

MULTIPROCESS HORIZONTAL LATHES



GEMINIS
MAHER HOLDING

ALL IN ONE

ONE MACHINE ALL PROCESSES:

- Turning
- Milling
- Boring
- OD/ID grinding
- Burnishing and fine machining
- Deep hole drilling
- CNC facing
- Hobbing
- Others under request

ONE SET UP ALL ADVANTAGES:

- Technological differentiation
- Production increase
- High accuracy
- Maximum comfort
- Customized solutions



Turbine rotor shaft



Power transmission shaft



Landing gear machining

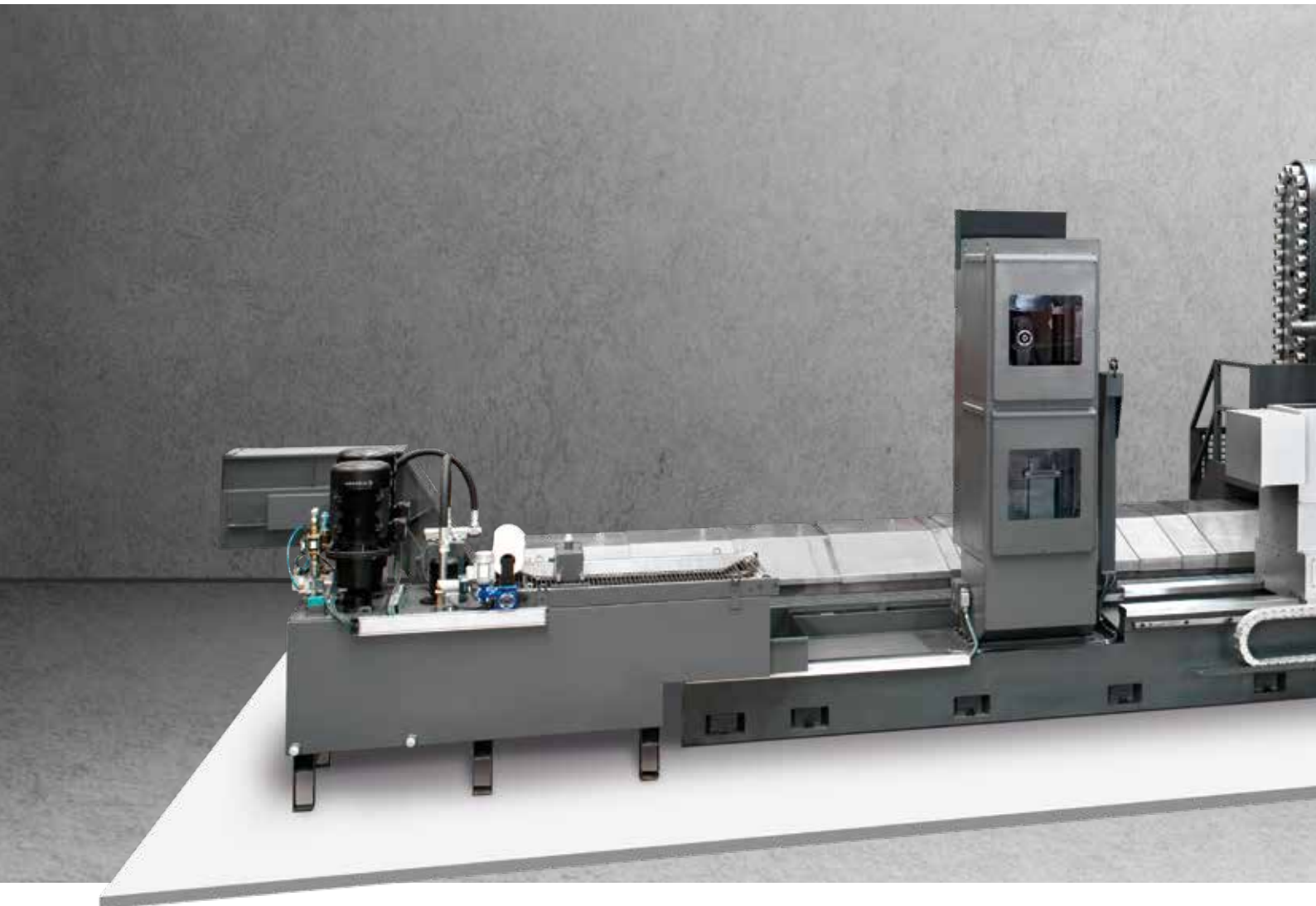


Turbine rotor shaft complete machining solutions



Crankshaft machining

GM-9

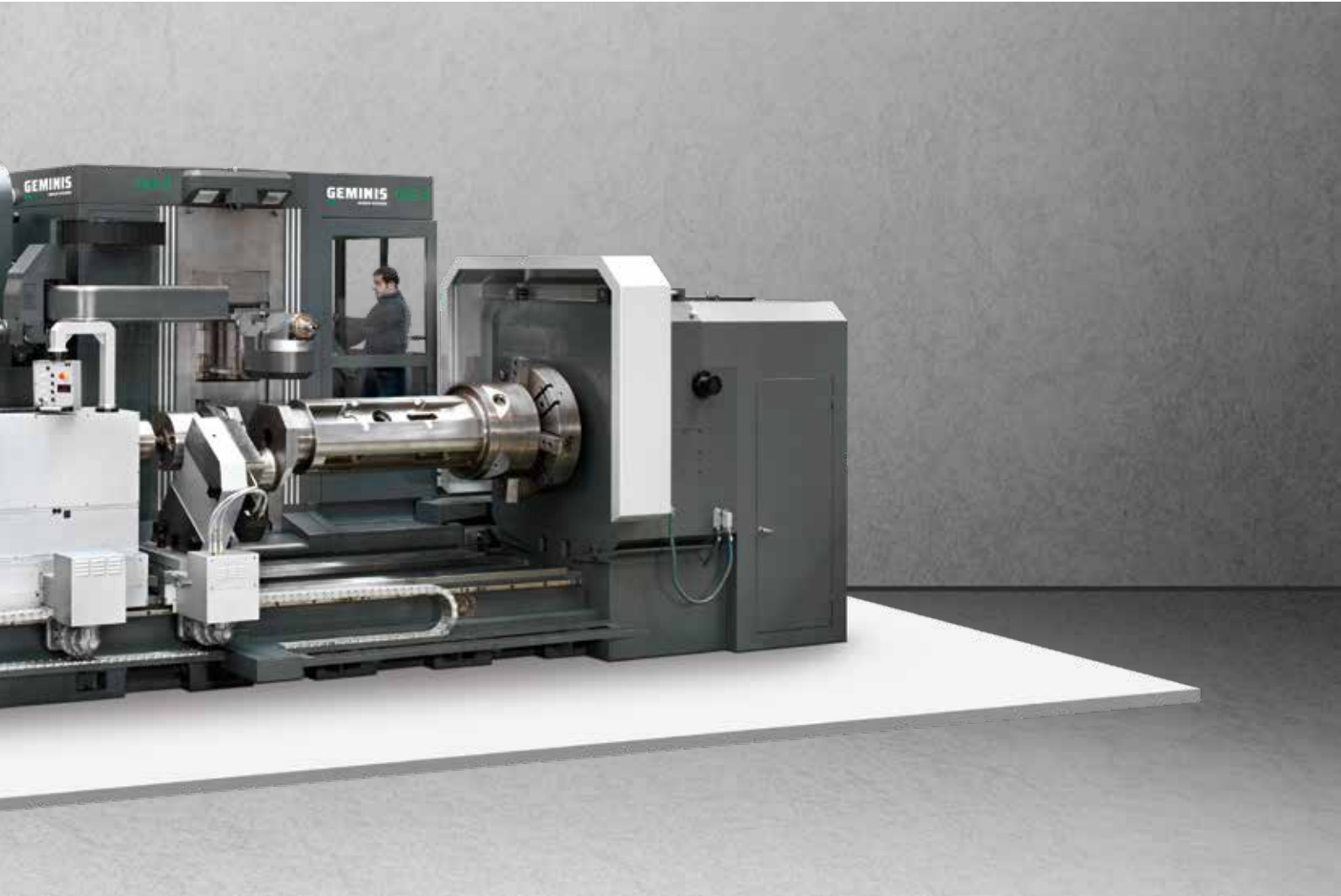


TECHNICAL CHARACTERISTICS

GM9

Max. turnable swing	mm	2.000 - 2.500
Distance between centres	mm	1 - 24
Main spindle power	kW	74 - 120
Max. Torque	Nm	23.000 - 120.000
C axis positioning accuracy	°	0,001
Slides speed	m/min	20
Vertical travel "Y"	mm	1.000 - 2.000
Milling power	kW	37 - (52*)
Milling torque	Nm	1.300 - (1.650*)
Milling speed (2 ranges)	min-1	3.000 - (4.000*)
Turn-milling toolholder		HSK 100 - (Capto C8*)
Turn-milling head indexing degrees "a" and "b" axis	°	1 - (0,003*)
Tool magazine		30 - 120
Weight between centres	Kg	25.000 - 80.000

* Optional



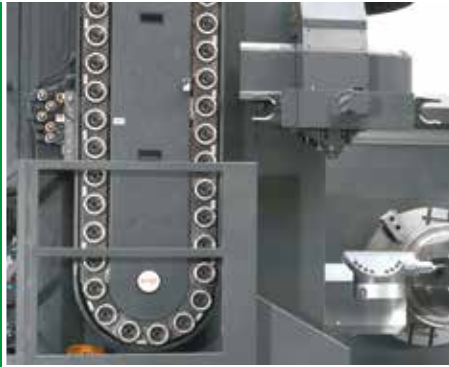
Finishing of turbine Blade fir tree roots



Combined steady rests
(hydrostatic & roller or babbitt contact type)

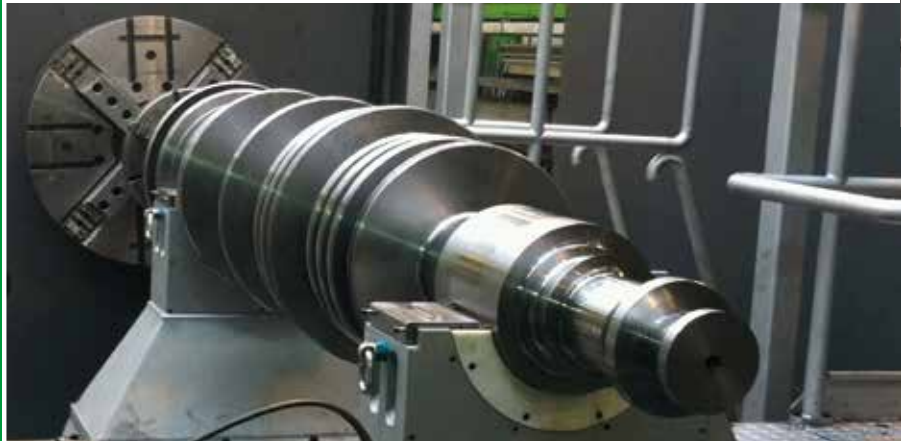
PRODUCTIVITY

- Down time reduction due to one set up machining.
- High dynamic slides & C axis.
- Wide range of machining heads .
- Automatic head change (Pick Up).
- Automatic tool change.
- Ram system to access narrow areas.



ACCURACY

- Failure minimisation due to one set up machining.
- C axis Twin Drive system.
- Specifically developed measuring cycles.
- Thermal stability.
- Linear scales.
- Part and tool measuring probes.



COMFORT

- Optimal view of working area.
- Ergonomic position operator/work piece.
- Adjustable control panel height.
- PTZ video system.
- Cabin temperature control (optional).
- GEMINIS Smart Factory Solutions (Smart HMI, Machine process and monitoring systems)



CUSTOMISATION

- Turnkey projects.
- Customised solutions according to customer requirements by building quality and reliable machines.



OPTIONS AND SOLUTIONS:

- Wide range of heads (Indexing milling-turning, 5 axis continuous, horizontal milling, heavy duty turning, grinding, boring, ...)
- Chucks (3 jaws closed, 4 jaws independent, self-centering, big bore, 2+2 power, heavy duty, large diameter, ...)
- Steadies (3&4 contacts closed, open, C type, self-centering, chuck type, sliding-roller- hydrostatic surface contact options, manual, automatic or programmable, ...)

CUSTOMER SUPPORT SERVICES

- Field services (installation, scheduled preventive maintenance, machine repair).
- Training (Electrical & mechanical maintenance, applications engineering, CNC programming, machine set up and operation).
- Machining consultancy (Support of machining, technology and methods).

OUR HEADS



5 axis machining



OD / ID Grinding



Horizontal milling



Heavy duty turning



Multitasking head - Deep hole drilling solutions

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