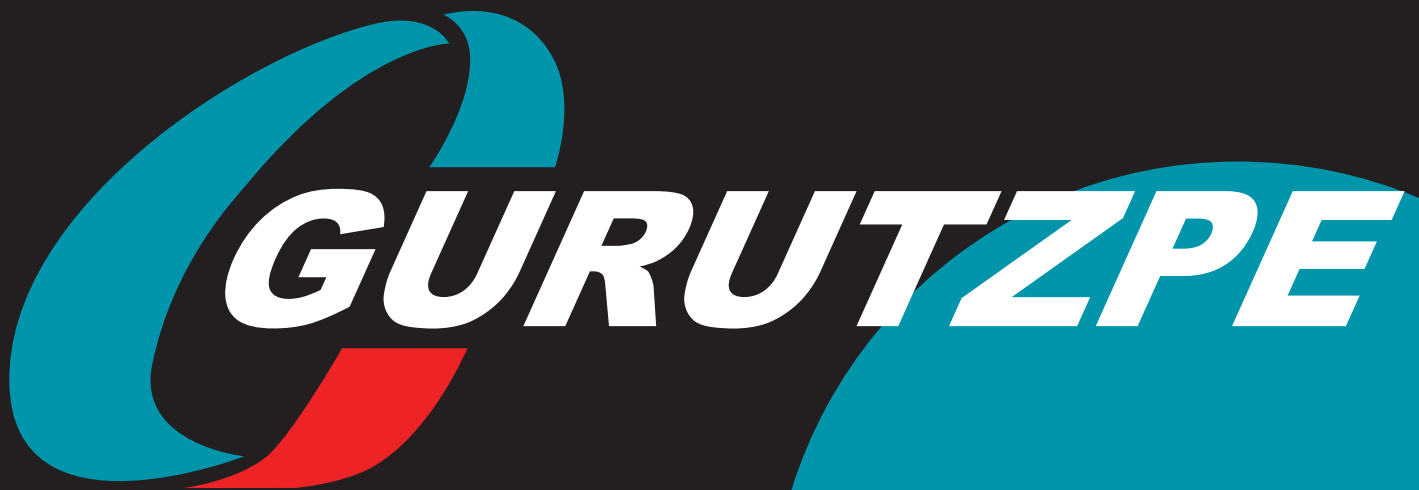


LEADERS IN HEAVY DUTY CNC LATHES

The logo for GURUTZPE features a stylized 'G' composed of two overlapping curved shapes, one in teal and one in red. To the right of the 'G', the word 'GURUTZPE' is written in a bold, white, italicized sans-serif font.

GURUTZPE

**4 GUIDE-WAY LATHE
B 4G SERIES**





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



History

Series "M", "A", and "B" were the corner stones for the manufacture of Gurutzpe conventional parallel lathes.

In 1961 Gurutzpe makes their very first lathe. It is "M1" model with 1,500 mm between centres and with a 390 mm bed width. It was sold to our first customer Talleres Enteriza, in Barcelona. Two years after the "A" model is made. It was a lathe with a wider bed (540 mm). This lathe will give way in 1968 to the "Super A" model and in 1975 to the definitive "Super AT".

The "M1" model from the 60s gives way to the "M2", turning into model "Super M" in 1972.

From 1962 to 1975 more than 2,400 lathes from our series "A" and "M" were manufactured.

On the other hand, in 1968 a new and bigger lathe is started to be made which will set the example for the peer lathes, it was the Super B model. It was a lathe with 800 mm bed width. This lathe will turn into the Super-BT model.

Before taking the definitive step to the manufacturing of CNC lathes, several variants to the conventional lathes appeared with more sophisticated standard equipment, the RT-API model (threading with automatic cycle). The Super BT model was also designed with an electric copier which interpolated the "X" and "Z" axis. This model was a key one for rollers machining and the wheels from the trains up til the development of the CNC.

The new era of Gurutzpe as CNC lathe manufacturer is started in the Machine Tools Exhibition in Bilbao in 1972. We showed there the first CNC lathe in Spain, it was the TF-215 model. It was a frontal lathe in order to machine pieces on the air.

It was in 1980 when we started to manufacture CNC lathes in mass production. The first model to be designed was the "A-1000" model (1981) Afterwards the "M-640", "B-1400" and "B-1800/3" models were born.

In 1986 Gurutzpe manufactured the first slant lathe, model A-800 CNC, a lathe that was very popular. Due to the great success, we manufactured another one with less capacity: MS-500 CNC model.

Nowadays, the A and B series comprise our productive range with turning capacities up to diameter 2,400 mm over bed. The diameter, length and weight of the piece to be machined are the features that determine the ideal model for the customer's need.



1- Gurutzpe lathe B-2200 4G (2009)
2- M1 model (1957)



B 4G SERIES

“The ideal solution for machining heavy pieces.”

The B SERIES represents the best option for machining heavy pieces (up to 40 tons). This model also allows to machine pieces of diameter up to 2,200 mm thanks to the rigidity of the bed of 1,950 mm with guiding in inverted “V” (with prism of 160 mm).

This model has been perfectly designed for **machining the big wind mill shafts**. The design has been made searching for the maximum optimization of the machining time.

The traditional **robustness and reliability** of the Gurutzpe lathes allow this model to deal with maximum warranty the **machining of the paper rolls and the machining of big shafts for energy generation** in different lengths and weights.



“B” 4G Series 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.
- Double pinion rack system with mechanical preload for the longitudinal feed.
- 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 the CNC keyboard with the longitudinal carriage.
- Machine design complying with rigorous European Safety Norms (CE).

- 10.4. 4 position automatic square turret size 320 mm.
- 20.1. Fagor CNC.
- 25.2. Main motor of 71 kw.
- 30.7. Motorised movement of the tailstock.
- 30.8. Automatic clamping of the tailstock.
- 30.93. Tailstock with rotating motorised quill of diameter 320 mm with pressure regulator and expansion balance device.
- 90.1. Electronic handwheel.
- 90.11. Digital scale in the "Z" axis.

Optional equipment

- 10.5. 8 position automatic disk type turret size 320 mm with or without live tools.
- 10.6. A 4-position automatic square turret size 400 mm.
- 10.8. 8 position automatic disk type turret size 400 mm with or without live tools.
- 20.2. Siemens or Fanuc CNC.
- 25.3. Main motor of 92 kw or 113 kw.
- 30.11. Tailstock positioning commanded by the CNC.
- 30.94. Tailstock with rotating motorised quill of diameter 360 mm with pressure regulator and expansion balance device for > 25 tonnes.
- 40.1. "C" axis with headstock motor or independent motor.
- 40.2. "Y" axis in-built in the carriage.
- 50.4. Manual steady rests capacity 100-600 mm with passage in front of the carriage.
- 50.5. Manual steady rest capacity 500-900 mm with passage in front of the carriage.
- 50.6. Manual steady rest capacity 900-1400 mm with(out) passage in front of the carriage.
- 50.7. Manual steady rest capacity 1400-1800 mm without passage in front of the carriage.
- 50.9. Hydraulic steady rest capacity 125-460 mm commanded by the CNC.
- 50.11. 90° automatic rotation for hydraulic steady rests.
- 50.12. "C" type steady rests with different capacities.
- 50.15. Hydrostatic steady rests.
- 50.16. Supports of "white metal".
- 60.2. Boring bar support of 160 mm in the square turret.
- 60.3. Boring bar support of 200 mm in the base of the turret.
- 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 tools for turret clamping.
- 80.1. Manual chucks.
- 90.2. Automatic chip conveyor in pit with coolant equipment included.
- 90.3. Piece measuring probe.
- 90.4. Tool wear probe.
- 90.5. Teleservice.
- 90.6. Air conditioning system in the electric cabinet.
- 90.9. Second longitudinal carriage for turning, milling and boring operations.
- 90.10. Special coolant equipment with motopumps of high pressure and flow.
- 90.11. Digital scales in "X"
- 90.12. Oil skimmer.

B 4G SERIES



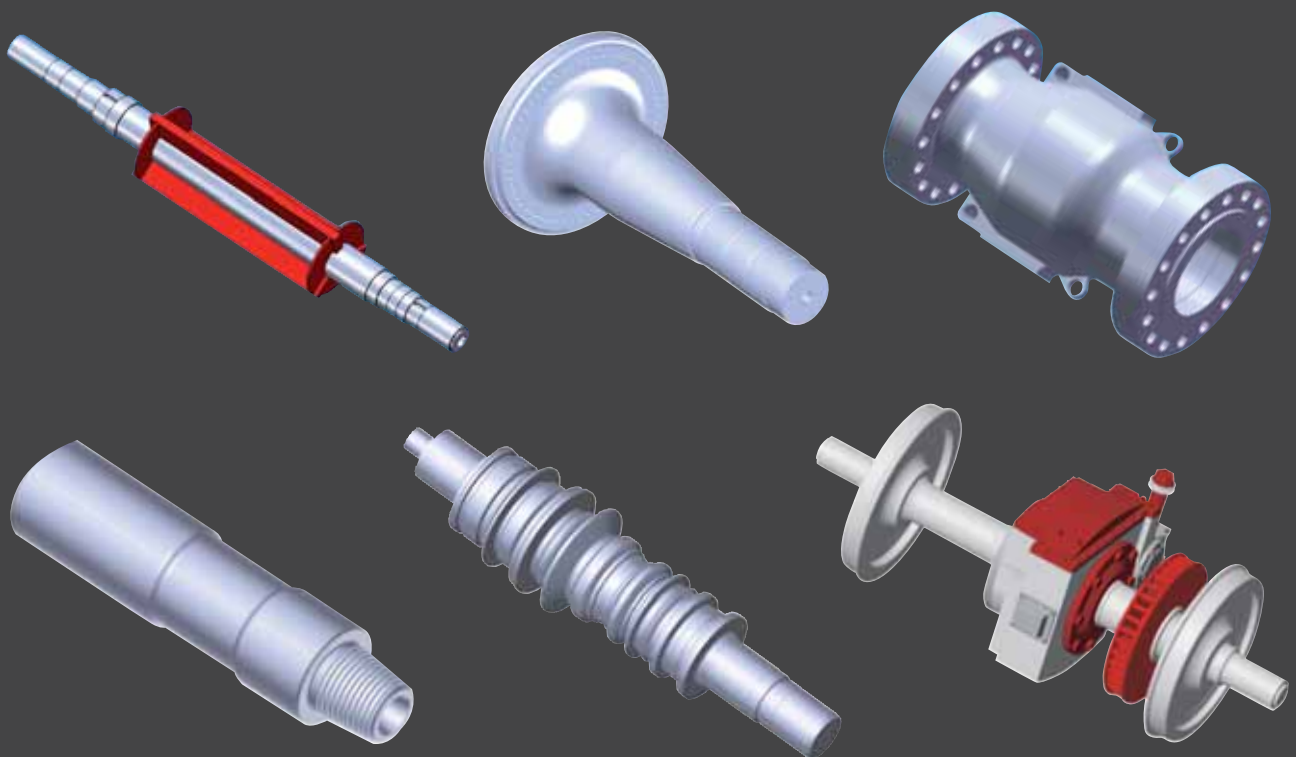
Machine equipped with two carriages, the second one with milling unit column and automatic tool-change system.



Detail of paper rolls machining.

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	●		

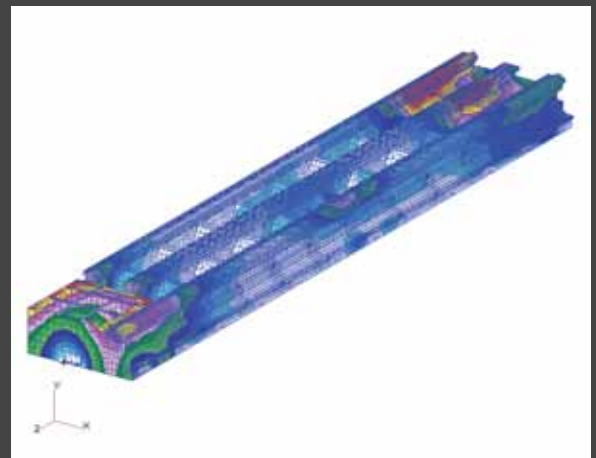
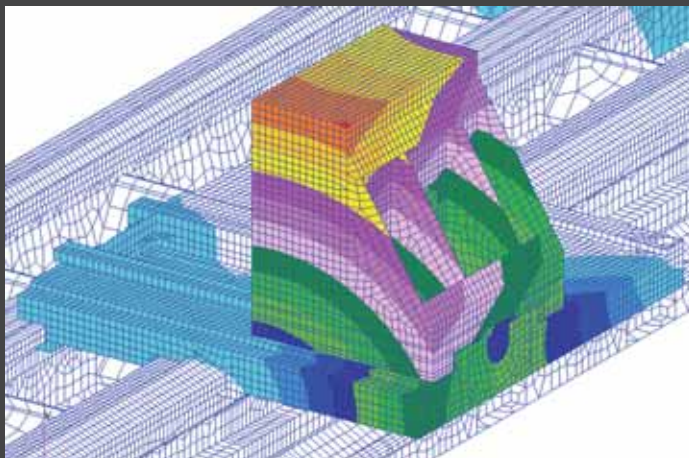




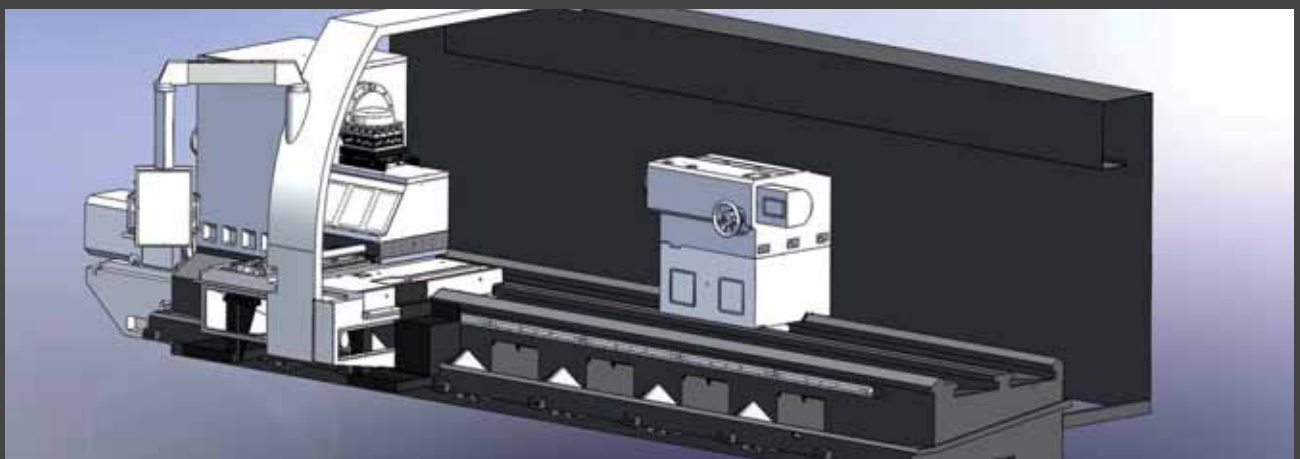
Guidance for models according to the weight and diameter of the piece to be machined

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

∅(mm) WEIGHT (kg)	700	950	1.300	1.700	2.200
4.000	A 1000	A 1000 4G			
6.000					
10.000		A 1200	A 1200 4G	A 1600	A 1600 4G
15.000					
20.000				A 2000 4G	
25.000					
35.000					B 2200



FEM analysis.



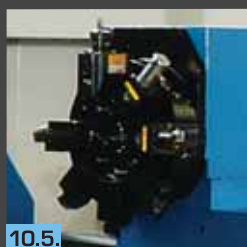
Design of the model in 3D.

Summary of the standard and optional features

- 10.4. 4 position automatic square turrets.
- 10.5. 8/12 automatic disk type turret up to size 320 mm with or without live tools.
- 20.2. Siemens/Fanuc CNC.
- 40.2. "Y" axis built into the carriage.
- 50.5. Manual steady rests.
- 50.11. 90° automatic rotation for the hydraulic steady rest.
- 50.12. "C" type steady rests.
- 50.15. Hydrostatic steady rests.
- 50.16. "White metal" support.
- 60.2. Boring bar support up to 160 mm.
- 60.3. Boring bar support up to 200 mm in the base of the turret.
- 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 in the turret.
- 80.1. Manual chucks.
- 90.2. Chip conveyor.
- 90.3. Piece measuring probe.
- 90.4. Tool wear probe.
- 90.9. Second longitudinal carriage for turning, milling and boring operations.
- 90.12. Oil skimmer.



10.4.



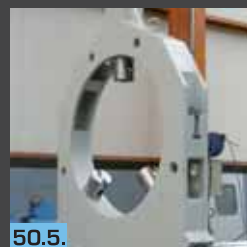
10.5.



20.2.



40.2.



50.5.



50.11.



50.12.



50.15.



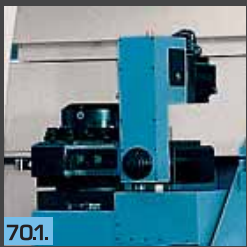
50.16.



60.2.



60.3.



70.1.



70.2.



70.5.



80.1.



90.2.



90.3.



90.4.

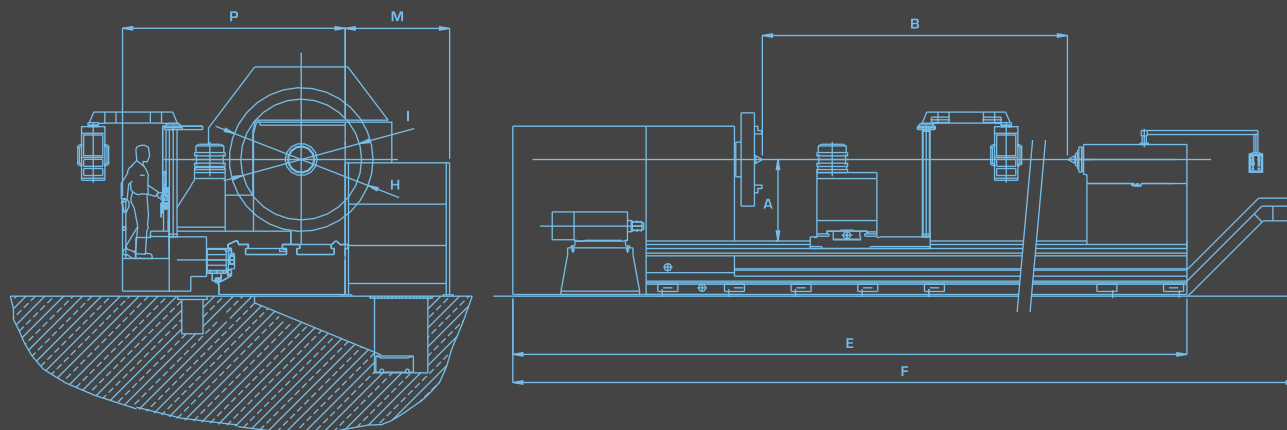


90.9.



90.12.

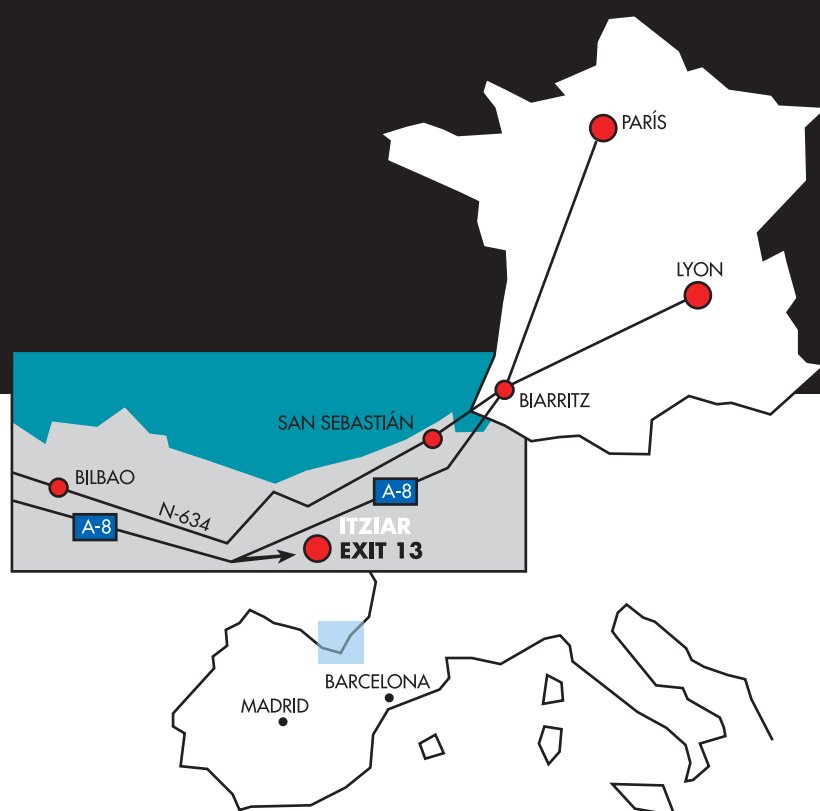
Technical chart



B 4G Series Main Characteristics					
Centre height	A	1.025	1.125	1.225	1.325
Swing over bed	H	2.000	2.200	2.400	2.600
Swing over carriage	I	1.600	1.800	2.000	2.200
Cross slide stroke	mm	930		1.130	
Bed width	K	1.950			
Allowable weight without steadies	kg	25.000		35.000	
Diameter of the tailstock's quill	mm	Ø320		Ø360	
Main spindle bore	mm	Ø110			
Diameter of the front bearing	mm	Ø290			
Main spindle nose	-	DIN 55026 Type A20			
Headstock power (S1/S6)	kw	71 / 88	92 / 114		113 / 140
Headstock torque (S1/S6)	Nm	24.400 / 30.200	31.200 / 38.660		38.320 / 47.500
Speed range	r.p.m.	0 - 500	0 - 500		0 - 500
Length for 3 meter machine	mm	(E) 8.525 // (F) 10.125			
Machine width	mm	(P) 3.140 // (P+M) 4.740		(P) 3.340 // (P+M) 5.140	

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

LEADERS IN HEAVY DUTY CNC LATHES



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