HIGH PRODUCTIVITY • ROBUSTNESS • PRECISION • TECHNOLOGY

TURNING CENTRES

ROMI GL SERIES

NEW GENERATION

www.romi.com

ROMI

MUCH MORE PRODUCTIVITY AND PROFITABILITY FOR YOUR BUSINESS!

ROMI

In the constant process of transformation of the industry, it is crucial to have ***differentials that make your products superior to those offered by competitors.***

In this context, the insertion of new technologies in your production process, mainly by means of ***modern, fast and precise machine tools, raises your production performance.***

You get higher quality, productivity, efficiency and the best: higher profits than what you have already achieved in your business!

With over 90 years of history and global presence, we have preserved the values that made our products known worldwide. **We offer the most cost-effective machine tools in the market.** Our commitment to the constant development of new solutions and dedication to innovation results in robust, high technology and quality machine tools.

We guarantee full support at all stages of the purchase through our teams: sales and sales engineering, customer training, specialized technical assistance and spare parts.

Having a Romi machine tool assures that **you have a state-of-the-art equipment produced in the present and in the future**. And in the future, when you need to replace it with another more modern Romi, you will see that you have made a big deal: your equipment is highly valued in the market.

At Romi, you get a complete solution, much more than just a piece of equipment: **you have the security and tranquility of counting on the manufacturer at all times, whenever you need it**. Count on us to find a solution that fits your needs. **Our main goal is to make your business even more productive and profitable.**

Ultra Clean Room


Development Engineering


Flexible Manufacturing System

Technical Assistance

Training


Spare Parts

ROMI GL SERIES

NEW GENERATION

High productivity with robustness, precision and technology.

Designed to operate in environments of medium and high production, the ROMI GL Series has high power and torque. Its robust structure is ideal for machining at full power. It offers high rigidity even during severe machining operations. Thermal and geometric stability, grants accuracy, high performance and productivity.

ROMI GL 250

Headstock	6.000 or 4.500 rpm
Spindle nose	ASA A2-5" or A2-6"
Main motor	19,4 hp / 14,4 kW
Max. turning diameter*	up to 282mm (11")
Rapid traverse X/Z	30m/min (1,18in/min)

ROMI GL 300

Headstock	4.500 or 3.500 rpm
Spindle nose	ASA A2-6" or A2-8"
Main motor	25,2 hp / 18,5 kW
Max. turning diameter*	up to 330mm (13")
Rapid traverse X/Z	30m/min (1,18in/min)

ROMI GL 350

Headstock	3.000 or 2.500 rpm
Spindle nose	ASA A2-8" or A2-11"
Main motor	34 hp / 25 kW
Max. turning diameter*	up to 410mm (16")
Rapid traverse X/Z	30m/min (1,18in/min)

ROMI GL 450

Headstock	3.000 or 2.500 rpm
Spindle nose	ASA A2-8" or A2-11"
Main motor	40,8 hp / 30 kW
Max. turning diameter*	up to 490mm (19.3")
Rapid traverse X/Z	30m/min (1,18in/min)

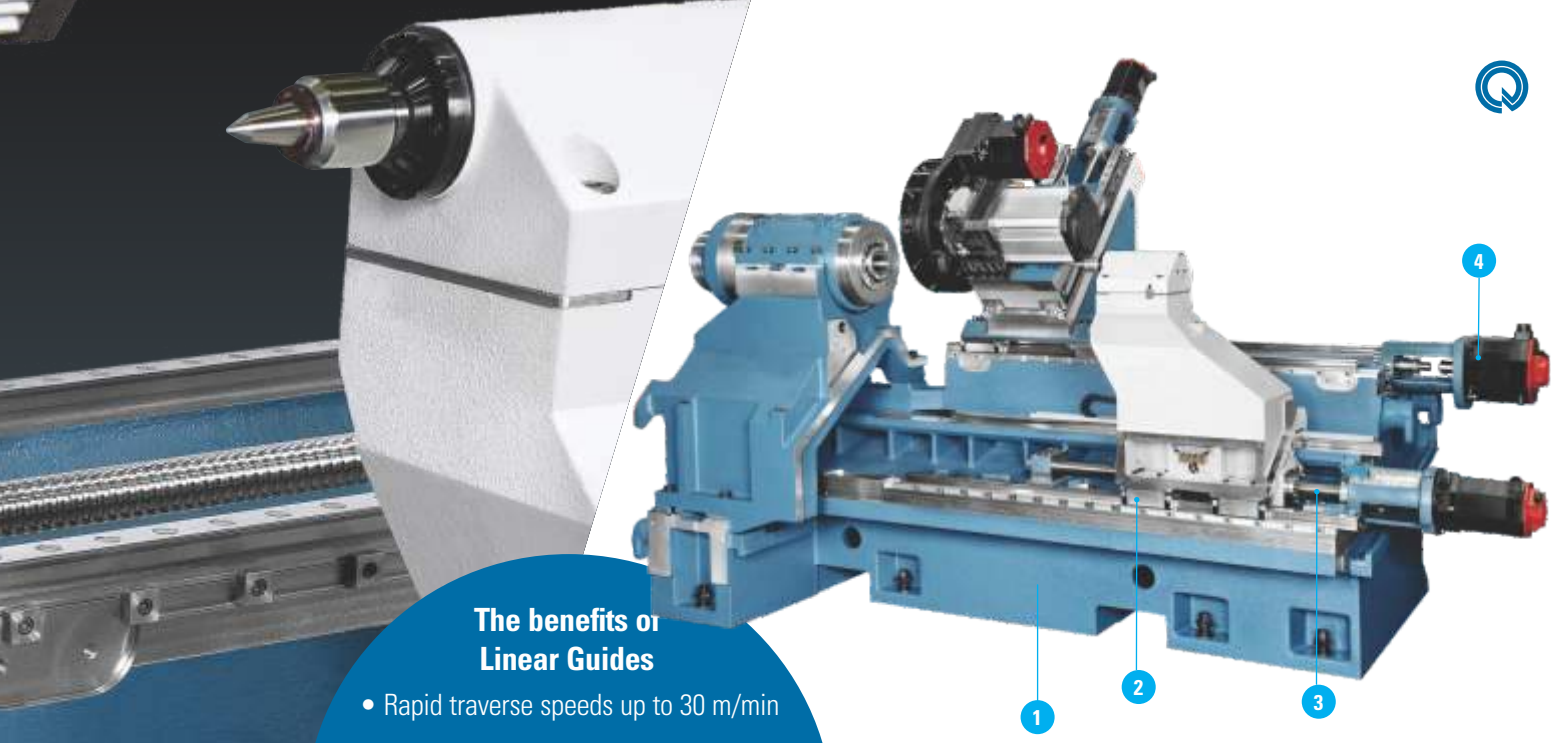
*see specifications for each version

STRUCTURE

ROBUSTNESS AND TECHNOLOGY

The quality of the manufacturing processes grants reliability and operational efficiency of ROMI machines.

Projected in 3D CAD system, the entire structure of the **ROMI GL SERIES** is dimensioned by Finite Element Analysis software (FEA), resulting in adequate structures for each machine size.



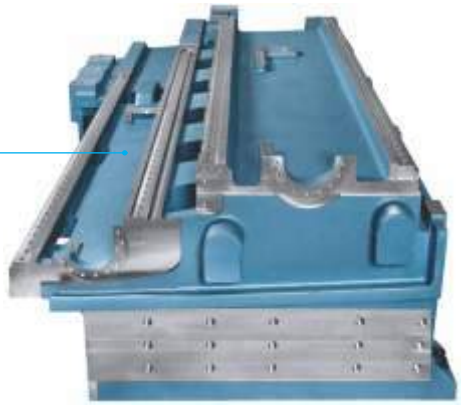
The benefits of Linear Guides

- Rapid traverse speeds up to 30 m/min
- Fast positioning of axes minimizing idle times and increasing productivity
- Allows high accelerations
- Low lubricant consumption
- Easy maintenance
- High rigidity and long durability

THERMAL COMPENSATION

System developed to reduce the effects of thermal expansion.

In this way, stable, dimensional results are obtained even during long working periods.

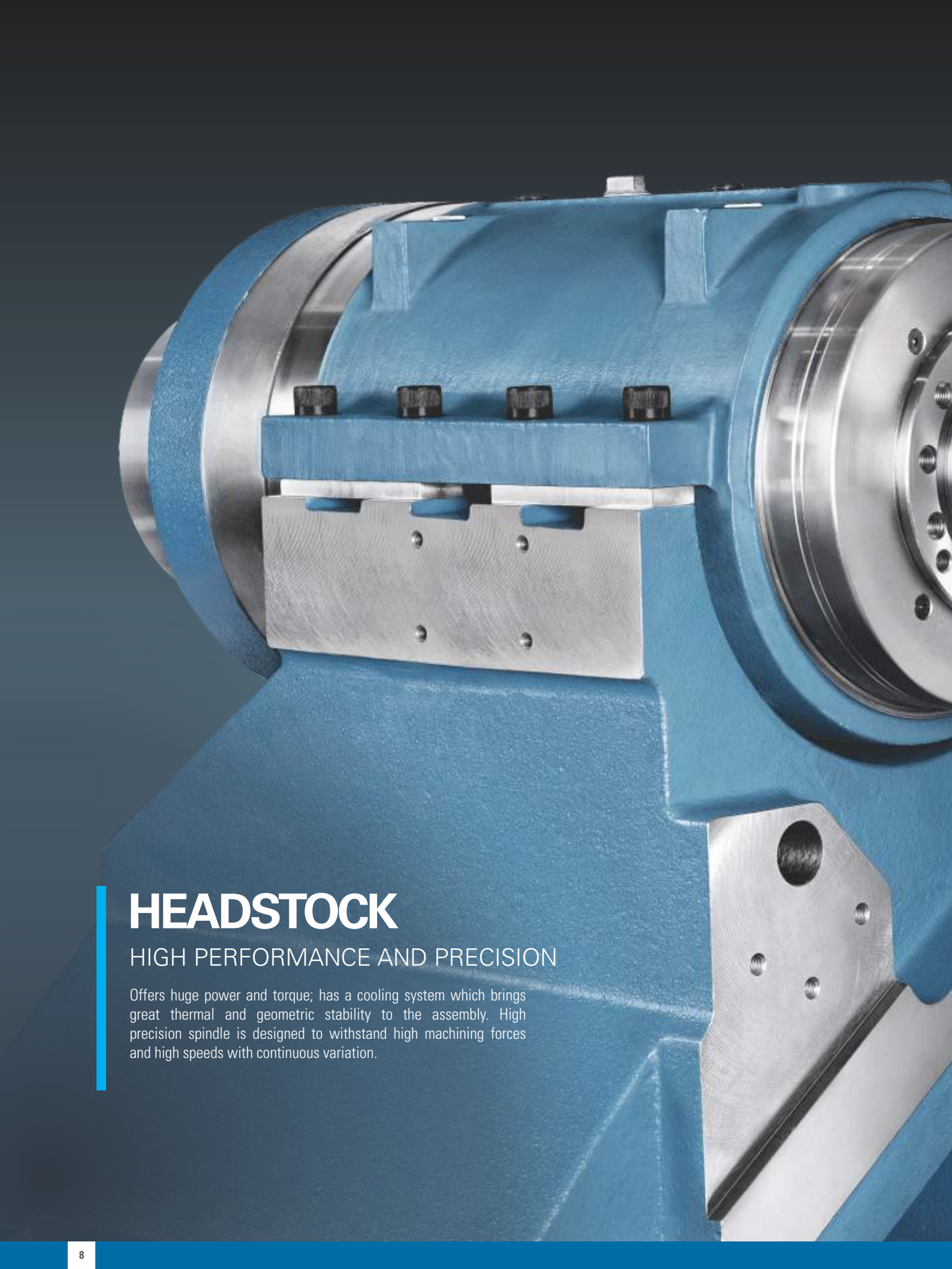


1 **MONOBLOCK BASE,** robust and designed to absorb vibrations; offers better parts finishing, longer durability for machine and cutting tools.

2 **LINEAR GUIDES** allow fast displacements, great rigidity, great movement accuracy and positioning of the axis due to low friction coefficient between rails and blocks.

3 **BALL SCREWS** are hardened and ground with preloaded nuts; designed to offer high rigidity, high accuracy in both positioning and repeatability of axes.

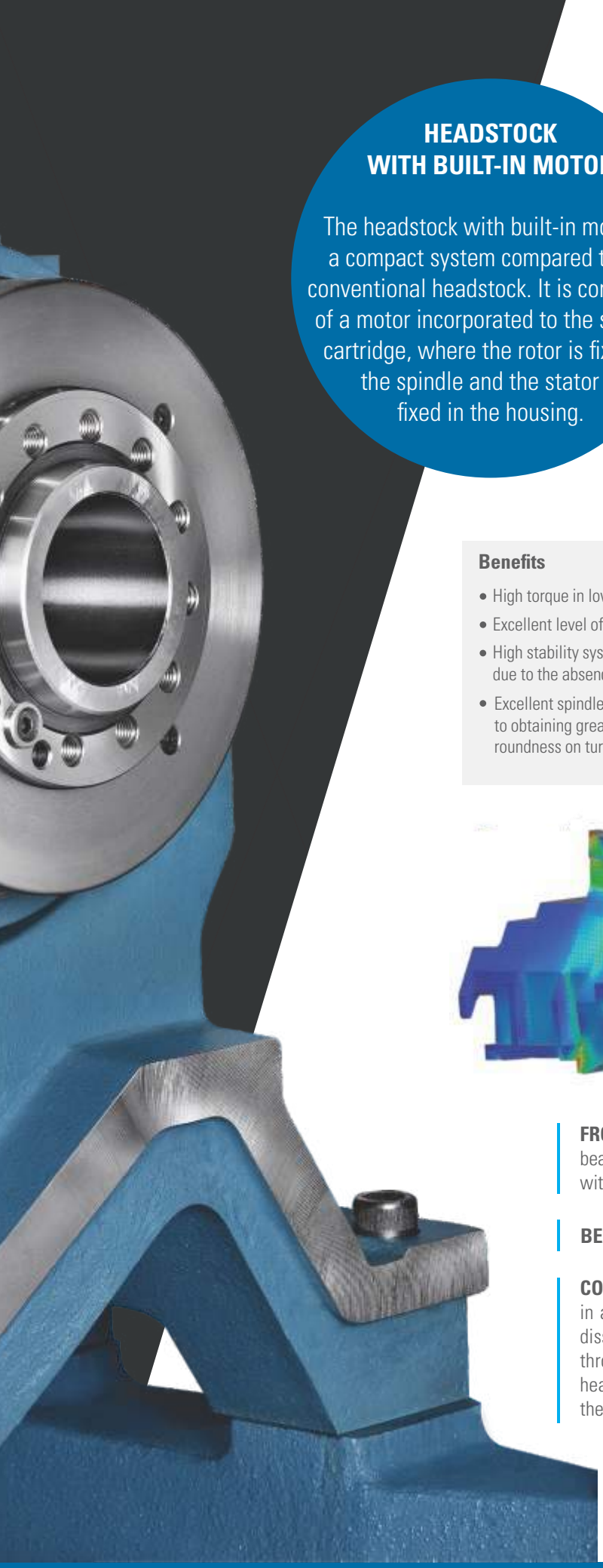
4 **Brushless AC SERVOMOTORS** with integrated absolute encoders, which transmit the movement of the ball screws directly, providing accurate positioning and excellent repeatability of axes.



HEADSTOCK

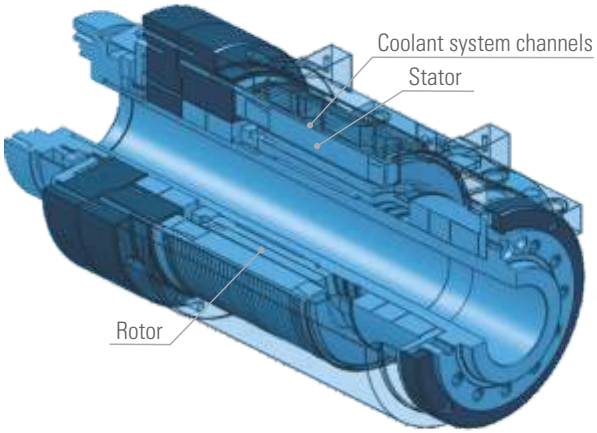
HIGH PERFORMANCE AND PRECISION

Offers huge power and torque; has a cooling system which brings great thermal and geometric stability to the assembly. High precision spindle is designed to withstand high machining forces and high speeds with continuous variation.



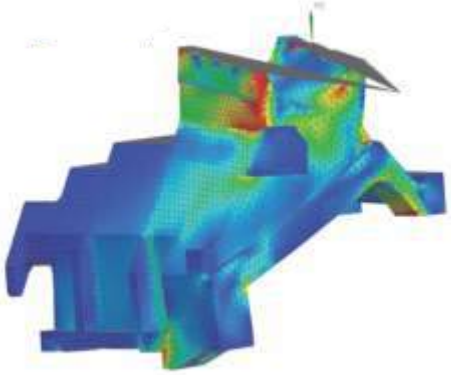
HEADSTOCK WITH BUILT-IN MOTOR

The headstock with built-in motor is a compact system compared to the conventional headstock. It is comprised of a motor incorporated to the spindle cartridge, where the rotor is fixed to the spindle and the stator is fixed in the housing.



Benefits

- High torque in low rotations
- Excellent level of power and performance
- High stability system, without vibrations due to the absence of pulleys and belts
- Excellent spindle run-out which contributes to obtaining great surface finishing and roundness on turning operations
- Low inertia contributing to high accelerations
- Incorporated high resolution encoder assuring extreme precise angular positioning (C axis) for operations with driven tools (for versions with driven tools)
- Offers high thermal and geometric stability of the assembly due to its efficient cooling system

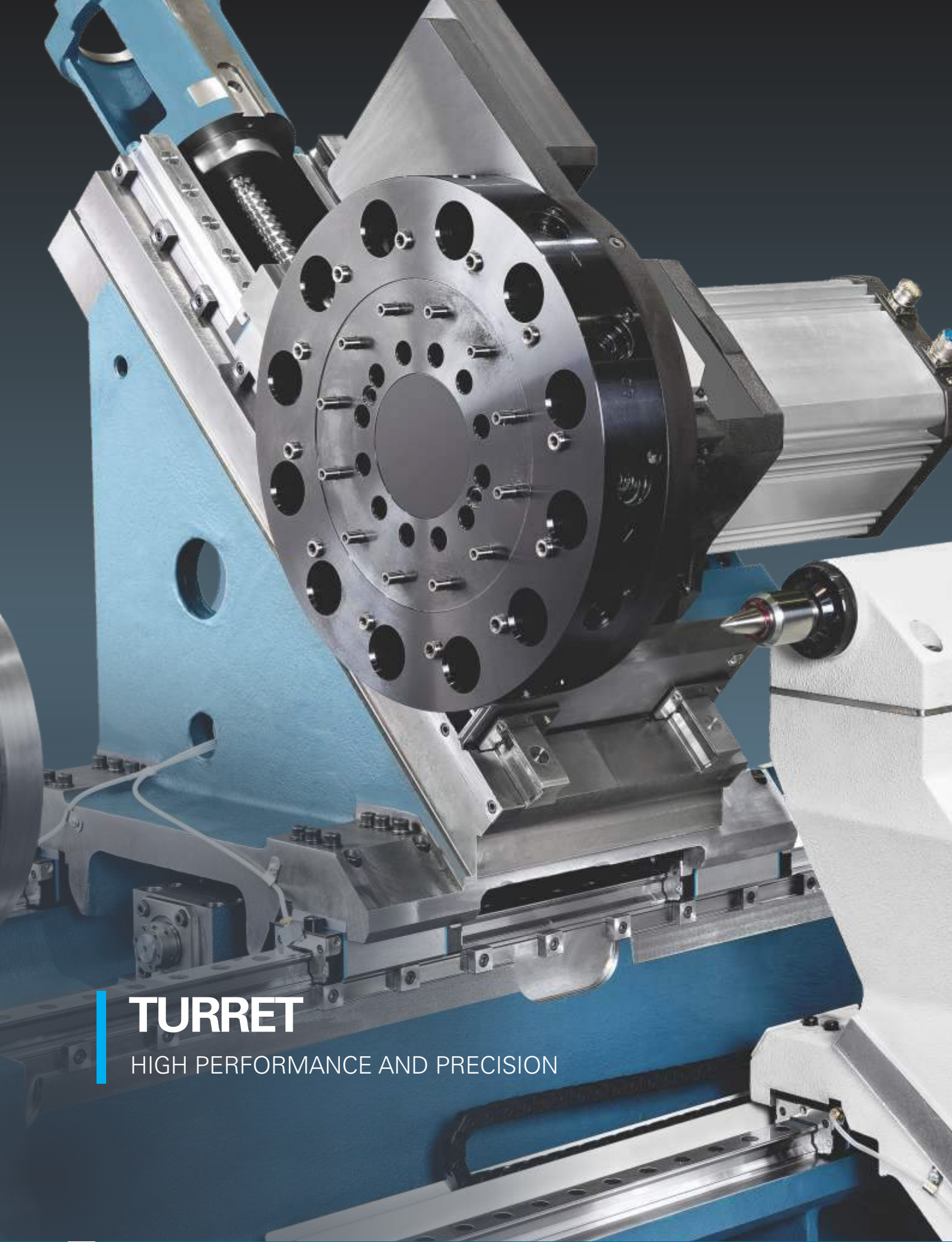


Structure that offers excellent thermal and geometric stability, rigidity and high capacity to absorb machining efforts, even in heavy duty machining conditions.

FRONTAL ARRANGEMENT OF ROLLER BEARINGS and angular ball bearings; rear arrangement of high-precision angular contact ball bearings with permanent lubrication.

BEARINGS sealing by labyrinths.

COOLING SYSTEM guided by a closed circuit through channels located in a labyrinth between the outer surface of the stator and the housing, dissipating the heat generated by the built-in motor. The liquid first passes through a heat exchanger. There it is cooled and then returned to the headstock. The system is monitored by a flow sensor. This ensures that the headstock is always cooled.



TURRET

HIGH PERFORMANCE AND PRECISION

12-station turret for fixed tools, with Romi disk

12-station turret for driven tools, with VDI- or BMT disk*

12-station turret for driven tools with Y Axis

Y AXIS

Enables turning operations out of workpiece centre line allowing drilling, milling and tapping operations with only one fixation.

*see specifications for each version

SECOND HEADSTOCK

TAILSTOCK

TAILSTOCK

Tailstock supported on high precision linear guides. Positioning and axial force adjustable via CNC. Prepared for cartridge with MT-4 or built-in live centre (with incorporated bearings).*

SECOND HEADSTOCK

The headstock with built-in motor is a compact system compared to the conventional headstock. It is comprised of a motor incorporated to the spindle cartridge, where the rotor is fixed to the spindle and the stator is fixed in the housing (with half-pass or total pass of 51 mm).

*see specifications for each version

CNC

TECHNOLOGY AND RELIABILITY

Fanuc 32i-B *i*-HMI CNC (for S versions) with 19" Touchscreen LED color monitor

Fanuc 0i-TF *i*-HMI CNC (for T, M and Y versions) with 15" Touchscreen LED color monitor

ROMI GL Series Turning Centres are equipped with Fanuc CNC, which facilitates programming, with main screen with separate areas for planning, machining, improvements and utilities, allowing access to functions in just only two clicks. It is equipped with Ethernet interface, drive for Compact Flash card and USB port.

1. Display of various information on a single screen. E.g.: feed axes and main spindle load indicators, ongoing program, modal codes, tool information, icons, alarms, etc.

2. Complete and dynamic tool manager, enabling quick access to information.

3. Functions for corrective, preventive and predictive maintenance (messages, alarms, message history, etc.). Warning messages are generated before the fault even occurs. This enables efficient preventive maintenance.

4. The machining programs can be easily accessed, they are organized in a folder structure with illustration of the workpiece, program name and number for easy identification.

5. Thanks to the compatibility with numerous file formats, manuals, diagrams and other important information can be stored.

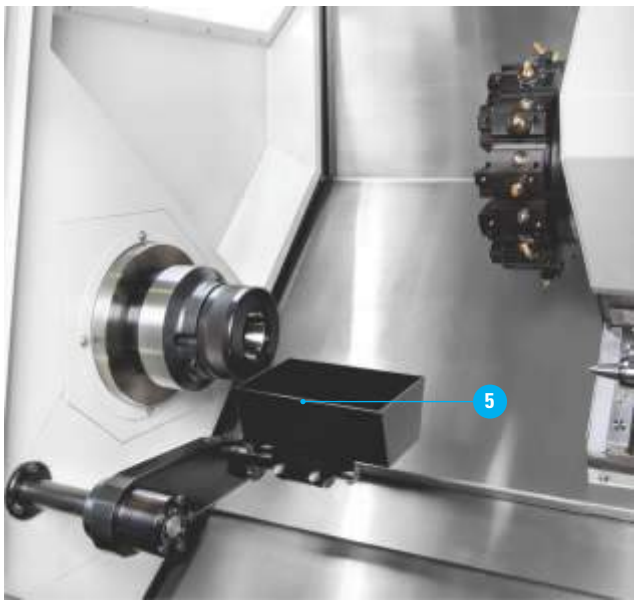
6. Various interactive machining cycles: cavity cycles, milling, tapping, measurements, etc.

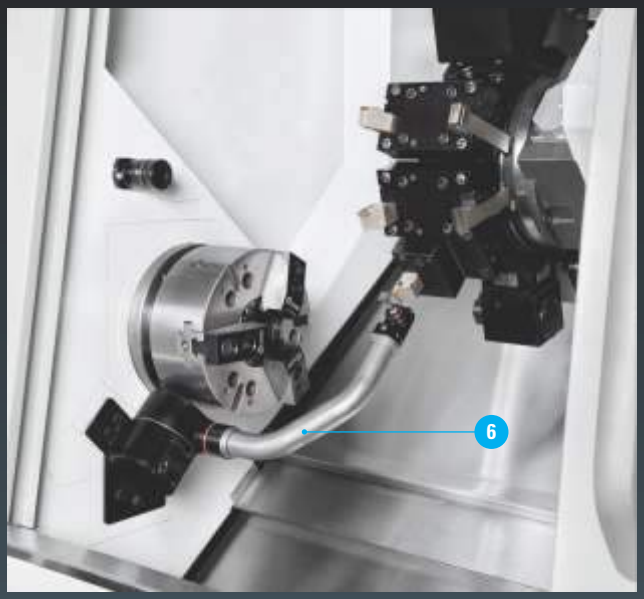
OPTIONAL EQUIPMENT

VERSATILITY FOR YOUR PRODUCTION

Thanks to the large selection of optional equipment, we can perfectly adapt your ROMI GL Turning Centre to your individual requirements and thus make it even more versatile.

1. Automatic Door and Safety Light Curtain
2. Chip Conveyor
3. Mist Exhausting System
4. Wash Gun
5. Parts Catcher
6. Tool Position Reader

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ROMI
GL 300S
2

Technical Specifications		ROMI GL 250	ROMI GL 300	ROMI GL 350	ROMI GL 450
Capacity					
Maximum cutting diameter	mm (in)	T = 282 (11) M, Y and S = 250 (9.8)	T = 330 (13) M, Y and S = 300 (11.8)	T = 410 (16.1) M and Y = 350 (13.7)	T = 490 (12.3) M and Y = 450 (17.7)
Swing diameter over Z axis cover	mm (in)	530 (20.8)	530 (20.8)	660 (26)	660 (26)
Swing diameter over X table	mm (in)	420 (16.5)	420 (16.5)	530 (20.8)	530 (20.8)
Swing diameter over Y table (with Y=0)	mm (in)	400 (15.7)	400 (15.7)	500 (19.7)	500 (19.7)
Travel (X Axis)	mm (in)	T/Y/S = 160 (6.3) / M = 195 (7.7)	T/Y/S = 185 (7.3) / M = 230 (9)	230 (9)	255 (10)
Travel (Z Axis)	mm (in)	600 (23.6)	600 (23.6)	1200 (47.2)	1200 (47.2)
Travel (Y Axis)	mm (in)	± 50 (1.97)	± 50 (1.97)	± 75 (3)	± 75 (3)
Travel (tailstock or second headstock)	mm (in)	540 (21.2)	540 (21.2)	1160 (45.7)	1160 (45.7)
Headstock					
Type		built-in			
Spindle nose	ASA	A2-5" / A2-6"	A2-6" / A2-8"	A2-8" / A2-11"	
Spindle hole diameter	mm (in)	61 (2.4) / 73 (2.9)	73 (2.9) / 85 (3.35)	104 (4.1) / 116 (4.56)	
Chuck diameter	mm (in)	165, 175 or 210 / 210 (6.5, 6.9 or 8.3 / 8.3)	210 or 254 / 254 (8.3 or 10 / 10)	254 or 315 / 315, 390 or 450 (10 or 12.4 / 12.4, 15.3 or 17.7)	
Maximum bar capacity	mm (in)	42 or 51 / 51 or 64 (1.65 or 2 / 2 or 2.5)	51 or 64 / 64 or 76 (2 or 2.5 / 2.5 or 3)	76 or 89 / 89 or 102 (3.9 or 3.5 / 3.5 or 4)	
Speed range	rpm	6000 / 4500	4500 / 3500	3000 / 2500	
Second Headstock					
Type		built-in			
Spindle nose	ASA	A2-5"			
Spindle hole diameter	mm (in)	61 (2,4)			
Chuck diameter	mm (in)	165, 175 or 210 (6.5, 6.9 or 8.3)			
Maximum bar capacity	mm (in)	51 (2)			
Speed range	rpm	6000			
Feeds					
Rapid traverse - X axis	m/min (in/min)	30 (1,181)			
Rapid traverse - Z axis	m/min (in/min)	30 (1,181)			
Rapid traverse - Y axis	m/min (in/min)	18 (708)			
Rapid traverse - W axis (tailstock or second headstock)	m/min (in/min)	10 (393)			
Turret					
Number of tools / stations	pc.	12			
Tool section: square	mm (in)	20 x 20 (0.78 x 0.78)	25 x 25 (0.98 x 0.98)	25 x 25 (0.98 x 0.98)	25 x 25 (0.98 x 0.98)
T Turret (for fixed tools)					
Tool holder	type	Romi			
Tool section: bar	mm (in)	Ø 32 (1.26)	Ø 40 (1.57)	Ø 40 (1.57)	Ø 50 (1.96)
M or T Turret (for driven tools)					
Tool holder	type	M: VDI 30 / Y: BMT-45	M: VDI 40 / Y: BMT-55	BMT 65	BMT 75
Tool section: bar	mm	Ø 32 (1.26)	Ø 40 (1.57)	Ø 40 (1.57)	Ø 50 (1.96)
Axial/radial driven tool holder	DIN 6499	M: ER-25 (Ø1 - Ø16mm) M: ER-25 (Ø0.039 - Ø0.63") Y: ER-20 (Ø1 - Ø13mm) Y: ER-20 (Ø0.039 - Ø0.51")	M: ER-32 (Ø2 - Ø20mm) M: ER-32 (Ø0.078 - Ø0.78") Y: ER-25 (Ø1 - Ø16mm) Y: ER-25 (Ø0.039 - Ø0.63")	ER-32 (Ø2 - Ø20mm) ER-32 (Ø0.078 - Ø0.78")	ER-40 (Ø3 - Ø26mm) ER-40 (Ø0.118 - Ø1.02")
Speed range for driven tool	rpm	0 ~ 6,000	0 ~ 4,000	0 ~ 4,000	0 ~ 4,000
Minimum allowed motor torque (continuum regime)	N·m	18	30	30	40
Y Turret (for driven tools) for S versions (with counter spindle)					
Tool holder	type	BMT 45	BMT 55	-	-
Tool section: bar	mm	Ø 32 (1.26)	Ø 40 (1.57)	-	-
Axial/radial driven tool holder	DIN 6499	ER-20 (Ø1 - Ø16mm)	ER-25 (Ø1 - Ø16mm)	-	-
Speed range for driven tool	rpm	0 ~ 6,000	0 ~ 4,000	-	-
Minimum allowed motor torque (continuum regime)	N·m	18	30	-	-
Automatic tailstock (servodriven)					
Taper hole for body positioning		MT-4	MT-4	built-in	built-in
Maximum axial force	kgf	300	500	700	1000
Power					
AC Main motor (intermittent regime - built-in)	hp/kW	19.4 / 14.3	25.2 / 18.5	34 / 25	40.8 / 30
AC Right motor (intermittent regime - built-in)	hp/kW	19.4 / 14.3	19.4 / 14.3	-	-
Total installed power (T/M and Y versions)	kVA	30	40	45	50
Total installed power (S versions)	kVA	45	50	-	-
Dimensions and weights (approx.)					
Machine weight (without chip conveyor)	kg	4,800	5,200	7,300	7,700
		GL 250 / GL 300		**GL 350 / GL 450**	
		T and M versions	**Y and S versions**	**T and M versions**	**Y versions**
Height	mm	2,051 (80.75)	2,235 (88)	2,270 (89.3)	2,350 (92.5)
Area (front x side) (**)	mm	3,513 x 2,006 (138.3 x 79)	3,901 x 2,268 (153.6 x 89.3)	4,230 x 2,360 (166.5 x 92.9)	4,390 x 2,523 (172.8 x 99.3)

Standard equipment

- Headstock with built-in motor ASA A2-5" (GL 250)
- Headstock with built-in motor ASA A2-6" (GL 250 or GL 300)
- Headstock with built-in motor ASA A2-8" (GL 300, GL 350 or GL 450)
- Headstock with built-in motor ASA A2-11" (GL 350 or GL 450)
- Second Spindle with built-in motor ASA A2-5" (S versions)
- Travel (X axis) and travel (Z axis) are supported on linear guides, AC servomotor driven, with direct drive transmission by means of pre-loaded ball screws (T and M versions)
- Travel (X axis), lower travel (Z axis) and upper travel (X' axis) are supported on linear guides, AC servomotor driven, with direct drive transmission by means of pre-loaded ball screws (Y versions)
- Travel (X axis), lower travel (Z axis), upper travel (X' axis) and counter spindle (W axis) are supported on linear guides, AC servomotor driven, with direct drive transmission by means of pre-loaded ball screws (S versions)
- Tailstock with long MT-4 live center, supported on linear guides, AC servodriven, with direct drive transmission by means of pre-loaded ball screws and anti-impact system (T, M and Y versions)
- Fanuc 0i-TF i-HMI CNC with 15" Touchscreen LED colour monitor and integrated safety system (for T, M and Y versions)
- Fanuc 32i-B i-HMI CNC with 19" Touchscreen LED colour monitor and integrated safety system (for S versions)
- Fully enclosed splash guard with interlocked sliding safety door
- Cleaning system for main and second spindle jaw chucks (S versions)
- Complete documentation for ROMI product
- Electrical installation available for the following voltage/frequencies: 400 Vca, 50 / 60 Hz
- Set of wrenches for machine operation
- Set of levelling screws and nuts
- Worklight LED type
- Electrical cabinet with centrifugal air conditioning and positive pressure
- Automatic lubrication system with line filter and oil level sensor
- Coolant system with tank capacity and four coolant pumps available (5, 7, 15 or 30 bar), with derivation through mechanical valve for cover cleaning
- 12-station servodriven Duplomatic turret, with horizontal axis, hydraulically clamped, available with Romi disc and basic tool set (T versions)
- 12-station servodriven Duplomatic turret, with horizontal axis, hydraulically clamped, available with VDI disk and basic tool set (GL 250 M and GL 300 M)
- 12-station servodriven Duplomatic turret, with horizontal axis, hydraulically clamped, available with BMT disk and basic tool set (GL 350M, GL 450M and all Y and S versions)
- Hydraulic power unit with maximum pressure of 50 bar, 10,2 / 12,4 l/min flow rate in 50 / 60 Hz, supply volume of 41 liters, pressure control circuit for clamping device, fixed pump controlled by frequency inverter and pressure control through proportional valves and pressure transducers
- Standard colours: Texturized Epoxy Enamel Munsell Blue 10B-3/4 and Texturized Epoxy Gray RAL 7035

Optional equipment

- Longitudinal hinged belt swarf conveyor (TCE): high (1,090 mm distance from conveyor outlet to floor) or low (750 mm distance from conveyor outlet to floor), and coolant tank
- Longitudinal drag belt swarf conveyor (TCA): high (1,090 mm distance from conveyor outlet to floor) or low (750 mm distance from conveyor outlet to floor), and coolant tank
- Hydraulic steady rest with diameters of 165 mm (Ø 42 mm bar capacity), 175 mm (Ø 51 mm bar capacity), 210 mm (Ø 51 or Ø 64 mm bar capacity), 254 mm (Ø 64, Ø 76 or Ø 90 mm bar capacity) and 315, 390 and 450 mm (Ø 76, Ø 89 or Ø 102 mm bar capacity) - according to headstock version
- Collet chuck C42 (Ø 42 mm bar capacity), C60 (Ø 60 mm bar capacity) or C80 (Ø 60 mm, Ø 64 mm or Ø 76 mm bar capacity) - according to headstock/machine version
- Hydraulic cylinder and draw bar with Ø 42 mm, Ø 51 mm, Ø 64 mm, Ø 76 mm, Ø 89 mm or Ø 102 mm bar capacity - according to headstock version
- Collet chuck in addition to hydraulic chuck C42 (Ø 42 mm bar capacity), C60 (Ø 51 mm or Ø 60 bar capacity) or C80 (Ø 64 mm or Ø 76 mm bar capacity) - according to headstock/machine version
- Automatic machine power off after shift end / program end / bar end / part end (Auto power off)
- M code for external interface with 3 pairs of M codes (3 independent outputs - 3 Ms code enable and 3 Ms code disable) ©
- LED Status light indicator (3 colors)
- Automatic door with light barrier and gear motor controlled by frequency inverter ©
- Tool setter (C)
- Pneumatic cleaning system of jaw chucks (A)
- Remote diagnosis interface via cable (C)
- Remote operation panel with handwheel and JOG functions for axes
- Ethernet Data-Server with integrated PCMCIA 4 or 16 GB card capacity
- Headstock parts catcher with Ø76 mm x 220 mm x 2.5 kg max. capacity (C)
- Second headstock parts catcher with Ø76 mm x 180 mm x 2.5 kg max. capacity (C)
- Oil/coolant separator (oil skimmer), disc type, with waste collection container
- Mist exhausting system (C)
- Smoke filter (G)
- Bar feeder device FEDEK DH 65L S (D)
- Bar feeder interface (C)
- Modular bar guide tubes for Ø 42 mm, Ø 51 mm, Ø 64 mm or Ø 76 mm bar capacity (according to the spindle bore)
- Nylon discs set (blind) for Ø 42 mm, Ø 51 mm, Ø 64 mm and Ø 76 mm bar guide (according to machine spindle bore)
- Air conditioning for electrical cabinet (recommended for environments with temperature over 38 °C)
- Autotransformer for 220 Vca, 200 / 250 Vca or 360 / 480 Vca (E)
- Electric and electronic interface (B)
- Basic pneumatic kit (F)
- Foot switch for fixing device starting (right and/or left counter spindle)
- Foot switch for tailstock starting
- Coolant pump 5, 7, 15 or 30 bar
- Wash gun with additional 5 bar motor pump
- Long or short CM-4 live center
- Linear scale (optical scale) for Z or X axis (A)
- Hydraulic steady and follow rest with programmable positioning (A)
- Additional set of ROMI product manuals in digital version
- Additional set of ROMI product manuals in print version
- Spare parts: jaw chuck sets, clamping collets, tool holders, reduction sleeves, bar puller and limiter

(A) Must purchase also the accessory: "Basic pneumatic kit".

(B) Contains the following parts: "Mist exhausting system", "Automatic door with light barrier and gear motor controlled by frequency inverter", "Bar feeder interface", "M code external interface with 3 pairs", "Tool setter", "Parts catcher ", "Remote diagnosis interface: cable", "Measure / inspection of parts".

(C) Must purchase also the accessory: "Electric and electronic interface".

(D) Must purchase also the accessory: "Bar feeder interface". The accessories: "Modular guide tube" and "Nylon discs set" are not included in the delivery and must be bought separately.

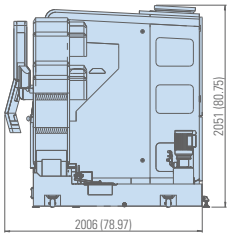
(E) Only for power supply with voltage different than 380 Vca.

(F) Contains the following parts: "Pneumatic cleaning system of jaw chucks" and "Linear scale".

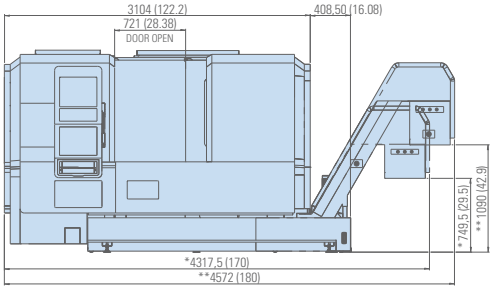
(G) Must purchase also the accessory: "Mist exhausting system".

Machine dimensions - dimensions in mm (in)

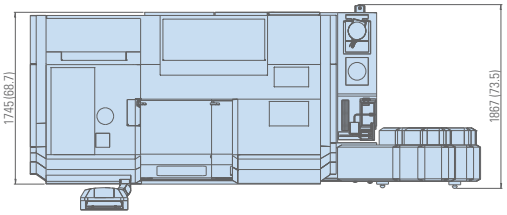
ROMI GL 250 / GL 250M / GL 300 / GL 300M



SIDE VIEW



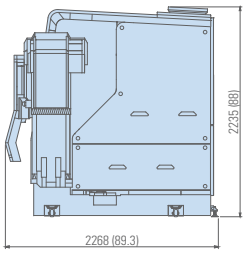
FRONT VIEW



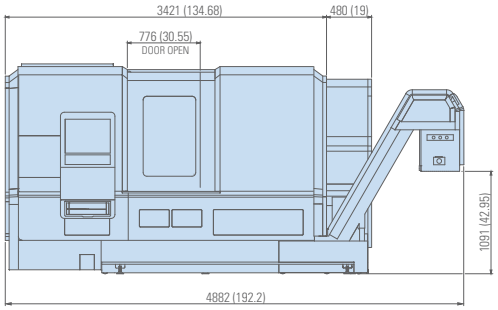
TOP VIEW

*Smaller layout swarf conveyor / ** Larger layout swarf conveyor

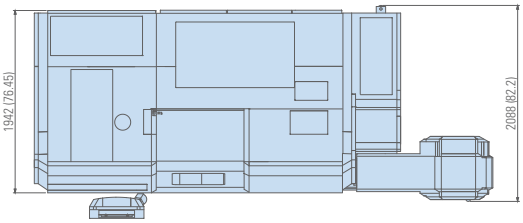
ROMI GL 250Y / GL 250S / GL 300Y / GL 300S



SIDE VIEW

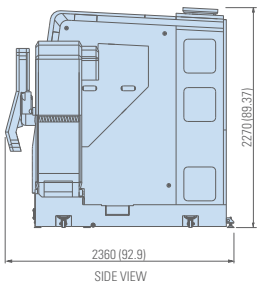


FRONT VIEW

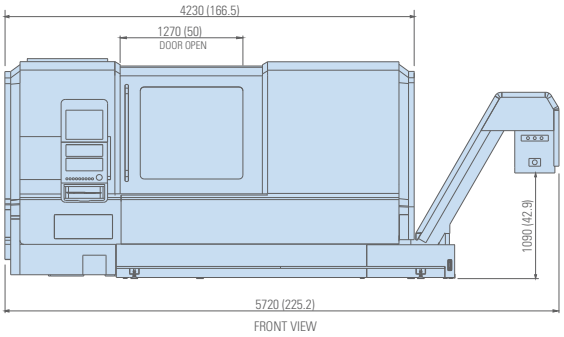


TOP VIEW

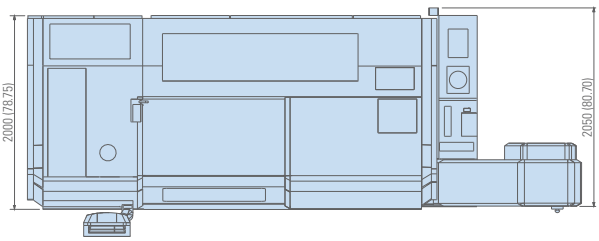
ROMI GL 350 / GL 350M / GL 450 / GL 450M



SIDE VIEW

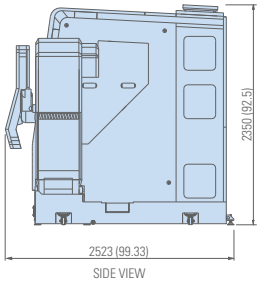


FRONT VIEW

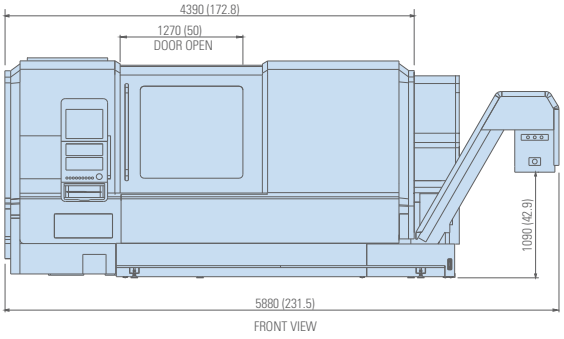


TOP VIEW

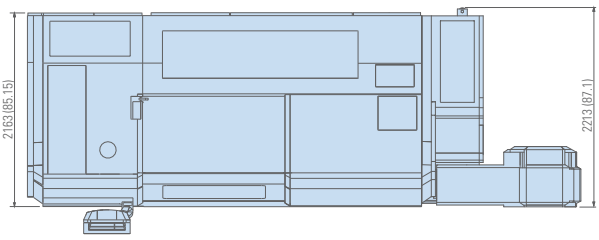
ROMI GL 350Y / GL 450Y



SIDE VIEW



FRONT VIEW



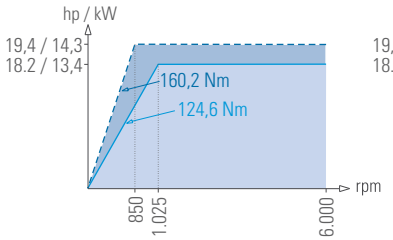
TOP VIEW

Designs are not in scale

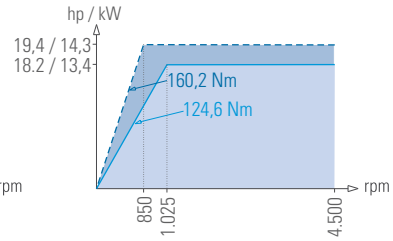
Power graphs

ROMI GL 250

Headstock ASA A2-5" - 6,000 rpm

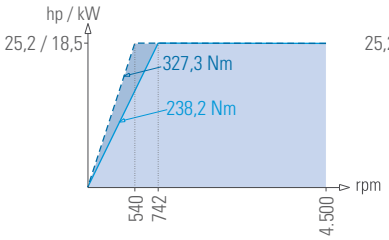


Headstock ASA A2-6" - 4,500 rpm

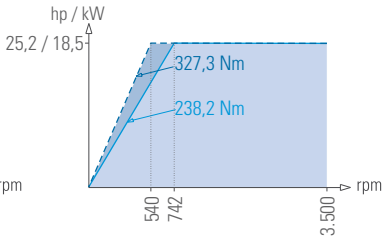


ROMI GL 300

Headstock ASA A2-6" - 4,500 rpm

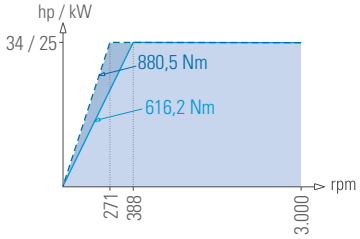


Headstock ASA A2-8" - 3,500 rpm

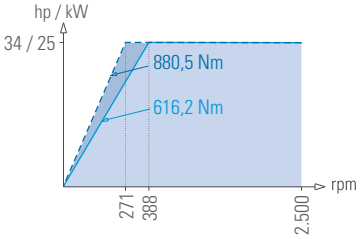


ROMI GL 350

Headstock ASA A2-8" - 3,000 rpm

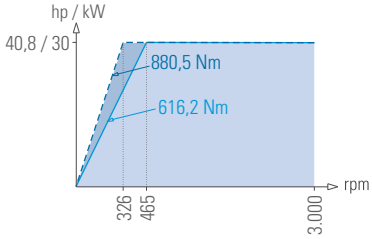


Headstock ASA A2-11" - 2,500 rpm

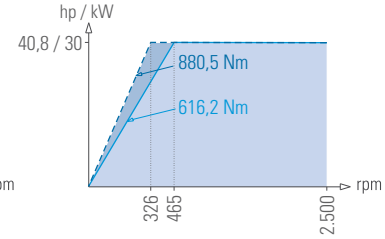


ROMI GL 450

Headstock ASA A2-8" - 3,000 rpm



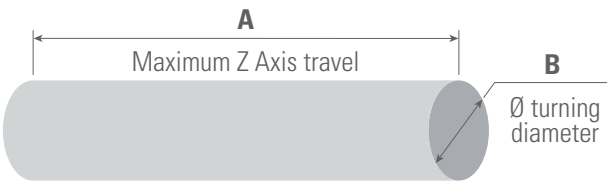
Headstock ASA A2-11" - 2,500 rpm



Continuous regime S1
Intermittent regime S6-40%

Graphics are not in scale

Capacities - dimensions in mm (in)



	A	B
ROMI GL 250	600 (23.6)	280 (11)
ROMI GL 250M / Y / S	600 (23.6)	250 (9.84)
ROMI GL 300	600 (23.6)	330 (13)
ROMI GL 300M / Y / S	600 (23.6)	300 (11.8)
ROMI GL 350	1200 (47.2)	410 (16.14)
ROMI GL 350M / Y	1200 (47.2)	350 (13.77)
ROMI GL 450	1200 (47.2)	490 (19.3)
ROMI GL 450M / Y	1200 (47.2)	450 (17.7)

FANUC 0i-TF *i*-HMI CNC
ROMI GL 250 / GL 300 / GL 350 / GL 450
Versions T / M / Y

1 - Resources:
. 15" Touchscreen LED monitor
. Qwerty keyboard
. Operation panel
. Stylus (Touch pen)
. Look-ahead blocks = 20
. Minimum Increment Positioning 0.001 mm or inches and 0.0001°
. Simultaneous control of up to 4 axes
. Stroke limit check before movement
. Linear Interpolation (G01)
. Circular Interpolation Multi-Quadrante (G02 and G03)
. Helical Interpolation (G02 and G03 w/ X, Y, Z simultaneous)
. Y Axis angular control (requires installed Y Axis)
. Helical interpolation (G02 and G03 w/ X, Y, Z simultaneous) (standard for Y versions)* Data protection with 4 access levels
. PCMCIA Interface (SRAM card)
. Puncher interface RS-232 (2 channels)*
. Interface Ethernet Embedded 10Mb
. Interface USB
. Automatic data backup
. Programmed Codes (T, S, M, F)
. Parts number display
. Clock
. Calculator
. Machining cycle time (not available in DNC mode)
. Interpolated pitch error compensation
. "Bell-Shaped" acceleration/deceleration for rapid traverse
. Linear acceleration/deceleration after interpolation for rapid traverse
. Block overlay in rapid traverse
. Power Mate Manager
. Machine Lock
. Travel limit through software
. Interlocking
. Backlash compensation
. Torque Limit Skip
. Languages (Portuguese, English, German, French, Italian, Spanish)
. Selection function for energy saving levels
. 15"* Anti-glare protective film

2 - Programming Resources:
. Thread cutting
. Thread repair
. Thread with spherical male thread
. Variable Pitch Thread
. Tool retract during thread cutting
. Programmable Return for up to 4 reference positions (G28, G30 e G53)
. Prevention of programming errors

3 - Feedrate Functions:
. Feed in mm/min or inches/min (G94)
. Feed per rotation, mm/rot or inches/rot (G95)
. Dwell time G04
. X / Z / Y axes linear scale*

4 - Graphic Functions:
. Machining graphic display – 2D
. Machining graphic display – 3D
. Removal of residual material

5 - Coordinate Systems:
. Local Coordinate System Setting (G52)
. Machine Coordinate System Selection (G53)
. Workpiece Coordinate System (G54~G59)
. Workpiece Coordinate Preset (G92, G92.1)
. Tool Geometry and Wear Compensation = 100

6 - Coordinate Values and Dimensions:
. Coordinate System Shift
. Programmable in Absolute Mode (G90) or Incremental Mode (G91)
. Inch/Metric Conversion (G20, G21)
. Coordinate System Rotation (requires installed Y axis)*
. Transfer Zero Point
. Mirror Image
. Programmable in radius or diameter
. Programmable Data Input (G10)

7 - Spindle Functions:
. C Axis Control
. Constant Surface Speed Control (G96)
. Spindle Speed Function in RPM (G97)
. Monitoring of current Spindle Speed
. Fixed position stop of active tool**

8 - Applied Tool Functions:
. Tool Radius Compensation G40, G41 and G42)
. Input Relative Corrector Tool [INPUT C]
. Direct Measurement of Corrector Tool
. Tool Life Management
. Screens for Tool Length Measurement – Manual i-HMI Mode

9 - Macro:
. Macro B (User Macro)
. Addition to variables for Macro B
. Macro Executor
. Memory for application in "Macro Executor" and Fanuc Picture (Mb) = 6MB

10 - Simplification Program Functions:
. Finishing Cycle (G70)
. Stock Removal in Turning (G71)
. Stock Removal in Milling (G72)
. Contour Machining (G73)
. Peck drilling along the Z axis (G74)
. Programming of dimensions directly from the drawing
. Drilling / boring (G83, G85)
. Rigid Tapping (M29 + G84, G88)
. Retraction for rigid tapping
. Cylindrical Interpolation (G07.1)**
. Polar Coordinate Interpolation (G12.1, G13.1)
. Thread Opening with Multiple Entries (G76)
. Multiple Repetitive Turning Cycle (Type II)
. Character engraving cycle**
. Polygon Turning (G50.2, G51.2)**
. Thread Opening Cycle (G78)
. Milling cycle (G79)

11 - Programming Format:
. Programming Format Command ISO Fanuc-10 / 11
. Conversational Programming i-HMI
. Parameter Configuration

12 - Execution Operations:
. Number / Program Research
. Program Comments
. Sub-program Call
. MDI Operation ("Memory Data Input")
. Automatic Operation
. Block to block Operation
. Program Stop (M00)
. Optional Stop (M01)
. Omission Block ("/") and Omission Block Extension ("/")
. Restart during program execution
. DNC Function
. Program Test Function
. Dry Run Function
. Reset Axes
. Jump "High Speed Skip"
. Spindle Controller Speed Key
. Tool Return and Manual Intervention
. Family A, B and C (G Codes)
. Search Block "N" Program
. Extend Part Program Editing
. Background Editing
. Number of Programs in Memory (400)
. Number of Programs in Memory (1000)*
. Interface for Ethernet Data Server*
. Memory space assigned to the user = 2 Mbytes (5120 m of Tape)
. Manual Handle Feed (MPG)
. JOG Feed
. Key Speed Control of Spindle

13 - Maintenance Functions:
. Course Limits
. Security area for jaw chuck and center
. Emergency functions
. Alarm messages
. Alarm History
. Operating history
. Periodic Maintenance
. Analysis of behavior System of Servomechanism
. User support
. Diagnosis Screen
. Maintenance Screen
. Integrated Safety System via Dual Check Safety
. Power consumption monitoring

*optional **for versions with driven tools

CNC FANUC 32i-B *i*-HMI
ROMI GL 250 / GL 300
S Version

1 - Resources
. 19" Touchscreen LED monitor
. Qwerty keyboard
. Operation panel
. Stylus (Touch pen)
. Look-ahead blocks = 20
. Minimum Increment Positioning 0.001 mm or inches and 0.0001°
. Simultaneous control of up to 4 axes
. Stroke limit check before movement
. Linear Interpolation (G01)
. Circular Interpolation Multi-Quadrante (G02 and G03)
. Helical interpolation (G02 and G03 w/ X, Y, Z simultaneous)
. Y Axis (angular control)
. Data protection with 4 access levels
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. Puncher Interface RS-232 (2 channels)*
. Interface Ethernet Embedded 10Mb
. Interface USB
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. Parts number display
. Clock
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. Machining cycle time (not available in DNC mode)
. Interpolated pitch error compensation
. "Bell-Shaped" acceleration/deceleration for rapid traverse
. Linear acceleration/deceleration after interpolation of rapid traverse
. Block overlay in rapid traverse
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. Machine lock
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. Interlocking
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. Programmable in Absolute Mode (G90) or Incremental Mode (G91)
. Inch/Metric Conversion (G20, G21)
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. Mirror Image
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. Spindle Speed Function in RPM (G97)
. Monitoring of current Spindle Speed
. Fixed position stop of active tool**
. Spindle synchronization

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. Polar Coordinate Interpolation (G12.1, G13.1)
. Thread Opening with Multiple Entries (G76)
. Multiple Repetitive Turning Cycle (Type II)
. Character engraving cycle**
. Polygon Turning (G50.2, G51.2)**
. Thread Opening Cycle (G78)
. Milling cycle (G79)
. External / Internal Turning Cycle (G77)

11 - Programming Format:
. Programming Format Command ISO Fanuc-10 / 11
. Conversational Programming i-HMI
. Parameter Configuration

12 - Execution Operations:
. Number / Program Research
. Program Comments
. Sub-program Call
. MDI Operation ("Memory Data Input")
. Automatic Operation
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. Optional Stop (M01)
. Omission Block ("/") and Omission Block Extension ("/")
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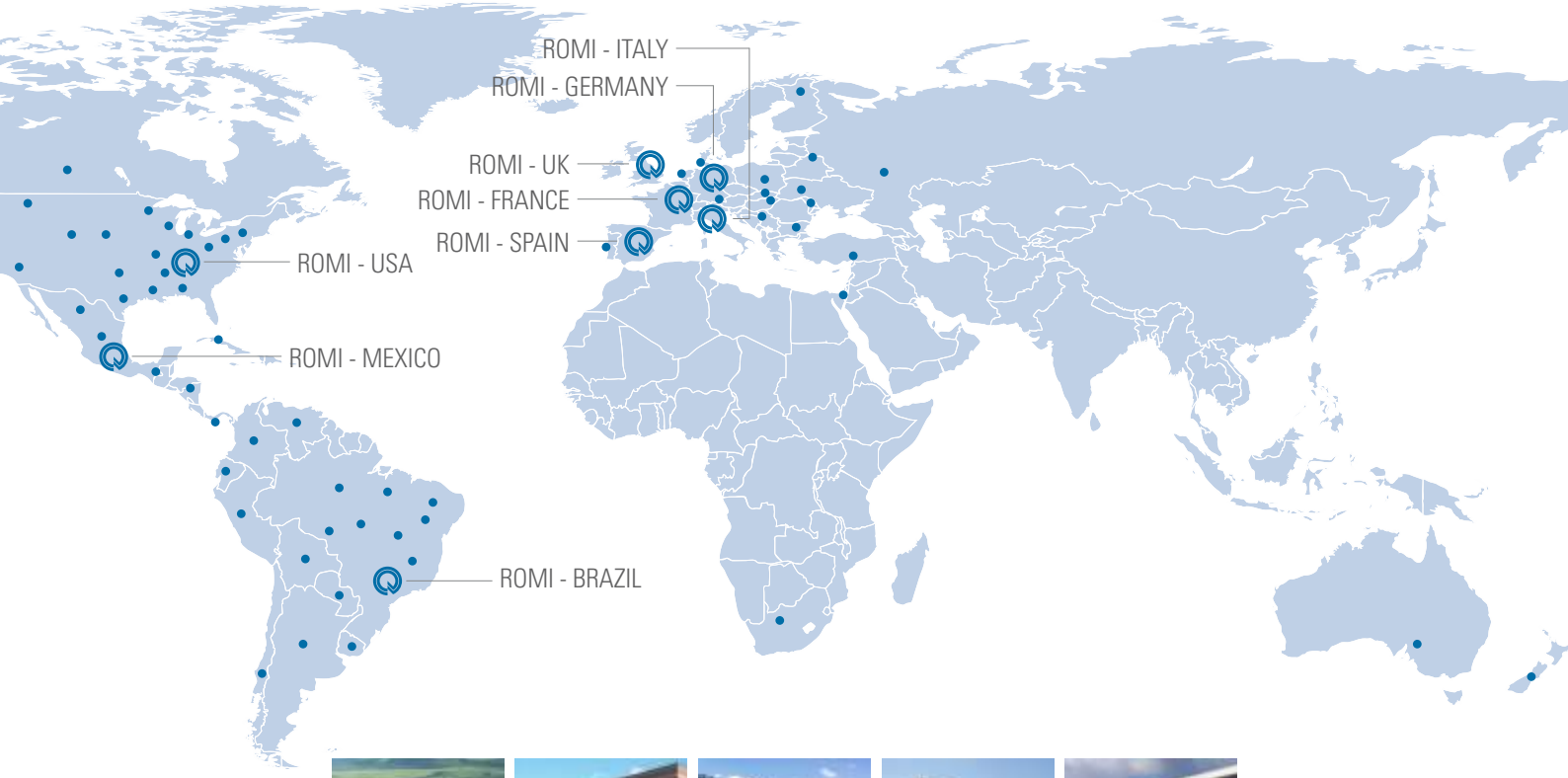
. User support
. Diagnosis Screen
. Maintenance Screen
. Integrated Safety System via Dual Check Safety
. Power consumption monitoring

*optional **for versions with driven tools

WORLDWIDE PRESENCE




Brazil


United States


Germany


England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Germany - B+W

ROMI | WWW.ROMI.COM

Indústrias Romi SA
Rod. SP 304, Km 141,5
Santa Bárbara d'Oeste SP
13453 900 Brazil
+55 (19) 3455 9000

Ventas América Latina
+55 (19) 3455 9800
export-mf@romi.com

Burkhardt+Weber Fertigungssysteme GmbH
Burkhardt+Weber-Strasse 57
72760 Reutlingen, Germany
+49 7121 315-0
info@burkhardt-weber.de
www.burkhardt-weber.de

ROMI Machine Tools, Ltd
1845 Airport Exchange Blvd
Erlanger KY - 41018 USA
+1 (859) 647 7566
sales@romiusa.com
www.romiusa.com

ROMI Europa GmbH
Burkhardt+Weber-Strasse 57
72760 Reutlingen, Germany
+49 7121 315-604
sales@romi-europa.de
www.romi-europa.de

ROMI France SAS
Parc de Genève, 240
Rue Ferdinand Perrier 69800
ST Priest
+33 4 37 25 60 70
infos@romifrance.fr
www.romifrance.fr

ROMI Machines UK Limited
Leigh Road
Swift Valley Industrial Estate
Rugby CV21 1DS
+44 1788 544221
sales@romiuk.com
www.romiuk.com

ROMI Máquinas España
Calle Comadrán, 15
Pol. Ind. Can Salvatela
C.P. 08210 - Barberà del Vallès
+34 93 719 4926
info@romi.es
www.romi.es

ROMI en México
Campos Elíseos 385-B Piso 5
Col. Polanco Chapultepec
C.P. 11560 - Del. Miguel Hidalgo
Ciudad de México
ventasmx@romi.com

ROMI Italia Srl
Via Morigi, 33 -29020
Gossolengo (PC) - Italia
+39 0523 778 956
commerciale@romiitalia.it
www.romiitalia.it

ISO 9001:2015
Certificate No. 31120

ISO 14001:2015
Certificate No. 70671

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Check availability and technical characteristics of the products to your country.

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