																											
Width	mm	1920 1920 1950 2050 1893 1893																											
Height	mm	1880 1880 2000 2080 1960 1960																											
Weight	kg	4050 4300 4300 4550 5900 6050																											

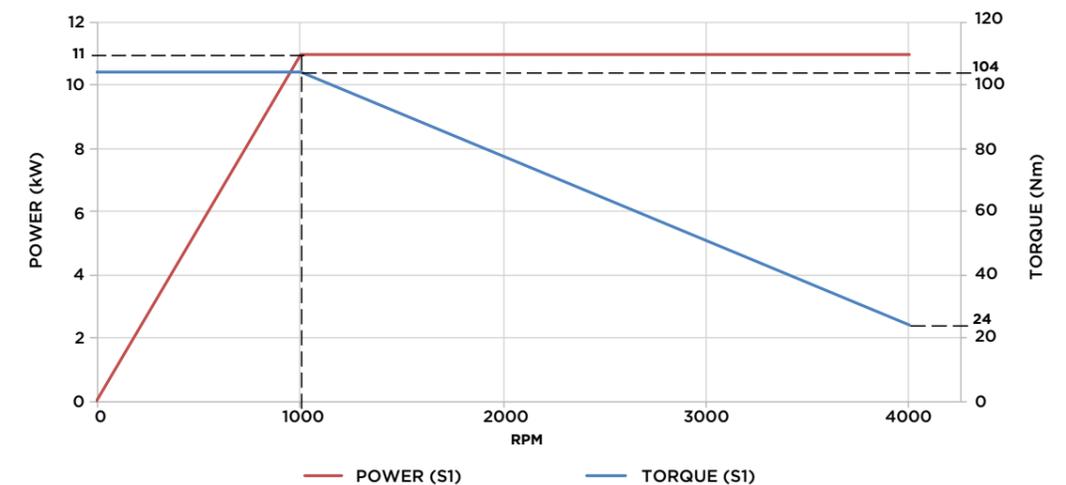
### SL-250/SL-250M > FAGOR



### SL-275/SL-305M > FAGOR



### SL-275/SL-275M > FAGOR



MODELS SH 400 > SH 500

## Large roughing CNC lathes with up to 4 axes.

The SH series of CNC lathes marks a milestone among flatbed numerical control machines. Parallel lathes with up to 4 axes that provide a record versatility within their segment without renouncing the precision and quality of finishes that have made Pinacho a reference in the world of machine tools.

SH parallel lathes have been designed with our most demanding customers in mind, using the highest quality components combined with the most innovative technology, the result of more than 75 years of experience.

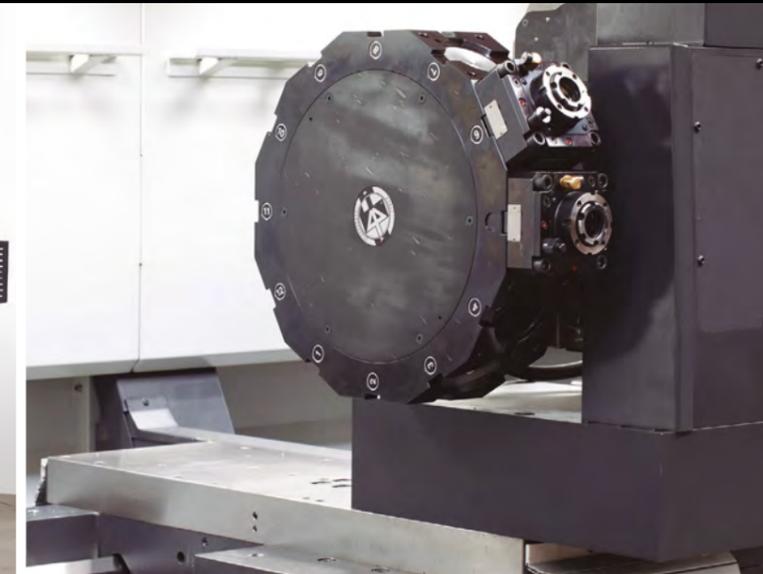
Models with up to 4 CNC axes, 1000 mm turning on over bed and 5000 mm between centres.

### STANDARD EQUIPMENT

- Fagor 8055i Control
- Dynamic graphics / trajectory
- Profile editor
- Screen 11".
- Reducing bush of main shaft and dead centres
- Servomotor
- Gearbox 2 ranges
- 8-position automatic turret with 4 toolholders
- Remote jog unit
- Refrigeration equipment
- Cast iron pedestals
- Precision levellers
- Work light
- Status signal light
- Instruction manual
- Verification standard DIN 8605
- CE Standard

### OPTIONAL EXTRAS

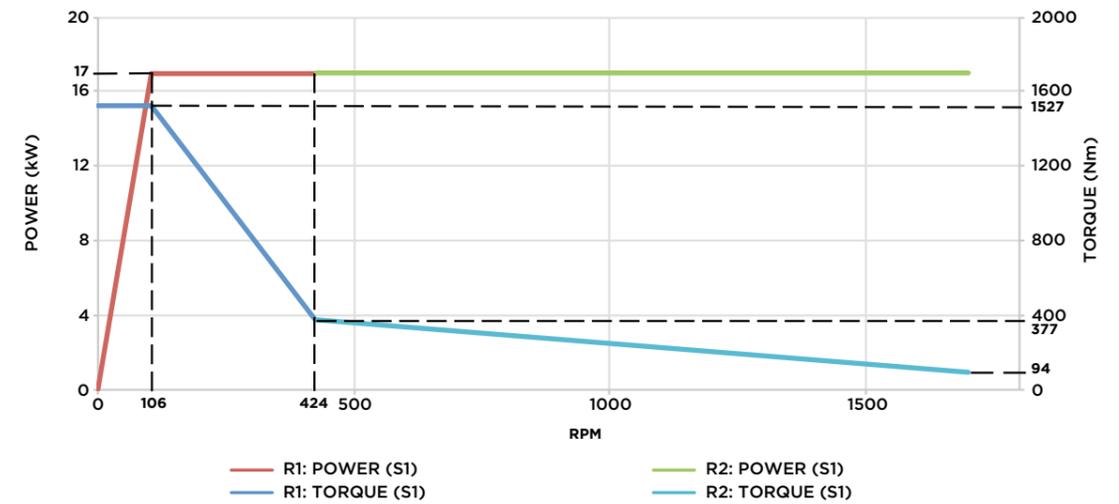
- Control Fanuc Oi-TF, Siemens 828D, Fagor 8058 or Fagor 8060
- Boring bar up to 310 mm
- C-axis
- Y-axis
- Automatic and live tool 8 or 12 positions VDI or BMT
- Chucks with 3 and 4 jaws
- Hydraulic chuck and tailstock
- Fixed steady rests of various capacities
- Follow rest
- Hydraulic steady rest
- Electric transformer
- Rear chuck
- Support for boring bars
- Live center
- Higher pressure coolant pump
- Chip conveyor
- Anti-vibration kit
- Tool Presetter
- Electric panel cooler



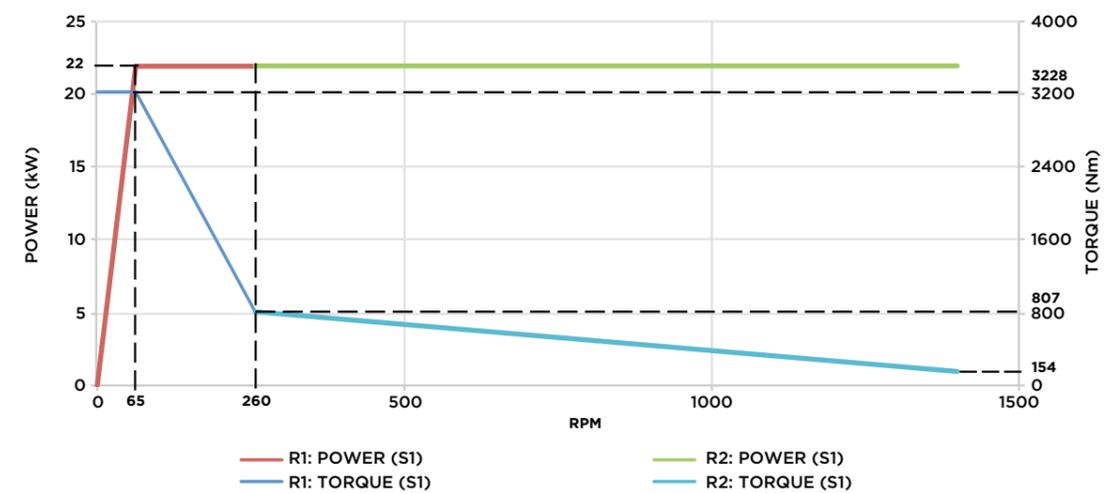
## TECHNICAL DATA SHEET TORQUE AND POWER CURVES

		SH-400					SH-500			
<b>Working capacity</b>										
Center distance	mm / in	1000/ 39 1/2	2000/ 78 3/4	3000/ 118	4000/ 157 1/2	5000/ 197	2000/ 78 3/4	3000/ 118	4000/ 157 1/2	5000/ 197
Bed width	mm / in	425 / 16 3/4					500 / 20			
Centre height	mm / in	400 / 15 3/4					500 / 19 3/4			
Ø max. swing over bed	mm / in	800 / 31 1/4					1000 / 39 1/4			
Ø max. swing over carriage	mm / in	720 / 28 1/4					900 / 35 1/2			
Ø max. over cross slide	mm / in	510 / 20 1/4					710 / 28 1/4			
Cross slide travel	mm / in	400 / 15 3/4					400 / 15 3/4			
Longitudinal carriage travel	mm / in	1000/ 39 1/2	2000/ 78 3/4	3000/ 118	4000/ 157 1/2	5000 / 197	1980/ 77 3/4	2980/ 117 1/4	3980/ 156 1/2	4980/ 196
<b>Headstock</b>										
Main motor power	kW	17					22			
Headstock main spindle bore Valid for all centre distances	mm / in	105 / 4	155 / 6	230 / 9						
Main spindle nose	ASA / CAM-LOCK	A2-8 / D1-8	A2-11 / --	A2-15 / --						
Main spindle nose taper	MT	5	5	6						
Speed ranges	Range I	0-424		0-288		0-217				
	Range II	424-1700		288-1000		217-750				
<b>X-axis, Z-axis</b>										
Working feeds Z	m/min	0 - 8.5								
Working feeds X	m/min	0 - 6								
Rapid traverse Z	m/min	10								
Rapid traverse X	m/min	7.5								
Z - Ball screw, Ø/pitch	mm	50/10								
X - Ball screw, Ø/pitch	mm	32/5								
<b>Tailstock</b>										
Tailstock barrel Ø	mm / in	106 / 4					120 / 4 1/2			
Tailstock barrel travel	mm / in	215 / 8 1/4					300 / 11 3/4			
Tailstock Morse taper	MT	6								
<b>Turret</b>										
Stations of standard turret		8								
Tool shank	mm	32x32					40x40			
Ø Boring bar	mm	50								
<b>Dimensions and Weight</b>										
Length	mm	3610	4610	5610	6610	7610	4610	5610	6610	7610
Width	mm	2170					2190			
Height	mm	2090					2315			
Weight	kg	5460	5760	6460	7560	9060	6400	7600	8800	10000
<b>Options</b>										
Fixed steady rest Ø	mm	90 - 300					10 - 380			
Large capacity fixed steady rest Ø	mm	300 - 530					370 - 730			
Follow rest Ø	mm	70 - 290					35 - 310			
<b>Dimensions and weight with packaging</b>										
Length (with transport cradle)	mm	4150	5150	6150	7150	8150	5150	6150	7150	8150
Width	mm	2270					2290			
Height	mm	2290					2515			
Weight	kg	5810	6160	7110	8060	9610	6800	8050	9300	10550

### SH-400/105 > FAGOR



### SH-500/130 > FAGOR



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

## High precision flatbed CNC lathes.

The ST is Pinacho's high reliability 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 75 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.

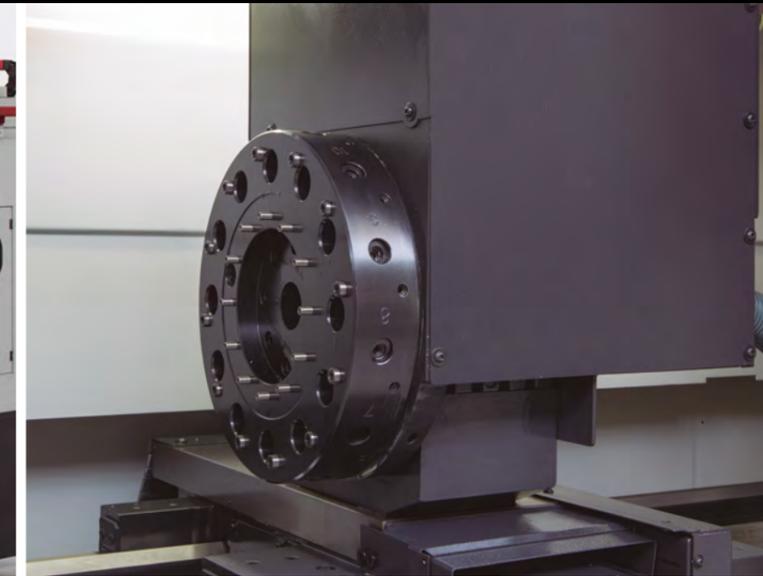
### STANDARD EQUIPMENT

- 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 8055i, Siemens 828D, Fagor 8058 or Fagor 8060
- Chucks with 3 and 4 jaws
- C-axis\*
- 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

Note: \* Not available for ST180



## TECHNICAL DATA SHEET TORQUE AND POWER CURVES

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				
	Fanuc	kW	11	15	15				15				
	Siemens	kW	7	9	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			
	Fanuc	m/min	0 - 10		0 - 10		0 - 10				0 - 10			
	Siemens	m/min	0 - 7		0 - 7		0 - 7				0 - 7			
Working feeds X	Fagor	m/min	0 - 12		0 - 12		0 - 12				0 - 12			
	Fanuc	m/min	0 - 12		0 - 12		0 - 12				0 - 12			
	Siemens	m/min	0 - 12		0 - 12		0 - 12				0 - 12			
Rapid traverse Z	Fagor	m/min	12.5		12.5		12.5				12.5			
	Fanuc	m/min	12.5		12.5		12.5				12.5			
	Siemens	m/min	9		9		9				9			
Rapid traverse X	Fagor	m/min	15		15		15				15			
	Fanuc	m/min	15		15		15				15			
	Siemens	m/min	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			

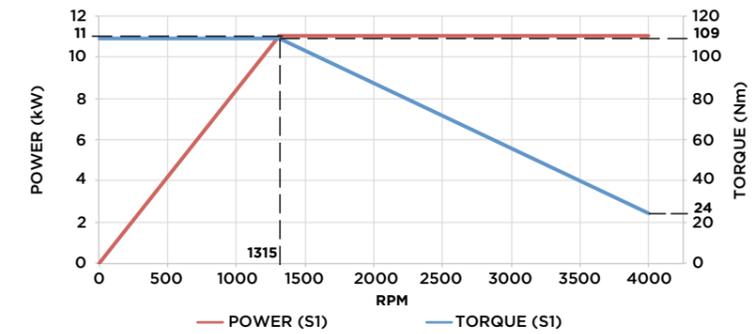
Turret		ST-180		ST-225		ST-285				ST-310			
Stations of standard turret		8				8							
Tool shank	mm	20x20				25x25							
Ø Boring bar	mm	32				40							

Dimensions and Weight		ST-180		ST-225		ST-285				ST-310			
Length	mm	2250	2520	2810	3325	2800	3320	3940	4750	2810	3325	3940	4750
Width	mm	1170		1270		1360				1450			
Height	mm	1820		1890		1890				2110			
Weight	kg	1580	2400	2230	2500	2250	2475	2970	3640	2300	2515	3010	3700

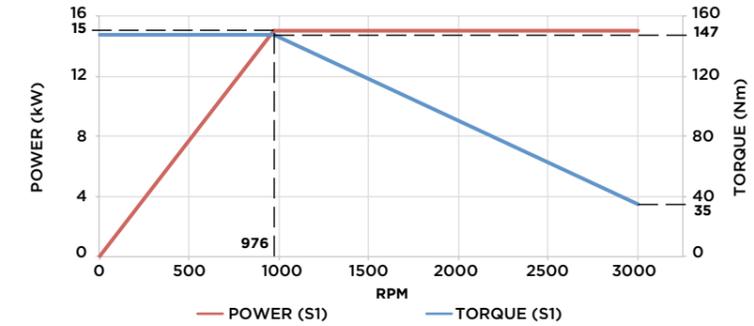
Options		ST-180		ST-225		ST-285				ST-310			
Fixed steady rest Ø	mm	10 - 125		10 - 140		10 - 180				10 - 180			
Large capacity fixed steady rest Ø	mm	110 - 200		140 - 250		180 - 350				180 - 400			
Follow rest Ø	mm	10 - 80		10 - 90		10 - 130				10 - 130			

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			
Height	mm	2020		2090		2130				2310			
Weight	kg	1685	2500	2530	2600	2650	2875	3370	3940	2700	2915	3410	4100

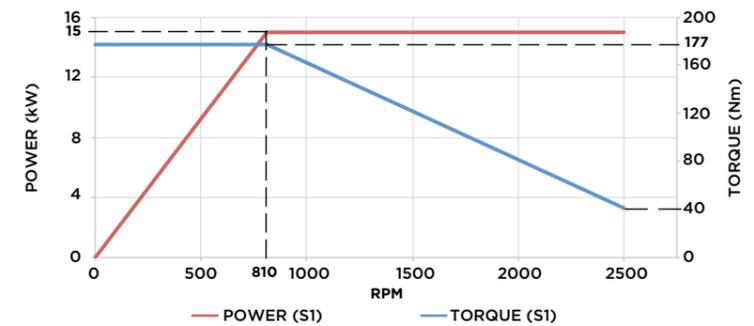
### ST-180/42 > FANUC



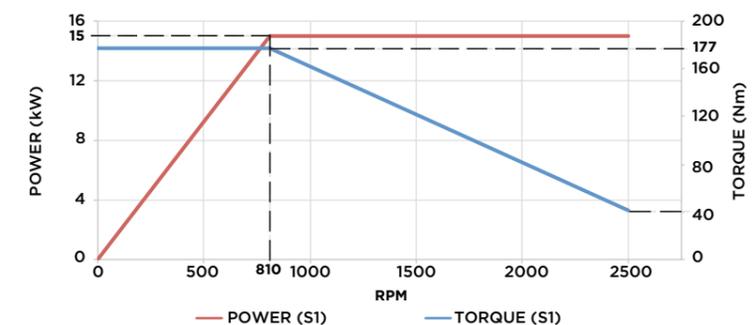
### ST-225/65 > FANUC



### ST-285/80 > FANUC



### ST-310/105 > FANUC



MODELS SE 200 > SE 250 > SE 325

## User-friendly & intuitive CNC lathes.

The SE series combines the working capacity of the conventional lathe with the advantages of the CNC. The SE machines are easy to use, ideal for the realization of short series, prototyping or educational centers, thanks to Siemens or Fagor controls that allow programming in both ISO and conversational language.

The CNC lathes of the SE series are precise, robust, and are also characterized by their high cutting capacity thanks to the head with electronic speed variator and the high torque supplied by the gearbox with three speed ranges.

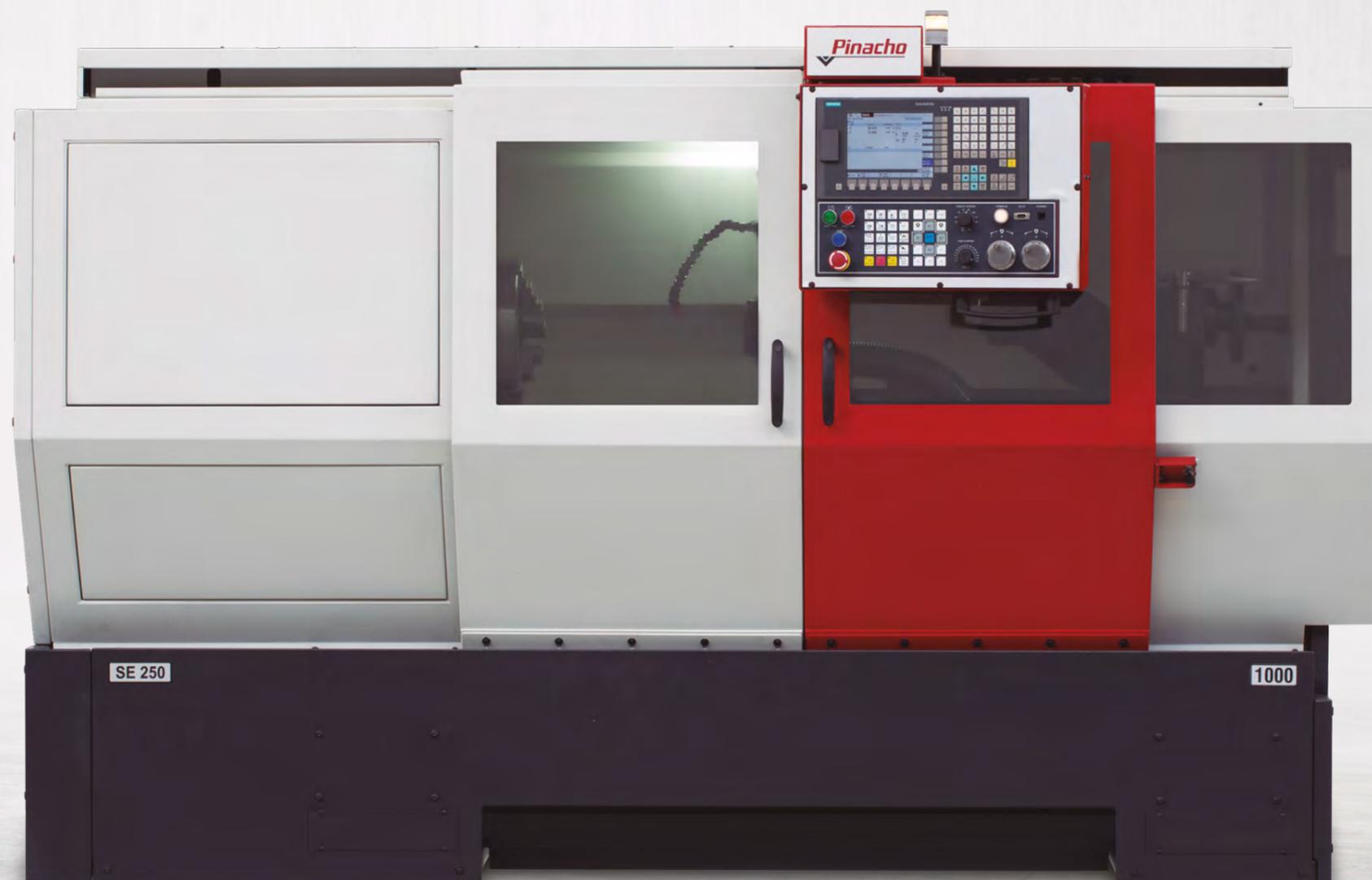
### STANDARD EQUIPMENT

- Siemens 808D Control
- Linear and solid path graphs
- Electronic handwheel for X and Z axes
- Headstock with electronic speed variator 3 ranges
- Reducing bush of main shaft and dead center
- Dead center for tailstock
- Manual quick-change toolpost
- Automatic guide lubrication system
- Refrigeration equipment
- Complete guarding enclosure
- Cast iron pedestals
- Precision levelers
- Working light
- Instruction manual
- Verification standard DIN 8605
- CE Standard

### OPTIONAL EXTRAS

- Control Fagor 8037T, Fagor 8055i or Fagor 8058
- 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
- Multifix quick-change toolpost
- 4 and 8 position automatic turret
- Live center
- Chip conveyor
- Electric transformer
- Higher pressure cooling system\*
- Electric panel refrigeration
- Anti-vibration kit
- Remote jog unit\*
- Tool presetter

Note: \* Not available with Fagor control 8037



## TECHNICAL DATA SHEET TORQUE AND POWER CURVES

		SE-200		SE-250		SE-325			
<b>Working capacity</b>									
Center distance	mm / in	750 / 30	1000 / 40	1000 / 40	1500 / 60	1000 / 40	1500 / 60	2000 / 80	3000 / 120
Bed width	mm / in	250 / 10		300 / 12		350 / 14			
Centre height	mm / in	200 / 8		250 / 10		325 / 13			
Ø max. swing over bed	mm / in	400 / 16		500 / 20		650 / 26			
Ø max. swing over carriage	mm / in	380 / 15		450 / 17 1/2		590 / 23			
Ø max. over cross slide	mm / in	235 / 9		300 / 11 3/4		440 / 22			
Cross slide travel	mm / in	160 / 6 1/4		245 / 9 1/2		300 / 11 3/4			
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

		SE-200		SE-250		SE-325			
<b>Headstock</b>									
Main motor power	kW	4		5.5		7.5			
Headstock main spindle bore Valid for all centre distances	mm / in	42 / 1 1/2		58 / 2 1/4	105 / 4	80 / 3	105 / 4	155 / 6	
Main spindle nose	ASA / CAM-LOCK	A2-5 / 5		A2-6 / 6	A2-8 / 8	A2-8 / 8		A2-11	
Main spindle nose taper	MT	4		6	5	5			
Speed ranges	Range I	r.p.m.	40 - 280	40 - 275	85 - 200	30 - 200	80 - 200	50 - 120	
	Range II	r.p.m.	280 - 815	275 - 760	200 - 465	200 - 550	200 - 465	120 - 290	
	Range III	r.p.m.	815 - 2300	760 - 2080	465 - 1250	550 - 1500	465 - 1250	290 - 800	

		SE-200		SE-250		SE-325			
<b>X-axis, Z-axis</b>									
Working feeds Z	Siemens	m/min			0 - 7				
	Fagor	m/min			0 - 10				
Working feeds X	Siemens	m/min			0 - 8.5				
	Fagor	m/min			0 - 12				
Rapid traverse Z	Siemens	m/min			9				
	Fagor	m/min			12.5				
Rapid traverse X	Siemens	m/min			10				
	Fagor	m/min			15				
Z - Ball screw, Ø/pitch	mm			40/10					
X - Ball screw, Ø/pitch	mm			20/5					

		SE-200		SE-250		SE-325			
<b>Tailstock</b>									
Tailstock barrel Ø	mm / in	58 / 2 1/4		68 / 2 1/2		95 / 3 3/4			
Tailstock barrel travel	mm / in	180 / 7		200 / 7 3/4		220 / 8 1/2			
Tailstock Morse taper	MT	4		4		5			

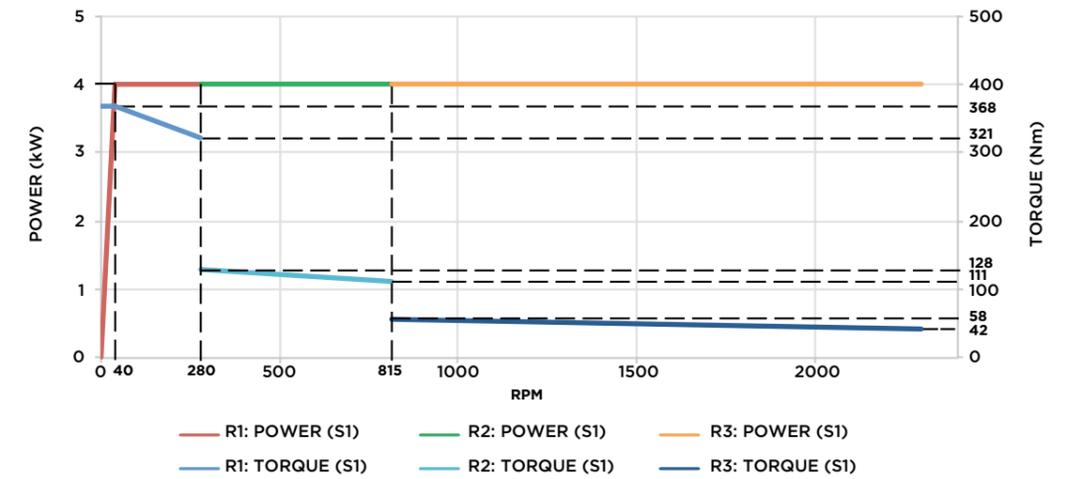
		SE-200		SE-250		SE-325			
<b>Turret</b>									
Manual turret									
Tool shank	mm	20x20				25x25			
Ø Boring bar	mm	32				40			

		SE-200		SE-250		SE-325			
<b>Dimensions and Weight</b>									
Length	mm	2250	2520	2810	3350	2810	3325	3940	4750
Width	mm	1170		1270		1380		1450	
Height	mm	1730		1890		1910		1875	
Weight	kg	1050	1300	2200	2550	1850	2200	2960	3200

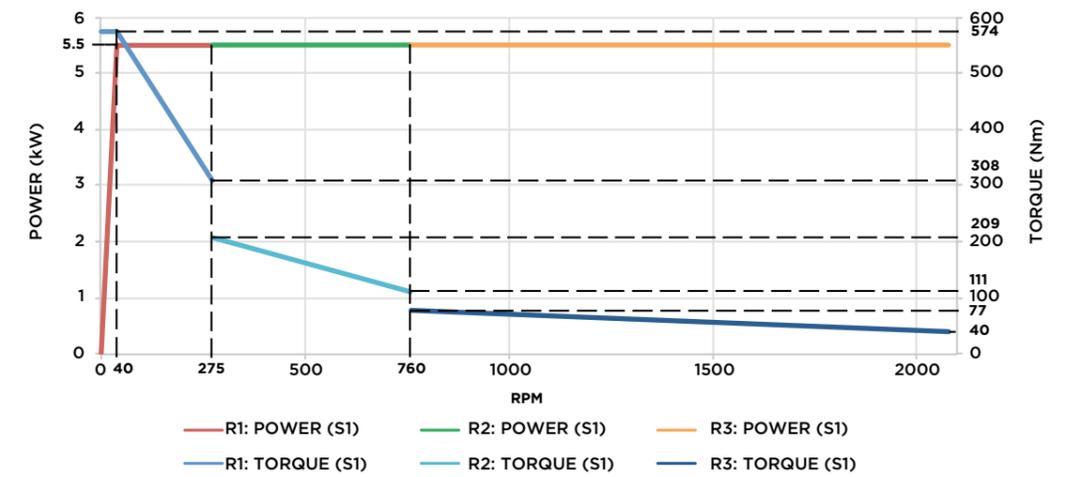
		SE-200		SE-250		SE-325			
<b>Options</b>									
Fixed steady rest Ø	mm	10 - 125		10 - 140		10 - 180			
Large capacity fixed steady rest Ø	mm	110 - 200		140 - 300		180 - 400			
Follow rest Ø	mm	10 - 80		10 - 90		10 - 140			

		SE-200		SE-250		SE-325			
<b>Dimensions and weight with packaging</b>									
Length	mm	2450	2720	3010	3550	3010	3525	4140	4950
Width	mm	1270		1370		1480		1550	
Height	mm	1930		2090		2110		2075	
Weight	kg	1350	1600	2450	2750	2250	2600	3100	3600

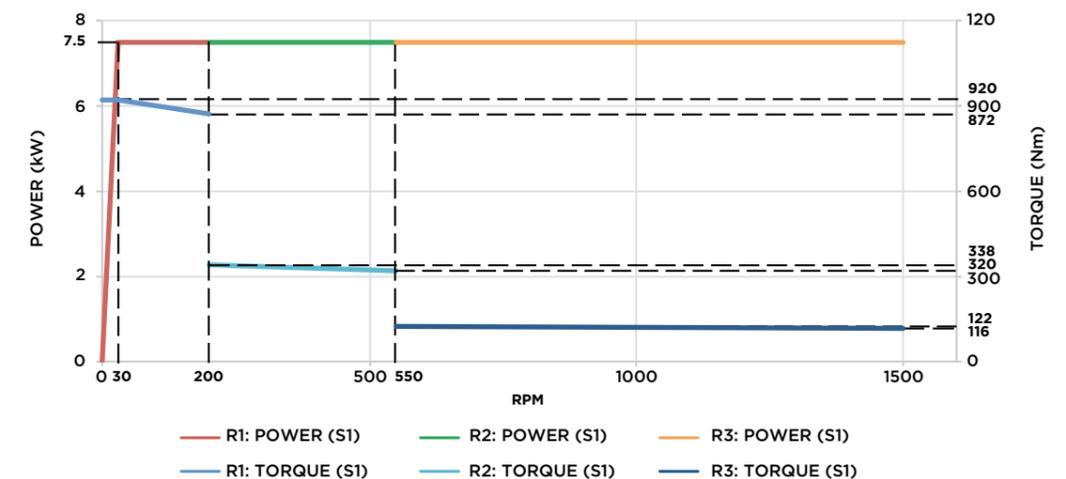
### SE-200/42



### SE-250/58



### SE-325/80



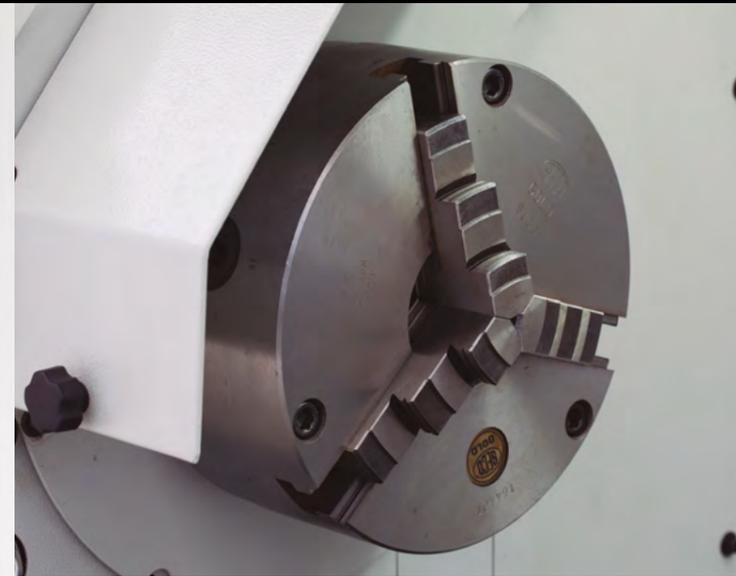


MODELS ML 200 > ML 250 > ML 325

## New range of manual lathes with variable speed headstock.

The new range of ML lathes, equipped with an electronic speed variator, allows the necessary cutting speed to be selected at all times, achieving better surface finishes, optimising tool consumption and improving machining performance.

The new ML models stand out for their precision and useful life, being versatile machines for both maintenance and production work.

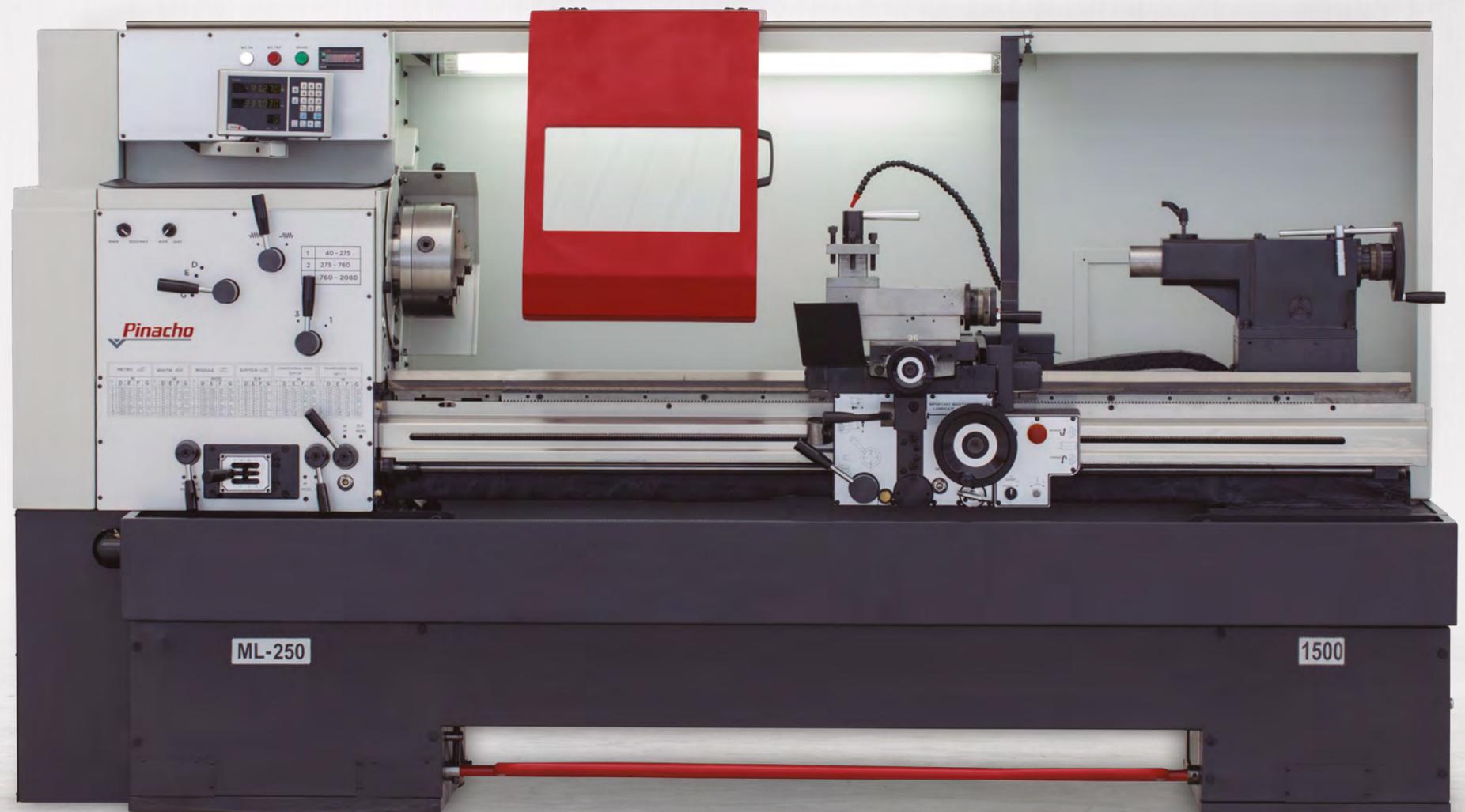


### STANDARD EQUIPMENT

- Headstock with variable speed 3 ranges
- Reducing bush of main shaft and dead center
- Dead center for tailstock
- 4-position toolpost
- Stop brake
- Micro switch chuck protection
- Emergency stop button
- Manual central lubrication
- Refrigeration equipment
- Rear and chuck anti-projection guard
- Sliding front guard
- Rigid protection of the standard spindle
- Cast iron pedestals
- Levelling washers
- Working light
- Instruction manual
- Verification standard DIN 8605
- CE Standard

### OPTIONAL EXTRAS

- Chucks with 3 and 4 jaws
- Rear chuck
- Fixed steady rest
- Large capacity fixed steady rest
- Follow rest
- Quick-change toolpost
- Multifix quick-change toolpost
- Digital read out
- Live center
- Cone copier
- Stopper
- Anti-vibration kit
- Micrometer carriage stop
- Electric transformer
- Rapid movements



## TECHNICAL DATA SHEET TORQUE AND POWER CURVES

		ML-200		ML-250		ML-325			
<b>Working capacity</b>									
Center distance	mm / in	750/30	1000/40	1000/40	1500/60	1000/40	1500/60	2000/80	3000/120
Bed width	mm / in	250 / 10		300 / 12		350 / 14			
Centre height	mm / in	200 / 8		250 / 10		325 / 13			
Ø max. swing over bed	mm / in	400 / 16		500 / 20		650 / 26			
Ø max swing over gap	mm / in	525 / 20		700 / 27 1/2		785 / 30			
Gap length from face plate	mm / in	120 / 5		160 / 6		220 / 9			
Ø max. swing over carriage	mm / in	370 / 15		450 / 18 3/4		595 / 23			
Ø max. swing over cross slide	mm / in	245 / 9 1/2		310 / 12		450 / 22			
Cross slide travel	mm / in	230 / 9		240 / 9 3/4		335 / 13			
Tool post slide travel (chariot)	mm / in	95 / 3 1/4		125 / 5		150 / 5 1/2			
Longitudinal carriage travel	mm / in	605/23	870/34	1000/39	1440/56	1035/40	1435/56	1960/77	2860/112
Dimensions of tool handle	mm	20x20		25x25		25x25			

		ML-200		ML-250		ML-325			
<b>Headstock</b>									
Main motor power	kW	4		5.5		7.5			
Headstock main spindle bore	mm / in	42 / 1 1/2		58/2 1/4	80 / 3	105/4	80 / 3	105 / 4	155 / 6
Main spindle nose Valid for all distances between centres	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		6	5		5		
Speed ranges	Range I	r.p.m.	40 - 280	40 - 275	85 - 200		30 - 200	85 - 200	50 - 120
	Range II	r.p.m.	280 - 815	275 - 760	200 - 465		200 - 550	200 - 465	120 - 290
	Range III	r.p.m.	815 - 2300	760 - 2080	465 - 1250		550 - 1500	465 - 1250	290 - 800

		ML-200		ML-250		ML-325			
<b>X-axis, Z-axis</b>									
Threads and feeds		44		55		44	55		
Longitudinal feeds	mm / rev	0.05 - 0.752		0.05 - 1.5		0.05 - 0.752	0.05 - 1.5		
Cross feeds	mm / rev	0.025 - 0.376		0.025 - 0.752		0.025 - 0.376	0.025 - 0.752		
Metric threads	mm	0.5 - 7.5		0.5 - 15		0.5 - 7.5	0.5 - 15		
Whitworth threads		60 - 4		60 - 2		60 - 4	60 - 2		
Modular threads	mm	0.25 - 3.75		0.25 - 7.5		0.25 - 3.75	0.25 - 7.5		
Pitch diametral threads		120 - 8		120 - 4		120 - 8	120 - 4		
Lead screw rod pitch Ø35	mm / in	6 / 1 1/4		6 / 1 1/4		6 / 1 1/4	6 / 1 1/4		

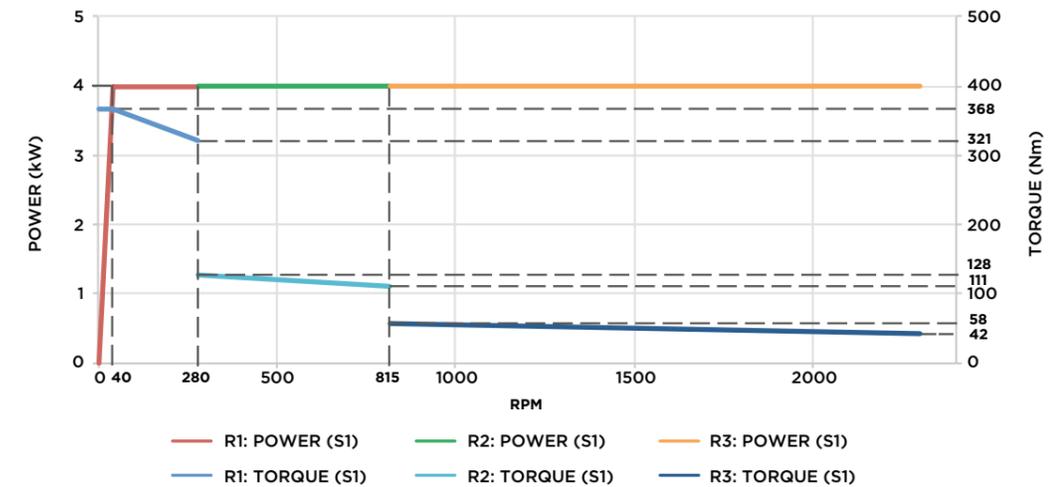
		ML-200		ML-250		ML-325			
<b>Tailstock</b>									
Tailstock barrel Ø	mm / in	58 / 2 1/4		68 / 2 1/2		95 / 3 3/4			
Tailstock barrel travel	mm / in	180 / 7		200 / 7 3/4		220 / 8 1/2			
Tailstock Morse taper	MT	4		4		5			

		ML-200		ML-250		ML-325			
<b>Dimensions and Weight</b>									
Length	mm	2020	2360	2620	3030	2540	3020	3650	4550
Width	mm	930		1000		1140			
Height	mm	1540		1710		1730			
Weight	kg	1250	1500	2035	2170	2160	2400	2980	3450

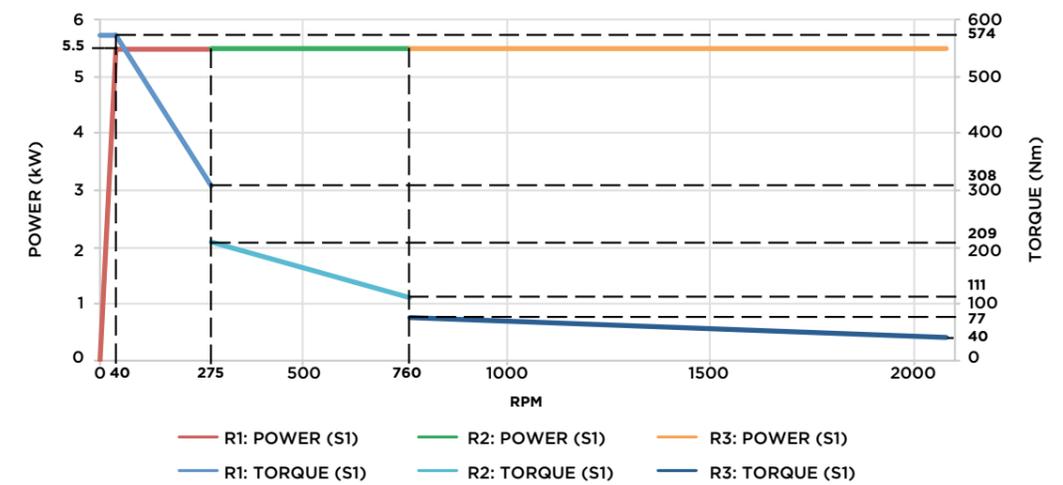
		ML-200		ML-250		ML-325			
<b>Options</b>									
Fixed steady rest Ø	mm	10 - 125		10 - 140		10 - 180			
Large capacity fixed steady rest Ø	mm	110 - 200		140 - 300		180 - 400			
Follow rest Ø	mm	10 - 80		10 - 90		10 - 140			

		ML-200		ML-250		ML-325			
<b>Dimensions and weight with packaging</b>									
Length	mm	2320	2560	2820	3240	2740	3220	3850	4780
Width	mm	1050		1100		1240			
Height	mm	1780		1850		1970			
Weight	kg	1550	1600	2140	2310	2560	2800	3070	3670

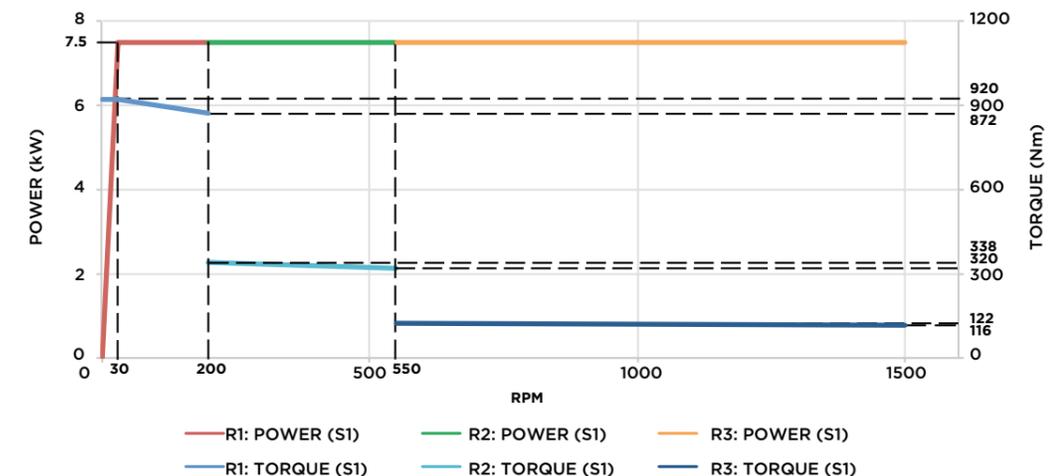
### ML-200/42



### ML-250/58



### ML-325/80



# Metosa Showroom: professionals at the service of professionals

In the METOSA GROUP facilities we have a large Showroom of 2,000 square meters where our clients can go through the evolution of our lathes and see in detail the model that best suits their business needs. It will always be attended by qualified technical personnel who will be able to solve any doubt that could arise.

## 1 Presentation

This multifunctional room allows to carry out acts of presentation of the new models, of the different activities of our commercial brands, etc.

All the models we manufacture are on permanent display, so that who visits the factory can see all the lathes and the differences between them.

## 2 Training

The training courses are taught by our qualified technicians, very experienced teachers who know every corner and performance of the lathe. They are designed for Customers and Distributors of our brand. Additionally, we provide workshops and updating-days for our own staff in order to keep up to date with the technologic novelties

## 3 Product launches

Every time a new model is launched on the market, we make an official presentation in which we bring together Clients, staff, personalities and the sectorial press.

It is another way of being permanently close to the industrial environment in which we move.

