“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 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 m² 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.
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.

For 450 mm and 500 mm height:
10.1. A 4 position - automatic square turret size 210 mm.
20.1. Fagor CNC.
9.1. 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. Steady rests capacity 30-300 mm.
50.2. Steady rest capacity 50-500 mm.
60.1. Boring bar support of 120 mm.
80.2. Automatic chucks: hydraulic and pneumatic.
9.2. Chip conveyor.
9.3. Probe for piece measurement.
9.4. Probe for tool wear measurement.
9.5. Teleservice.
9.6. Air conditioning system in the electric cabinet.
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 optimum machining.

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

Remark: the enclosed model presents some modifications with respect to the standard equipment.
**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.
- Displacement of the CNC keyboard with the longitudinal carriage.
- Machine design complying with the European Security Norms (CE).

10.1. A 4 position - automatic square turret size 210 mm.
10.6. 8 position automatic disk type turret size 200 mm.
20.1. Fagor CNC.
30.2. Tailstock with quill of diameter 140 mm.
9.1. Electronic hand-wheel.

**Optional equipment**

- A 4-position automatic square turret size 250 mm.
- 8 position automatic disk type turret size 250 mm with or without live tools.
- Siemens and Fanuc CNC.
- Cone Morse no. 6 rotating point.
- Tailstock with rotating quill with ISO cone.
- Tailstock with quill of diameter 180 mm with adaptation for the rotating point cone Metric 80.
- Tailstock with hydraulic exit for the quill.
- Tailstock with motorised movement.
- Automatic clamping of the tailstock.
- “C” axis with headstock motor or independent motor.
- Steady rests capacity 50 - 500 mm.
- Steady rest capacity 500 - 900 mm.
- Boring bar support of 120 mm.
- Boring bar support of 180 mm.
- ISO 40 milling headstock.
- Manual chucks.
- Automatic chucks: hydraulic or pneumatic.
- Chip conveyor.
- Probe for piece measurement.
- Probe for tool wear measurement.
- Teleservice.
- Air conditioning system in the electric cabinet.
- Headstock with big bores (up to 280 m).
- Double front door.
- Special coolant equipment with motor driven of high pressure and flow.
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 fitting 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.
- 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).

Optional equipment

- Automatic square turret size 250 mm.
- 8 position automatic disk type turret size 250 mm.
- Fagor CNC.
- Tailstock with quill of diameter 180 mm with adaptation for the cone Metric 80.
- Motorised movement for the tailstock.
- Electronic hand-wheel.
- A 4 - position automatic square turret size 320 mm.
- A disk - type automatic turret size 320 mm with or without live tools.
- Siemens and Fanuc CNC.
- Tailstock with rotating quill with ISO cone.
- Tailstock with hydraulic exit for the quill.
- Automatic clamping of the tailstock.
- Tailstock with rotating quill of diameter 220 mm with pressure regulator and dilation balancer device.
- Rotating point cone Metric 80.
- "C" axis with headstock motor or independent motor.
- "Y" axis in - built in the carriage.
- Steady rests capacity 500-900 mm.
- Steady rests capacity 100-600 mm.
- Boring bar support of 160 mm.
- ISO 40 milling headstock.
- ISO 50 milling headstock.
- Grinding headstock.
- Manual chucks.
- Automatic chucks: hydraulic or pneumatic.
- Chip conveyor.
- Probe for piece measurement.
- Probe for tool wear measurement.
- Teleservice.
- Air conditioning system for the electric cabinet.
- Headstock with big bores (up to 550 mm).
- Double front door.
- Special coolant equipments with motor driven of high pressure and flow.

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

<table>
<thead>
<tr>
<th>SECTORS/PRODUCTS</th>
<th>2G A SERIES</th>
<th>4G A SERIES</th>
<th>4G B SERIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAVAL: Ships shafts</td>
<td>●</td>
<td>●</td>
<td></td>
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<tr>
<td>WIND ENERGY: Wind-driven generator shafts</td>
<td>●</td>
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<td>●</td>
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<tr>
<td>PAPER INDUSTRY: Rolls</td>
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</tr>
<tr>
<td>IRON AND STEEL INDUSTRY: Mill rolls and steel suppliers</td>
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<td>●</td>
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<tr>
<td>TRAIN INDUSTRY: Shafts and wheels</td>
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<tr>
<td>BORING/DRILLING: Tubes</td>
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<td>●</td>
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<tr>
<td>OIL INDUSTRY: Tubes</td>
<td>●</td>
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<tr>
<td>HYDRAULIC: Cylinders</td>
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<tr>
<td>HOISTS/CRANES: Drums</td>
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<td></td>
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<tr>
<td>TURBINES/GENERATORS: Shafts</td>
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<td>●</td>
<td></td>
</tr>
<tr>
<td>MOTORS: Casing and shafts</td>
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<td>AERONAUTICS: Landing shafts</td>
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<tr>
<td>AGRICULTURAL: Spiral drums</td>
<td>●</td>
<td>●</td>
<td></td>
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<tr>
<td>VALVES</td>
<td>●</td>
<td>●</td>
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</table>
Guidance for models according to the weight and swing 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).

<table>
<thead>
<tr>
<th>WEIGHT (kg)</th>
<th>Ø (mm.)</th>
<th>700</th>
<th>900</th>
<th>1200</th>
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</thead>
<tbody>
<tr>
<td>4.000</td>
<td></td>
<td>A-1000 CNC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.000</td>
<td></td>
<td></td>
<td>A-1200 CNC</td>
<td></td>
</tr>
<tr>
<td>10.000</td>
<td></td>
<td></td>
<td></td>
<td>A-1600 CNC</td>
</tr>
<tr>
<td>15.000</td>
<td></td>
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</tbody>
</table>

The Gurutzpe lathes machine pieces targeted to the most relevant industrial sectors.
Summary of the standard and optional features

10. 4-position automatic square turrets.
10.3. 8/12 position automatic disk type turret up to size 320 mm with or without live tools.
20.1. Fagor CNC.
20.2. Siemens and Fanuc CNC’s.
30. Tailstocks with quill of diameter up to 220 mm.
30.4. Tailstock with rotating quill with ISO cone.
30.6. Tailstock with hydraulic exit for the quill.
30.9. Tailstock with rotating motorised quill of diameter 220 mm with pressure regulator and expansion balancer device.
40.2. “Y” axis in-built in the carriage.
50.1. Fixed steady rests.
60. Boring bar supports up to 160 mm.
70. ISO 40 and ISO 50 milling headstock.
80.2. Automatic chucks: hydraulic and pneumatic.
9.1. Electronic hand-wheel.
9.2. Chip conveyor.
9.3. Probe for piece measurement.
9.4. Probe for tool wear measurement.
### Technical chart

![Diagram of machine tool](image)

#### main characteristics

<table>
<thead>
<tr>
<th></th>
<th>A-1000</th>
<th>A-1200</th>
<th>A-1600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre height</td>
<td>A 450</td>
<td>500</td>
<td>565</td>
</tr>
<tr>
<td></td>
<td>550</td>
<td>615</td>
<td>710</td>
</tr>
<tr>
<td>Swing over carriage</td>
<td>H 600</td>
<td>700</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>600</td>
<td>900</td>
<td>1000</td>
</tr>
<tr>
<td>Swing over bed</td>
<td>I 900</td>
<td>1000</td>
<td>1100</td>
</tr>
<tr>
<td></td>
<td>1200</td>
<td></td>
<td>1400</td>
</tr>
<tr>
<td>Bed width</td>
<td>K 650</td>
<td>750</td>
<td>1100</td>
</tr>
<tr>
<td>Allowable weight</td>
<td>Kg. 4000/6000</td>
<td>6000/10000</td>
<td>10000/15000</td>
</tr>
<tr>
<td>without steadies</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Main spindle bore</td>
<td>mm. 120</td>
<td>150</td>
<td>150*</td>
</tr>
<tr>
<td></td>
<td>150*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diameter of the front bearing Ø</td>
<td>mm. 160</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>203</td>
<td>220*</td>
<td></td>
</tr>
<tr>
<td>Diameter of the tailstock’s quill Ø</td>
<td>mm. 125</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>180</td>
<td>180</td>
<td>180</td>
</tr>
<tr>
<td>Headstock power</td>
<td>KW. 18/22</td>
<td>22/28/28/34</td>
<td>28/34</td>
</tr>
<tr>
<td></td>
<td>28/34</td>
<td>39/48</td>
<td>39/48</td>
</tr>
<tr>
<td>Headstock torque</td>
<td>Nm. 2320/2850</td>
<td>3630/4420</td>
<td>3630/4420/7450/9170</td>
</tr>
<tr>
<td></td>
<td>11160/13740</td>
<td>14600/19600</td>
<td></td>
</tr>
<tr>
<td>Speed range</td>
<td>r.p.m. 0-1600</td>
<td>0-1600/0-1000</td>
<td>0-800</td>
</tr>
<tr>
<td>Machine width</td>
<td>mm. (E) 6055</td>
<td>(F) 7155</td>
<td>(E) 6655</td>
</tr>
<tr>
<td></td>
<td>(F) 7755</td>
<td></td>
<td>(F) 8830</td>
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<tr>
<td></td>
<td>(E) 7230</td>
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<tr>
<td></td>
<td>(P) 2400</td>
<td>(P+M) 3000</td>
<td>(P+M) 3100</td>
</tr>
<tr>
<td></td>
<td>(P) 3050</td>
<td>(P+M) 3850</td>
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</table>

*Bigger upon request*