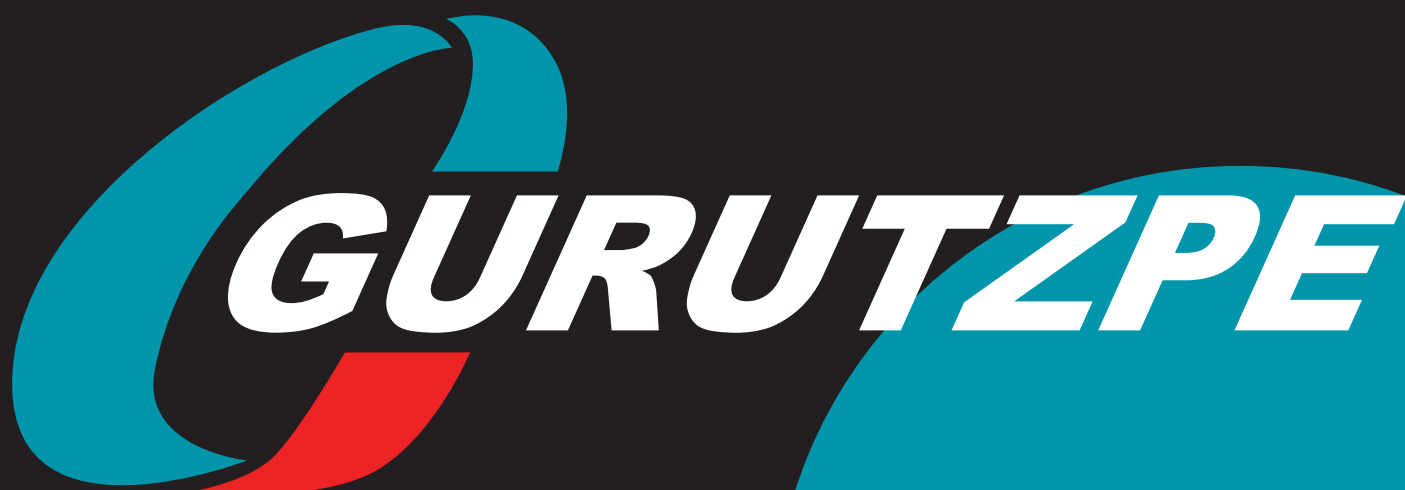


LEADERS IN HEAVY DUTY CNC LATHES



4 GUIDE-WAY LATHES

A-1000 4G

A-1200 4G

A-1600 4G





**“Gurutzpe's prestige is a result of
50 years of achievement.”**



History

The Machine Tool Industry in Gipuzkoa started its development in the 20th century. Since the beginning of our activity in 1957 with the manufacture of the conventional lathe model M1 up to the latest generation CNC lathes, Gurutzpe has delivered more than 5,000 machines all over the world. Through these years, Gurutzpe has adapted to the market and customer demands of each period, which has enabled us to become one of the most prestigious horizontal CNC lathes manufacturers in the world.

Strategic goals

- Maximize the value of the company.
- Satisfy of our customer's requirements by supplying them tailor-made solutions which keep them competitive.
- Consolidate our company as a worldwide reference in the manufacturing of big capacity CNC lathes.
- Contribute actively to the technical, professional and human development of our staff and incorporate all the members of the organization into the management of our company.

Location and installations

Tornos Gurutzpe is located in an area with the strongest industrial tradition in Europe in the heart of the Basque Country. Gurutzpe boasts more than 2,000 m² of facilities aimed at the assembly of large CNC lathes.

Range of products and services

Gurutzpe presents in this catalogue its four guide-way lathes, which include the most up-dated technological advances to satisfy the most demanding machining requests of our customers.

Gurutzpe complements this broad range of products with teaching services, machine commissioning and preventive maintenance, capable answering special requests of our customers.



1- Gurutzpe lathe A-1200 4G (2007)
2- M1 model (1957)



A-1000 4G

“Optimization of machining operations.”

The A-1000 4G model represents the embodiment to the Gurutzpe 4 guide-way principle. Its singularity lies in the great versatility which allows the carriage to pass in front of the tailstock and steady rests because it travels on its own two independent guides. This design enables the internal and external machining processes in one operation, avoiding unproductive time for piece centring and holding. Moreover, its inverted “V” prismatic guiding makes possible an automatic alignment and a rectilinear trajectory of the carriage upon the bed.



A-1000 4G Model

Remark: the model shown includes some special features with respect to the standard equipment list.



Standard equipment

- Stabilized casting and hardened guides.
- High accuracy ground ball-screws.
- Headstock with automatic two-gear change.
- Headstock and carriage lubrication commanded by the CNC.
- Biplast plates in the carriages with low friction coefficient and high toughness.
- Convenient travel of the CNC keyboard with the longitudinal carriage.
- Machine design complying with rigorous European Safety Norms (CE).

- 10.1. 4 position-automatic square turret size 210 mm.
- 20.1. Fagor CNC
- 30.1. Tailstock with a 125 mm quill.
- 30.7. Motorised movement of the tailstock.
- 90.1. Electronic hand-wheel.

Optional equipment

- 10.2. Automatic square turret size 250 mm.
- 10.3. 8 position automatic disk type turret size 250 mm with or without live tools.
- 10.6. 8 position automatic disk type turret size 200 mm.
- 20.2. Siemens and Fanuc CNC.
- 30.2. Tailstock with a 140 mm quill.
- 30.3. Cone Morse no. 6 rotating point.
- 30.4. Tailstock with rotating quill with ISO cone.
- 30.6. Tailstock with hydraulic exit for the quill.
- 30.8. Automatic clamping for the tailstock.
- 30.11. Tailstock positioning commanded by the CNC.
- 40.1. "C" axis with headstock motor or independent motor.
- 50.1. Manual steady rests capacity 30-300 mm.
- 50.2. Manual steady rest capacity 50-500 mm.
- 50.7. Hydraulic steady rest capacity 30-245 mm commanded by the CNC.
- 50.8. Hydraulic steady rest capacity 45-310 mm commanded by the CNC.
- 50.11. 90° automatic rotation for hydraulic steady rests.
- 50.12. "C" type steady rests.
 - 60.1. Boring bar support of 120 mm.
 - 60.2. Boring bar support of 160 mm.
- 70.1. ISO 40 milling headstock with two ranges.
- 70.2. ISO 40 milling headstock with "Y" axe ± 40 mm.
- 70.5. Burnishing tool for turret clamping.
- 80.1. Manual chucks.
- 80.2. Automatic chucks: hydraulic and pneumatic.
- 90.2. Chip conveyor.
- 90.3. Piece measuring probe.
- 90.4. Tool wear probe.
- 90.5. Teleservice.
- 90.6. Air conditioning system in the electric cabinet.
- 90.8. Double front door.
- 90.9. Second longitudinal carriage for turning, milling and boring operations.
- 90.10. Special coolant equipment with motor driven of high pressure and flow.
- 90.11. Digital scales in "X" and "Z" axis.
- 90.12. Oil skimmer.

A-1000 4G



Detail of the access to the motorized turret for the interior milling and drilling process.

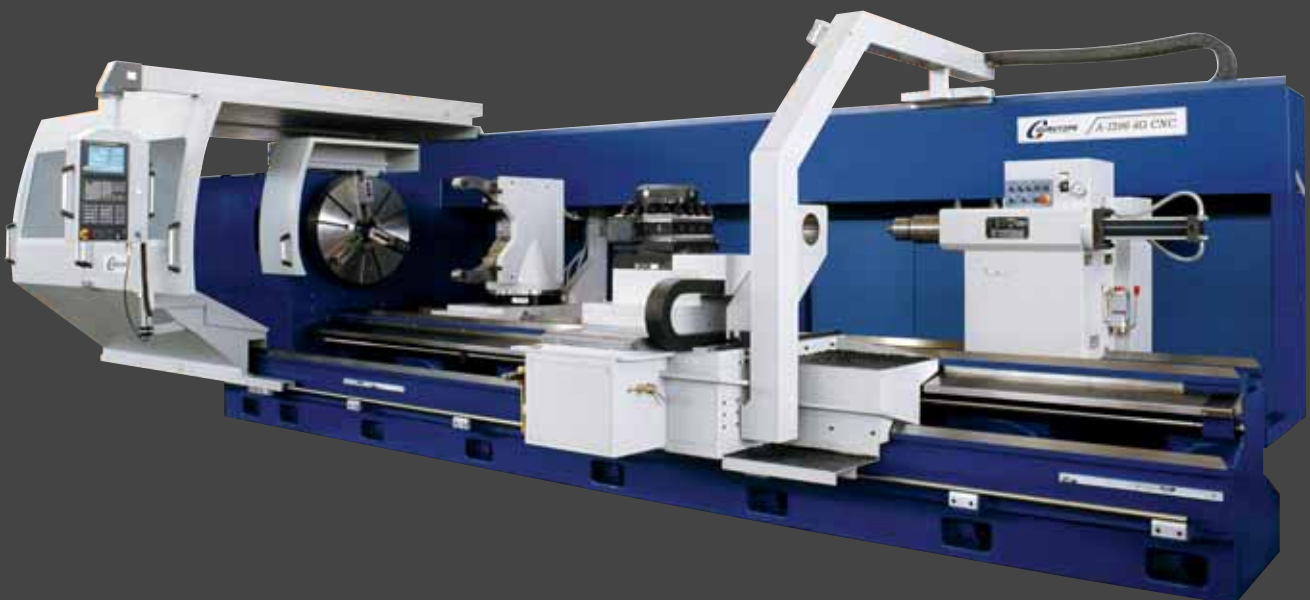


Detail of piece machining in both sides of the hydraulic steady rest.

A-1200 4G

“The beginning of long piece machining.”

The A-1200 4G model allows the machining of pieces up to 12 meters. The longitudinal feed with double pinion-rack system is provided for lathes of more than 4 meters long. This model comprises all the A-1000 4G characteristics plus a 970 mm width bed together with a bigger carriage and tailstock.



A-1200 4G Model

Remark: the model shown includes some special features with respect to the standard equipment list.



Standard equipment

- Stabilized casting and hardened guides.
- High accuracy ground ball-screws.
- Headstock with automatic two-gear change.
- Headstock and carriage lubrication commanded by the CNC.
- Biplast plates in the carriages with low friction coefficient and high toughness.
- Convenient travel of CNC keyboard with the longitudinal carriage.
- Machine design complying with the rigorous European Safety Norms (CE).

- 10.1. 4-position automatic square turret size 210 mm.
- 20.1. Fagor CNC.
- 30.2. Tailstock with 140 mm quill.
- 30.7. Motorised movement of the tailstock.
- 90.1. Electronic hand-wheel.

Optional equipment

- 10.2. Automatic square turret size 250 mm.
- 10.3. 8 position automatic disk type turret size 250 mm with or without live tools.
- 10.6. 8 position automatic disk type turret size 200 mm.
- 20.2. Siemens and Fanuc CNC.
- 30.3. Cone Morse no. 6 rotating point.
- 30.4. Tailstock with rotating quill with ISO cone.
- 30.5. Tailstock with quill of diameter 180 mm with adaptation for the rotating point cone Morse 6.
- 30.6. Tailstock with hydraulic exit for the quill.
- 30.8. Automatic clamping of the tailstock.
- 30.11. Tailstock positioning commanded by the CNC.
- 40.1. "C" axis with headstock motor or independent motor.
- 40.2. "Y" axis built into the carriage.
- 50.2. Manual steady rests capacity 50-500 mm.
- 50.5. Manual steady rest capacity 500-800 mm (without passage of the carriage).
- 50.8. Hydraulic steady rest capacity 85-350 mm commanded by the CNC.
- 50.10. Steady rest with in-built chuck.
- 50.11. 90° automatic rotation for hydraulic steady rests.
- 50.12. "C" type steady rests.
- 50.13. Twin hydraulic steady rests.
- 60.1. Boring bar support of 120 mm.
- 60.2. Boring bar support of 160 mm.
- 70.1. ISO 40 milling headstock with two ranges.
- 70.2. ISO 40 milling headstock with "Y" axis ± 40 mm.
- 70.5. Burnishing tool for clamping turret.
- 80.1. Manual chucks.
- 80.2. Automatic chucks: hydraulic or pneumatic.
- 90.2. Chip conveyor.
- 90.3. Piece measuring probe.
- 90.4. Tool wear measuring probe.
- 90.5. Teleservice.
- 90.6. Air conditioning system in the electric cabinet.
- 90.7. Headstock with big bores (up to 260 mm).
- 90.8. Double front door.
- 90.9. Second longitudinal carriage for turning, milling and boring operations.
- 90.10. Special coolant equipments with motor driven pumps of high pressure and flow.
- 90.11. Digital scales in the "X" and "Z" axis.
- 90.12. Oil skimmer.

A-1200 4G



Detail of motorized turret, hydraulic steady rests and second carriage.



Detail of the 90° automatic rotation in a hydraulic steady rest in order to release all the turning area in the carriage.

A-1600 4G

“Maximum versatility for machining big length, dimension and weight pieces.”

The A-1600 4G represents the best option in the market for machining pieces up to 15 meters, 15 tons and diameters up to 1,300 mm thanks to its inverted “V” prismatic guides and its 1,300 mm width bed. This model can be equipped with headstock with big bores up to 550 mm.



A-1600 4G Model

Remark: the model shown includes some special features with respect to the standard equipment list.



Standard equipment

- Stabilized casting and hardened guides.
- High accuracy ground ball-screws.
- Headstock with automatic two-gear change.
- Headstock and carriage lubrication commanded by the CNC.
- Hard-tempered and ground helicoid gears in the headstock.
- Biplast plates in the carriages with low friction coefficient and high toughness.
- Convenient travel of CNC keyboard with the longitudinal carriage.
- Machine design complying with the rigorous European Safety Norms (CE).

- 10.2. Automatic square turret size 250 mm.
- 20.1. Fagor CNC.
- 30.5. Tailstock with quill of diameter 180 mm with Morse 6 cone.
- 30.7. Motorised movement for the tailstock.
- 90.1. Electronic hand-wheel.

Optional equipment

- 10.3. 8 position automatic disk type turret size 250 mm.
- 10.4. Automatic square turret size 320 mm.
- 10.5. 8 position automatic disk-type turret size 320 mm with or without live tools.
- 20.2. Siemens and Fanuc CNC.
- 30.4. Tailstock with rotating quill with ISO cone.
- 30.6. Tailstock with hydraulic exit for the quill.
- 30.8. Automatic clamping of the tailstock.
- 30.9. Tailstock with rotating quill of diameter 220 mm with pressure regulator and expansion compensator device.
- 30.10. Rotating point cone Metric 80.
- 30.11. Tailstock positioning commanded by the CNC.
- 40.1. "C" axis with headstock motor or independent motor.
- 40.2. "Y" axis built in the carriage.
- 50.4. Manual steady rests capacity 100-600 mm.
- 50.6. Manual steady rest capacity 500-1,000 mm (without passage of the carriage).
- 50.9. Hydraulic steady rest capacity 125-460 mm commanded by the CNC.
- 50.10. Steady rest with in-built chuck.
- 50.11. 90° automatic rotation for hydraulic steady rests.
- 50.12. "C" type steady rest.
- 50.13. Twin hydraulic steady rests.
- 60.2. Boring bar support of 160 mm.
- 70.1. ISO 40 milling headstock with two ranges.
- 70.2. ISO 40 milling headstock with "Y" axis ± 40 mm.
- 70.3. ISO 50 milling headstock with two ranges.
- 70.5. Burnishing tool for turret clamping.
- 80.1. Manual chucks.
- 80.2. Automatic chucks: hydraulic or pneumatic.
- 90.2. Chip conveyor.
- 90.3. Piece measuring probe.
- 90.4. Tool wear measuring probe.
- 90.5. Teleservice.
- 90.6. Air conditioning system for the electric cabinet.
- 90.7. Headstock with big bores (up to 550 mm).
- 90.8. Double front door.
- 90.9. Second longitudinal carriage for turning, milling and boring operations.
- 90.10. Special coolant equipments with motor driven pumps of high pressure and flow.
- 90.11. Digital scales in the "X" and "Z" axis.
- 90.12. Oil skimmer.

A-1600 4G



Detail of the boring bar support of big capacity in the second carriage.



Twin hydraulic steady rests.

Sectors of activity

SECTORS/PRODUCTS	2G A SERIES	4G A SERIES	4G B SERIES
NAVAL: Ships shafts		●	●
WIND ENERGY: Wind-driven generator shafts	●	●	●
PAPER INDUSTRY: Rolls			●
IRON AND STEEL INDUSTRY: Mill rolls and steel suppliers	●	●	●
TRAIN INDUSTRY: Shafts and wheels	●	●	
BORING/DRILLING: Tubes		●	
OIL INDUSTRY: Tubes	●		
HYDRAULIC: Cylinders		●	
HOISTS/CRANES: Drums	●		
TURBINES/GENERATORS: Shafts		●	●
MOTORS: Casing and shafts	●	●	
AERONAUTICS: Landing shafts		●	
AGRICULTURAL: Spiral drums		●	
VALVES	●		

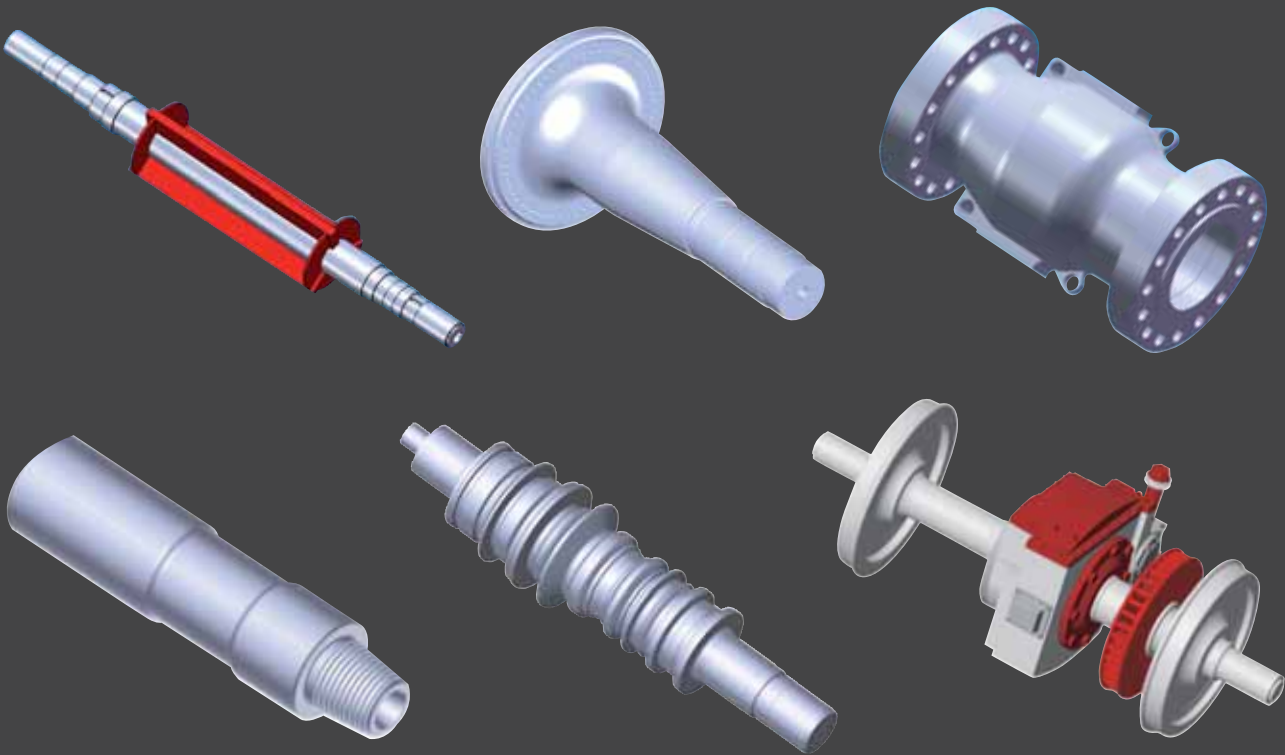




Guidance for models according to the weight and diameter of the piece to be machined

In this chart each model is segmented according to the size and length of the piece to be machined (diameter over carriage).

<div>Ø[mm]</div> <div>WEIGHT [kg]</div>	700	950	1.300	1.700	2.200
4.000	A 1000	A 1000 4G			
6.000		A 1200	A 1200 4G		
10.000			A 1600	A 1600 4G	
15.000				A 2000 4G	
20.000					
25.000					B 2200
35.000					



Summary of the standard and optional features

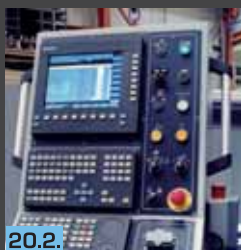
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|--|---|--|
| 10.1. 4-position automatic square turrets. | 50.6. Fixed manual steady rests 500-1000 (without passage in the carriage). | 70.5. Burnishing tool for clamping turret. |
| 10.3. 8/12 automatic disk type turret up to size 320 mm with or without live tools. | 50.7. Hydraulic steady rest commanded by the CNC. | 80.1. Manual chucks. |
| 20.2. Siemens and Fanuc CNC's. | 50.10. Steady rest with in-built chuck. | 80.2. Automatic chucks: hydraulic and pneumatic. |
| 30.4. Tailstock with rotating quill with ISO cone. | 50.11. 90° automatic rotation for the hydraulic steady rest. | 90.3. Piece measuring probe. |
| 30.6. Tailstock with hydraulic exit for the quill. | 50.12. "C" type steady rest. | 90.4. Tool wear measuring probe. |
| 30.9. Tailstock with rotating motorised quill of diameter 220 mm with pressure regulator and expansion compensator device. | 50.13. Twin hydraulic steady rests. | 90.7. Headstock with big spindle bore. |
| 40.2. "Y" axis built into the carriage. | 60.2. Boring bar supports up to 160 mm. | 90.8. Double front door. |
| | 70.1. ISO 40 and ISO 50 milling headstock. | 90.9. Second longitudinal carriage for turning, milling and boring operations. |
| | 70.2. ISO 40 milling headstock with "Y" axis ± 40 mm. | 90.12. Oil skimmer. |



10.1.



10.3.



20.2.



30.4.



30.6.



30.9.



40.2.



50.6.



50.7.



50.10.



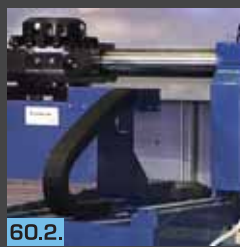
50.11.



50.12.



50.13.



60.2.



70.1.



70.2.



70.5.



80.1.



80.2.



90.3.



90.4.



90.7.



90.8.



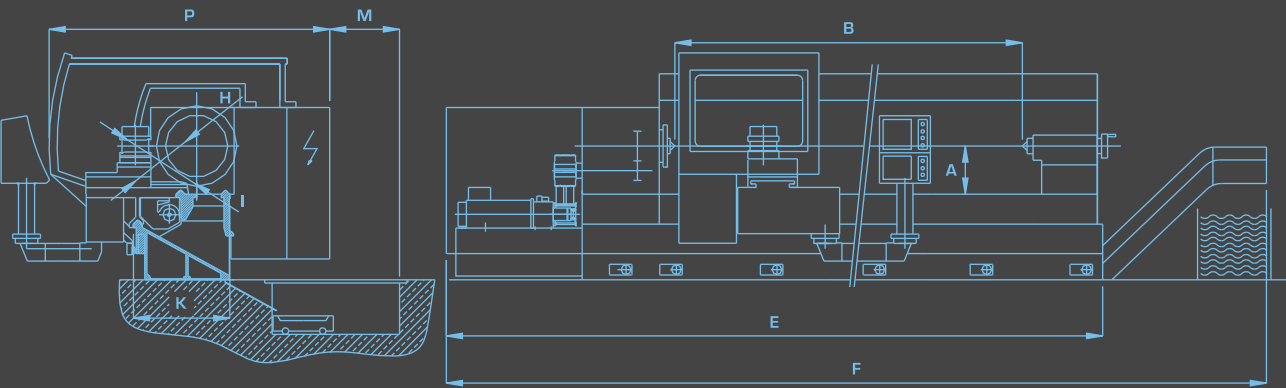
90.9.



90.12.



Technical chart

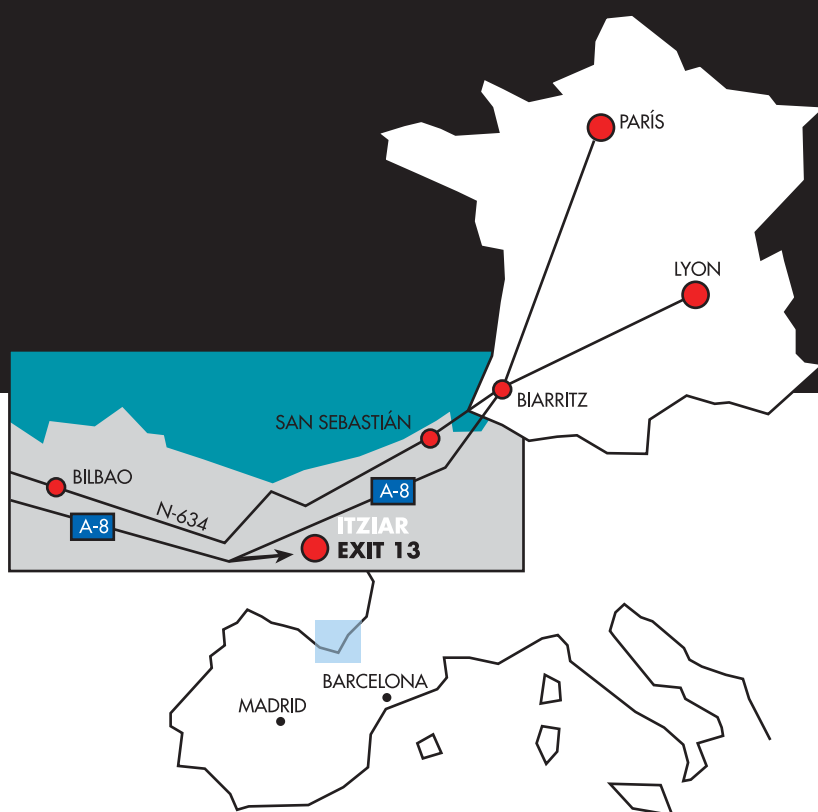


Main Characteristics							
		A-1000 AG		A-1200 4G		A-1600 4G	
Centre height	A	450		600		700	800
Swing over carriage	H	650		950		1100	1300
Swing over bed	I	870		1170		1350	1550
Cross slide stroke	mm	530		530		725	
Bed width	K	970		970		1285	
Allowable weight without steadies	kg	4000	6000	6000	10000	10000	15000
Main spindle bore	mm	150		150*		110*	
Diameter of the front bearing	mm	200		200*		203*	
Main spindle nose	-	DIN 55026 Type A11		DIN 55026 Type A11*		DIN 55026 Type A15*	
Diameter of the tailstock´s quill	mm	125	140	140	180	180	220
Headstock power [S1/S6]	kw	22/28	28/34	28/34	39/48	39/48	51/65
Headstock torque [S1/S6]	Nm	2850/3630	3630/4420	3630/4420	9300/11450	11160/13740	14600/18600
Speed range	rpm.	0-1600		0-1600	0-1000	0-800	
Length for 3 meter machine	mm	(E) 6620	(F) 8220	(E) 6620	(F) 8220	(E) 7030	(F) 8630
Machine width	mm	(P) 2825	(P+M) 3625	(P) 2825	(P+M) 3625	(P) 3050	(P+M) 3850

*Bigger upon request.

The manufacturer has the right to alter some of the characteristics described in order to improve the machine design.

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