

RAILWAYS



GEMINIS
MAHER HOLDING

BEHIND GEMINIS
YOU WILL FIND
A TEAM OF
MORE THAN
100 PEOPLE
DEVELOPING
MACHINING
SOLUTIONS.

Our technology and experience allow us to work in the most challenging sectors and projects. Besides railways we are reference in Iron & Steel, Oil&Gas, Power generation, Wind energy, Shipyard or Cranes.



GR5-S / GR7-S



WE BELIEVE IN RAILWAYS AS A MAJOR ACTOR IN CONNECTING OUR WORLD

We are proud to support railway manufacturers, railway lines managers, etc. with close contact and customize solutions manufacturing high reliability machines for rolling stock maintenance. Our Geminis lathes are specialized in machining of axles, wheelset and wheels. We have a track of more than 60 years supplying highly demanding machining solutions and service all over the world.



GR5-A

FOR AXLE
MACHINING



TECHNICAL CHARACTERISTICS

GR5-A

Swing over bed	mm	1,000 - 1,200*
Max. Axle diameter	mm	500
Max. Axle length	mm	3,000 - 4,000*
Max. Axle weight	kg	5,000
Spindle nose		DIN 55026-11
Spindle range	r.p.m.	0 ... 1,400
Main motor power	kW	28 - 37*
Rapid traverse	m/min	8
Quill diameter	mm	160
Machine dimensions	mm	3,100 x 2,600 x 8,900
Machine weight	Kg	16,000

* Optional

AXLES
HORIZONTAL LATHE FOR HIGH PRECISION FINISHING..



GR5-S / GR7-S

FOR WHEELS SET MACHINING

Machine also capable
of machining axles and
loose wheels.



TECHNICAL CHARACTERISTICS		GR5-S	GR7-S
Max. Wheel tread diameter	mm	840	1,250
Track gauge	mm	1,435	1,435
Max. wheelset weight	kg	5,000	8,000
Max. Axle length	mm	3,000 - 4,000	3,000 - 4,000
Main motor power	kW	30 / 51*	51 / 71*
Machine dimensions	mm	3,600 x 3,000 x 8,900	4,100 x 3,300 x 9,300
Machine weight	Kg	18,500	25,000
Radial run out	mm		<0.10
Accuracy of profile	mm		<0.15
between wheels	mm		<0.10
Roughness of surface	mm		<0.012

* Optional

WHEELSETS
HORIZONTAL LATHE FOR HIGH POWER CUTTING.



GR3-W

WHEELS

VERTICAL MACHINE FOR BORING APPLICATIONS

FOR WHEEL
HUB BORING



TECHNICAL CHARACTERISTICS

GR3-W

Max. Wheel tread diameter	mm	840 ... 1,250*
Min. Wheel tread diameter	mm	580
Chuck diameter	mm	1,200 - 1,500*
Max. Boring diameter	mm	350
Max. Weight over table	kg	3,000
Main motor power	kW	22
Speed range	r.p.m.	0 ... 500
Machine taper		HSK 63A
Automatic tool changer		12 - 20* - 30*
Machine dimensions	mm	4,200 x 5,000 x 3,900
Machine weight	Kg	15,000
Boring accuracy		IT6 - IT7
Roundness	mm	<0.02
Cilindricity	mm	<0.02
Roughness of surface	mm	<1.2

* Optional



GR3-W

WHEELS
LOADING SOLUTIONS

GEMINIS
MAHER HOLDING



MAIN CHARACTERISTICS

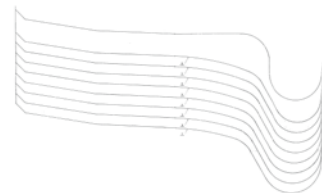
GR3-W

- Designed for all range of wheel dimensions
- Storage buffer at the entrance of the conveyor
- Wheel input area before processing
- Wheels loading and unloading system to the machining area
- Wheel output area after processing
- Storage buffer at the exit of the conveyor
- Integrated to the GR3-W machine
- Software
- Safety guarding



TECHNOLOGIES

- PERSONALIZED INTERFACES
- AUTOMATIC MEASURING SYSTEMS
- AUTOMATIC MACHINING OF THE OPTIMUM PROFILE
- MEASURING REPORTS
- KEY PARAMETERS COMMUNICATION BETWEEN MACHINES
- AUTOMATIC LOADING / UNLOADING SYSTEMS FOR ALL TYPE OF LATHES



GEMINIS		Geminis Machine Tools, S.p.A.	
MACHINE TOOLS		Largo T. Audo, 17100 Sesto San Giovanni (Alessandria) (Italy)	
Machine:	GEMINIS GTT 04 N3 300000	Model:	GT
Report N°:	20	Date:	2/10/17
Features		Right Wear dimension	
Actual tool end	0,05	Max (GEMINIS)	0,000000
Tread absolute Measured	170,43		
Wear Detected	0,00		
Flange Height H	27,00		
Flange Width w	10,24		
Raxial Run Out	0,01		
Gr	0,00		
Features		Left Wear dimension	
Actual tool end	0,01	Max (GEMINIS)	0,000000
Tread absolute Measured	170,38		
Wear Detected	0,00		
Flange Height H	27,07		
Flange Width w	10,21		
Raxial Run Out	0,02		
Gr	0,10		
Features		Set dimensions	
Measured Profile	5		
Distance Between Inner Flange	100,0		





REFERENCES

ALSTOM

Ansaldo STS
A Hitachi Group Company

CAF

Talgo



renfe


euskotren

TMR

SNCF

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ISO 9001
ISO 14001
ISO 14006
BUREAU VERITAS
Certification



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