GURUTZPE

2 GUIDE-WAY LATHES A-1000 A-1200 A-1600









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 the of most prestigious horizontal CNC lathes manufacturers in the world.

Strategic goals

- · Maximize the value of the company.
- · Satisfy our customers' requirements by supplying 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.

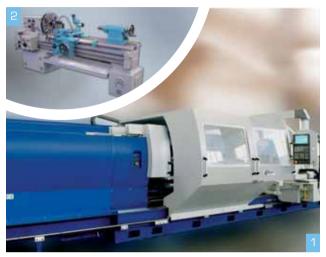
Location and installations

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

Range of products and services

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

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



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





A-1000

"Designed to cover the general needs of machining. It has all the characteristics of Gurutzpe: great rigidity and prismatic guides in the bed."

The A-1000 model stands out because of its prismatic guides in inverted "V" which allow an automatic readjustment and a rectilinear trajectory of the carriage over the bed.

Besides the rigidity associated with the Gurutzpe lathes, the bed has a third support guide for the carriage which allows a more stable and accurate turning.

Moreover, its design permits the operator an easy access to the working area.





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.
- Displacement of the tailstock with the longitudinal carriage.
- · In-built CNC in the door.
- · Machine design complying with the European Security Norms (CE).

For 450 mm and 500 mm height.

- 10.1. A 4 position automatic square turret size 210 mm.
- 20.1. Fagor CNC.
- 90.1. Electronic hand-wheel.

For 450 mm height.

30.1. Tailstock with a quill of diameter 125 mm.

For 500 mm height.

30.2. Tailstock with a quill of diameter 140 mm.

Optional equipment

- 10.2. A 4-position automatic square turret size 250 mm (only available for model with 500 mm height).
- 20.2. Siemens and Fanuc CNC
- 30.3. Cone Morse no. 6 rotating point
- 30.4. Tailstock with rotating quill with ISO cone.
- 50.1. Manual steady rest capacity 30-300 mm
- 50.2. Manual steady rest capacity 50-500 mm.
- 60.1. Boring bar support of 120 mm.
- 80.1. Manual chucks.
- 80.2. Automatic chucks: hydraulic and pneumatic.
- 90.2. Chip conveyor.
- 90.3. Probe for piece measurement.
- 90.4. Probe for tool wear measurement.
- 90.5. Teleservice.
- 90.6. Air conditioning system in the electric cabinet.



Detail of an in-built CNC in the door.



Detail of the bed with the third-guide support for the carriage and prismatic guides in inverted "V".

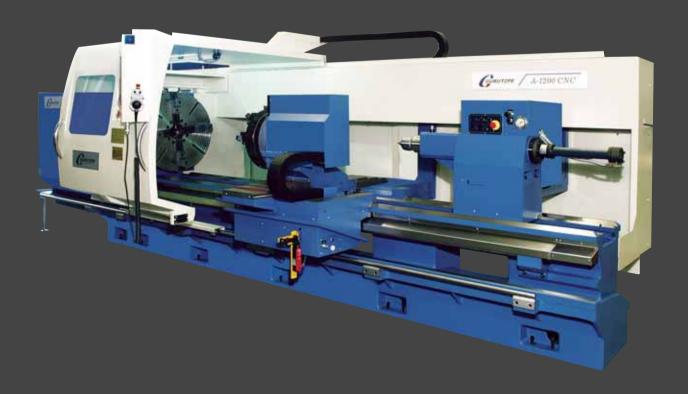


A-1200

"The door to new options in machining."

The A-1200 model combines the same characteristics of the A-1000 model with an increase in the width of the prismatic guides up to 80 mm and a standard static ball-screw in the longitudinal axis. This design enables an increase in the stability of the carriage providing the necessary conditions for an optimun machining.

The A-1200 model can also include optional equipment which allows the machine to perform a great variety of operations (milling, drilling, etc.).





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.
- 10.1. A 4 position-automatic square turret size 210 mm.
- 20.1. Fagor CNC.
- 30,2. Tailstock with quill of diameter 140 mm
- 90.1. Electronic hand-wheel.

- · Displacement of the tailstock with the longitudinal carriage.
- · Displacement of the CNC keyboard with the longitudinal carriage.
- · Machine design complying with the European Security Norms (CE).

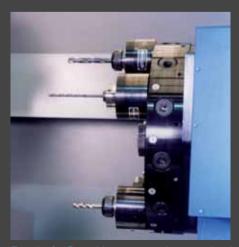
A-1200

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.
- 30.7. Tailstock with motorised movement.
- 30.8. Automatic clamping of the tailstock.
- 40.1. "C" axis with headstock motor or independent motor.
- 50.2. Manual steady rest capacity 50-500 mm.
- 50.3. Manual steady rest capacity 500-900 mm.
- 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 of ±40 mm.
- 70.5. Burnishing tools for turret clamping.
- 80.1. Manual chucks.
- 80.2. Automatic chucks: hydraulic or pneumatic
- 90.2. Chip conveyor.
- 90.3. Probe for piece measurement.
- 90.4. Probe for tool wear measurement.
- 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.
- 90.10. Special coolant equipment with motor driven of high pressure and flow.
- 90.11. Digital scales in "X" and "Z" axis.
- 90.12. Oil skimmer.



Detail of the static ball-screw with rotating nut.



Detail of a 8-position automatic motorised turret.

A-1600

"Maximum machining features for big dimension pieces."

The A-1600 model offers the features and options of the A-1200 Gurutzpe lathe with prismatic guides of 120 mm and a bed of 1,100 mm width which offers a significant jump in the machining capacity of the machine.

Moreover, this model allows to fit headstocks with big bore diameters up to 550 mm specially designed for machining tubes.





Standard equipment

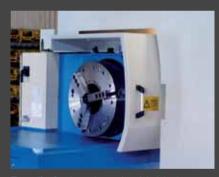
- · Stabilized casting and hardened guides.
- · High accuracy ground ball-screws.
- · Headstock with automatic two-gear change.
- · Headstock and carriage lubrication commanded by the CNC.
- · Hard-tempered and ground helicoid gears in the headstock.
- 10.2. Automatic square turret size 250 mm.
- 20.1. Fagor CNC.
- **30.5.** Tailstock with quill of diameter 180 mm with adaptation for the rotating point cone Morse 6.
- 30.7. Motorised movement for the tailstock.
- 90.1. Electronic hand-wheel.

- · Biplast plates in the carriages with low friction coefficient and high toughness.
- · Displacement of the CNC keyboard with the longitudinal carriage.
- · Machine design complying with the European Security Norms (CE).

A-1600

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 dilation balancer device.
- 30.10. Rotating point cone Metric 80.
- 40.1. "C" axis with headstock motor or independent motor.
- 40.2. "Y" axis in-built in the carriage.
- 50.3. Manual steady rest capacity 500-900 mm.
- 50.4. Manual steady rest capacity 100-600 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 of ±40 mm.
- 70.3. ISO 50 milling headstock with two ranges.
- 70.5. Burnishing tools for turret clamping.
- 80.1. Manual chucks.
- 80.2. Automatic chucks: hydraulic or pneumatic.
- 90.2. Chip conveyor.
- 90.3. Probe for piece measurement.
- 90.4. Probe for tool wear measurement.
- 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.
- 90.10. Special coolant equipments with motor driven of high pressure and flow.
- 90.11. Digital scales in "X" and "Z" axis.
- 90.12. Oil skimmer.



Detail of a headstock with big bore and automatic rear chuck.



Detail of the machining process of a large piece with boring and drilling operations.

Sectors of activity

SECTORS/PRODUCTS	2G A SERIES	4G A SERIES	4G B SERIES
NAVAL: Ships shafts		•	•
WIND ENERGY: Wind-driven generator shafe	ts •	•	•
PAPER INDUSTRY: Rolls			•
IRON AND STEEL INDUSTRY: Mill rolls and steel supp	oliers •	•	•
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	•		











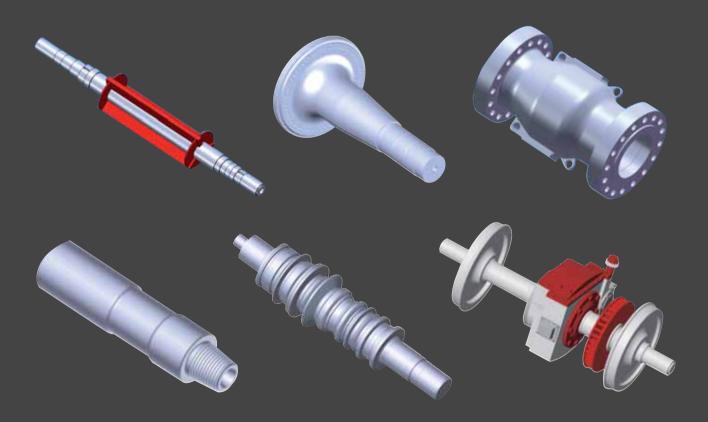




Guidance for models according to the weight and diameter of the piece to be machined

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

Ø(mm) WEIGHT (kg)	700		950		1.300		1.700	2.200
4.000	1.4000							
6.000	A 1000	A 1000 4G	A 4000	A 1200 4G				
10,000			A 1200	A 1200 46	4 4000	A 4000 40		
15.000					A 1600	A 1600 4G	A 0000 40	
20.000							A 2000 4G	
25.000								D 0000
35.000								B 2200



Summary of the standard and optional features

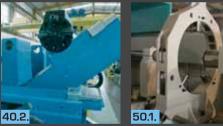
- 10.1. 4-position automatic square turrets.
- 10.3. 8/12 position automatic disk type turret up to size 320 mm with or without live tools.
- 20.2. Siemens and Fanuc CNC's.
 - 30. Tailstocks with quill of diameter up
- 30.4. Tailstock with rotating quill with ISO
- 30.6. Tailstock with hydraulic exit for the
- 30.9. Tailstock with rotating motorised
- 40.2. "Y" axis in-built in the carriage.
- 60.1. Boring bar supports up to 160 mm.
- 70.1. ISO 40 and ISO 50 milling headstock.
- 70.2. ISO 40 milling headstock with "Y" axis ±40 mm,
- 70.5. Burnishing tool for turret clamping.

- 801. Manual chucks.

- 90.2. Chip conveyor.
- 90.3. Probe for piece measurement.
- 90.4. Probe for tool wear measurement.
- 90.7. Headstock with big spindle bore.
- 90.8. Double front door.
- 90.12. Oil skimmer.











30.6.











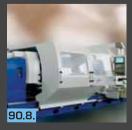
30.9.







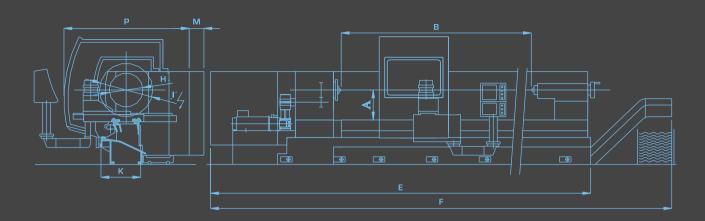








Technical chart

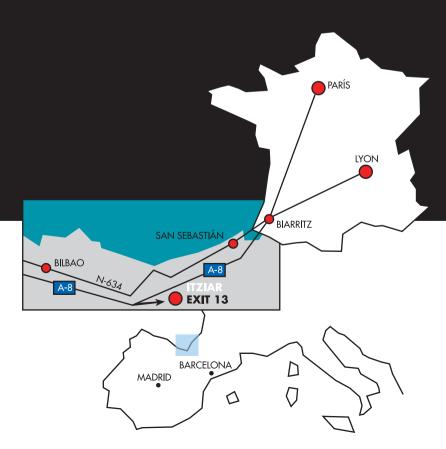


Main Characteristics								
		A-1000 A-1200		A-1600				
Centre height	А	450	500	565	615	735	835	
Swing over carriage	Н	600	700	800	900	1000	1200	
Swing over bed	I	900	1000	1100	1200	1400	1600	
Cross slide stroke	mm	530		630		800		
Bed width	К	640		750		1090		
Allowable weight without steadies	kg	4000/6000		6000/10000		10000/15000		
Main spindle bore	mm	120	150	150*		110*		
Diameter of the front bearing	mm	160	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	r.p.m.	0-1600		0-1600	0-1600 0-1000		0-800	
Length for 3 meter machine	mm	(E) 6055	(F) 7155	(E) 6655	(F) 7755	(E) 7230	(F) 8830	
Machine width	mm	(P) 2400	(P+M) 3000	(P) 2500	(P+M) 3100	(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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