TURNING CENTRES RONIGL SERIES NEW GENERATION





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In the constant transformation of industrial processes, 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 its production process, mainly by means of modern, fast and precise machine tools, raises production performance.

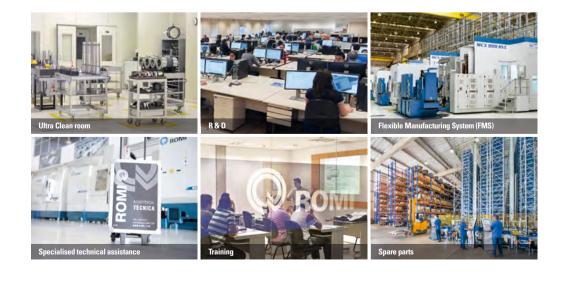
You get higher quality, productivity, efficiency and the best: higher profits than already achieved in your business!

With more than 90 years of history and global presence, we have preserved the values that have made our products recognised worldwide. **We offer the most cost-effective machine tools on 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 purchase through our sales and sales engineering teams, customer training, specialised technical assistance and spare parts.

Having a Romi machine tool assures that you have state of the art equipment combined with a reputation of value, providing a high resale value in the future.

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.



MUCH MORE PRODUCTIVITY AND PROFITABILITY FOR YOUR BUSINESS!

ROMIGL SERIES

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 cv / 14.3 kW
Max. turning diameter*	up to 282mm
Rapid traverse X/Z	30m/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
Rapid traverse X/Z	30m/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
Rapid traverse X/Z	30m/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
Rapid traverse X/Z	30m/min

STRUCTURE

ROBUSTNESS AND TECHNOLOGY

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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

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• High rigidity and long durability

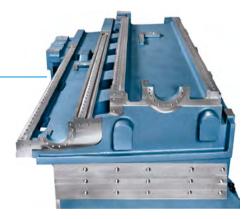
THERMAL COMPENSATION

System developed to reduce the effects of thermal expansion. In this way, stable, dimensional results are obtained even during long working periods.

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



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



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

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

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HEADSTOCK HIGH PERFORMANCE AND PRECISION

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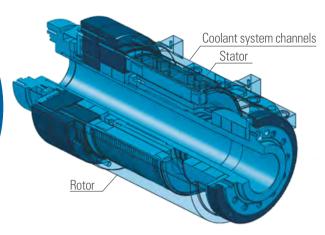
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Offers huge power and torque; has a cooling system which brings great thermal and geometric stability to the assembly. High precision spindle is designed to withstand high machining forces and high speeds with continuous variation.

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

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12-station turret for fixed tools, with Romi disk



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



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.

SECOND HEADSTOCK

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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).



CNC TECHNOLOGY AND RELIABILITY





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.

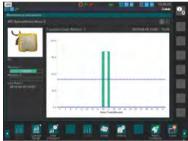
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1 12	12	Alexer Dis	144	Date of the	tion Ports	

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.



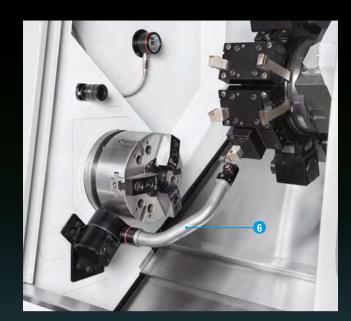


Types of chips		Short thin chips	Material				
Model	Curled or long chips		Steel	Aluminum	Non-ferrous metals (bronze and brass)	Cast iron	
TCE (Longitudinal Hinged belt chip conveyor)	0	Х	\bigcirc	Х	Х	х	
TCA (Longitudinal Drag belt chip conveyor)	Х	0	0	0	0	0	

TCA: chips smaller than 0.5 mm may contaminate the coolant tank and require frequent cleaning / chip clusters or chips larger than 50 mm may lock the conveyor TCE: short chips smaller than 5 mm may contaminate the coolant tank and require frequent cleaning

- 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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CapacityN N	Technical Specifications		ROMI GL 250	ROMI GL 300	ROMI GL 350	ROMI GL 450
Maxmulting semilarity consideredMarely 4.200Marely 4.200 <td>Capacity</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Capacity					
The second part of the secon		mm	T = 282	T = 330	T = 410	T = 490
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Single Abrill man (Abr)AthAthSingle Ath	Swing diameter over Z axis cover	mm	530	530	660	660
Image March em L'Arad's 100 /M -135 L'Arad's 100 /M -135 Q 20 225 Inval I Askaj mm 0.00 002 1.203 1.203 Inval I Askaj mm 9.40 9.43 1.203 1.203 Inval I Askaj mm 9.40 9.43 1.100 1.100 Sinden Instantor Social I haskitski mm 9.40 9.42 1.100 1.100 Sinden Instantor mm 6.173 7.758 1.047/13 1.030 8.00 Sinden Instantor mm 100.1758 (2012) 210 et 24/24 1.024/131, 300 et 40.00 100.07500 30.00 /7500	Swing diameter over X table	mm	420	420	530	530
Imagemm6009001.001.00Travel Insistok or second headented)mm5005431.1631.163Insel Insistok or second headented)mm5005431.1631.163Insel Insistok or second headented)ASAA2.5° /A2.6°A2.5° /A2.7°A2.4° /A2.1°ImageSpelind hold attambermm61/7373.68500 / A0.1°200 ar 264 / 263200 ar 284 / 264200 ar	Swing diameter over Y table (with Y=0)	mm	400	400	500	500
Tare (f Xis)mm5.00+ 50	Travel (X Axis)	mm	T, Y and S = 160 / M = 195	T, Y and S = 185 / M = 230	230	255
Image <br< td=""><td>Travel (Z Axis)</td><td>mm</td><td>600</td><td>600</td><td>1,200</td><td>1,200</td></br<>	Travel (Z Axis)	mm	600	600	1,200	1,200
in term in	Travel (Y Axis)	mm	± 50	± 50	± 75	± 75
	Travel (tailstock or second headstock)	mm	540	540	1,160	1,160
Sindle noiseASAAD-37 / AD-37AD-37 / AD-37AD-37 / AD-37Spindle hole dumetermm51 / 73 / 7373 / 85106 / 113Spindle hole dumetermm42 or 51 / 51 e 6451 or 64 / 64 or 75Note 30 / 85 or 12Maximum bac capacitymm42 or 51 / 51 e 6451 or 64 / 64 or 75Note 30 / 85 or 74 / 75Second Headstockmm60.00 / 450043.00 / 350030.00 / 750Spindle hole dienotesmm6111Spindle hole dienotesmm6111Spindle hole dienotesmm6111Spindle hole dienotesmm6111Spindle hole dienotesmm1011Spindle hole dienotesmm1011Spindle hole dienotesmm3011Spindle hole dienotesmm3011Spindle hole dienotesm/min5011Spindle hole dienotesm/minT, M Y = 10 / S = 1811Spindle hole dienotesm/minT, M Y = 10 / S = 1811Spindle hole dienotesm/min10111Spindle hole dienotesm/min10111Spindle hole dienotesm/min101111Spindle hole dienotesm/min101111Spindle hole die basicolo no second headstolom/min10111	Headstock					
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Name incrusionnmNo 	Spindle hole diameter	mm	61 / 73	73 / 85	104 ,	/ 116
Speed rangerpm6.000 / 4.5004.500 / 3.5003.000 / / 2.500Scacard	Chuck diameter	mm	165, 175 or 210 / 210	210 or 254 / 254	254 or 315 / 3	315, 390 or 450
Second Meadstock bulk dimension with the dimension of the di	Maximum bar capacity	mm	42 or 51 / 51 or 64	51 or 64 / 64 or 76	76 or 89 /	' 89 or 102
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Turnet for fixed tools) type Romi Tool holder type Romi <	Number of tools / stations	pc.				
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Tool section: bar mm 0.32 0.40 0.40 0.50 Axial/radial driven tool holder DIN 6499 M: ER-25 (01 - 013mm) M: ER-32 (02 - 020mm) ER-32 (02 - 020mm) ER-40 (03 - 026mm) Speed range for driven tool rpm 0.6000 0 - 4,000 0 - 0,000 0 - 4,000 0 - 0,000 0 - 0,000 0 - 0,000 0 - 0,000 0 - 0,000 0 - 0,000 0 - 0,000 0 - 0,000 0 - 0,000 0 - 0,000 0 - 0,000 0 - 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000	M or T Turret (for driven tools)					
Axia/radial driven tool holder DIN 6499 M: ER-25 (01 - 013mm) M: ER-32 (02 - 020mm) ER-32 (02 - 020mm) ER-40 (03 - 026mm) Speed range for driven tool rpm 0 - 6,000 0 - 4,000 <td>Tool holder</td> <td>type</td> <td></td> <td></td> <td></td> <td></td>	Tool holder	type				
Axial/radial driven tool model Din Veaso Y: ER-20 (01 - 013mm) Y: ER-25 (01 - 016mm) ER-32 (02 - 0201ml) ER-40 (03 - 0201ml) Speed range for driven tool rpm 0 - 6,000 0 - 4,000 0 - 4,000 0 - 4,000 Minimum allowed motor torque (continuum regime) Nm 18 30 30 40 Y Turret (for driven tools) for S versions (with counter spindle) V BMT 45 BMT 55 - - Tool holder type BMT 45 BMT 55 - - - Axia/radial driven tool holder DIN 6499 ER-20 (01 - 016mm) ER-25 (01 - 016mm) - - - Speed range for driven tool mm 0 32 0 40 -<	Tool section: bar	mm			Ø 40	Ø 50
Minimum allowed motor torque (continuum regime)Nm18303040 V Turret (for driven tools) for S versions (with counter spindle)<	Axial/radial driven tool holder	DIN 6499			ER-32 (Ø2 - Ø20mm)	ER-40 (Ø3 - Ø26mm
Y Turret (for driven tools) for S versions (with counter spindle) BMT 45 BMT 55 - Tool holder type BMT 45 BMT 55 - - Tool section: bar mm Ø 32 Ø 40 - - Axial/radial driven tool holder DIN 6499 ER-20 (Ø 1- Ø 16mm) ER-25 (Ø 1- Ø 16mm) - - Speed range for driven tool pm 0 ~ 6,000 0 ~ 4,000 - - - Minimum allowed motor torque (continuum regime) Nm 18 30 - - Automatic tailstock (servodriven) Nm 18 30 - - Maximum axial fore kgf 300 500 700 1,000 Power 30 50 700 1,94,143 AC Right motor (intermitten regime - built-in) hp / kW 194,114.3 34,25 34,25 40,8,30 AC Right motor (intermitten regime - built-in) hp / kW 30 40 45 50 Total installed power (T/M and Y versions) KA	Speed range for driven tool	rpm	0 ~ 6,000	0 ~ 4,000	0 ~ 4,000	0 ~ 4,000
Tool holder type BMT 45 BMT 55 - Tool section: bar mm 0 32 0 40 - Axial/radial driven tool holder DIN 6499 ER-20 ($01 - 016$ mm) ER-25 ($01 - 016$ mm) - Speed range for driven tool rpm $0 - 6,000$ $0 - 4,000$ - - Minimum allowed motor torque (continuum regime) Nm 18 30 - - Automatic tailstock (servodriven) Mm 18 30 - - Tool polder MT-4 MT-4 built-in built-in built-in Maximum axial force kgf 300 500 700 1,000 Power 19.4 / 14.3 19.4 / 14.3 19.4 / 14.3 19.4 / 14.3 AC Right motor (intermittent regime - built-in) hp / kW 19.4 / 14.3 19.4 / 14.3 19.4 / 14.3 19.4 / 14.3 Total installed power (T/M and Y versions) kVA 30 40 45 50 Dimensions and weights (approx.) kg 4,800 <td< td=""><td>Minimum allowed motor torque (continuum regime)</td><td>Nm</td><td>18</td><td>30</td><td>30</td><td>40</td></td<>	Minimum allowed motor torque (continuum regime)	Nm	18	30	30	40
Tool section: barM M M M M M M M MM M	Y Turret (for driven tools) for S versions (with cou	nter spindle)				
Axia/radial driven tool holder DIN 6499 ER-20 (01 - 016mm) ER-25 (01 - 016mm) - - Speed range for driven tool rpm 0 ~ 6,000 0 ~ 4,000 - - Minimum allowed motor torque (continuum regime) Nm 18 30 - - Automatic tailstock (servodriven) Nm 18 30 - - Maximum axial force kgf 300 500 700 1,000 Power 30 500 700 1,000 AC Right motor (intermittent regime - built-in) hp / kW 19.4 / 14.3 19.4 / 14.3 19.4 / 14.3 AC Right motor (intermittent regime - built-in) hp / kW 19.4 / 14.3 19.4 / 14.3 19.4 / 14.3 AC Right motor (intermittent regime - built-in) hp / kW 30 40 45 50 Total installed power (T/M and Y versions) kVA 30 40 45 50 Total installed power (S versions) kVA 45 5200 7,300 7,700 GL 250 / E E	Tool holder	type		BMT 55	-	-
Speed range for driven tool rpm $0 \sim 6,000$ $0 - 4,000$ - - Minimum allowed motor torque (continuum regime) Nm 18 30 - - Automatic tailstock (servodriven) MT-4 MuT-4 built-in built-in Taper hole for body positioning kgf 300 500 700 1,000 Power 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 19.4/14.3 19.4/14.3 AC Right motor (intermittent regime - built-in) hp / kW 19.4/14.3 19.4/14.3 19.4/14.3 19.4/14.3 AC Right motor (intermittent regime - built-in) kVA 30 40 45 50 Total installed power (T/M and Y versions) kVA 30 40 45 50 Identifies weight (without chip conveyor)* kg 4,800 5,200 7,300 7,700 Tand M versions Y and S versions Cal 350 / E Versions	Tool section: bar	mm	Ø 32	Ø 40	-	-
Minimum allowed motor torque (continuum regime)Nm1830Automatic tailstock (servodriven)Taper hole for body positioningMT-4MuT-4built-inMaximum axial forcekgf3005007001,000PowerAC Main motor (intermittent regime - built-in)hp / kW19.4 / 14.325.2 / 18.534 / 2540.8 / 30AC Main motor (intermittent regime - built-in)hp / kW19.4 / 14.319.4 / 14.319.4 / 14.319.4 / 14.3Total installed power (T/M and Y versions)kVA30404550Total installed power (S versions)kVA4550Machine weight (without chip conveyor)*kg4,8005,2007,3007,7007,700Tand M versionsY and S versionsY and M versionsY eversionsHeightmm2,0092,2352,2702,350	Axial/radial driven tool holder	DIN 6499		ER-25 (Ø1 - Ø16mm)	-	-
Automatic tailstock (servodriven)MT-4Muti-inbuilt-inTaper hole for body positioningMT-4MT-4built-inbuilt-inMaximum axial forcekgf3005007001,000PowerAC Main motor (intermittent regime - built-in)hp / kW19.4 / 14.325.2 / 18.534 / 2540.8 / 30AC Main motor (intermittent regime - built-in)hp / kW19.4 / 14.319.4 / 14.319.4 / 14.319.4 / 14.3AC Right motor (intermittent regime - built-in)hp / kW19.4 / 14.319.4 / 14.319.4 / 14.319.4 / 14.3Total installed power (T/M and Y versions)kVA30404550-Dimensions and weights (approx.)Kg4,8005,2007,3007,700GL 250 / GL 30CL 350 / GL 350 /	Speed range for driven tool	rpm	0 ~ 6,000		-	-
Taper hole for body positioningMT-4Muilt-inbuilt-inMaximum axial forcekgf3005007001,000PowerAC Main motor (intermittent regime - built-in)hp / kW19.4 / 14.325.2 / 18.534 / 2540.8 / 30AC Right motor (intermittent regime - built-in)hp / kW19.4 / 14.319.4 / 14.319.4 / 14.319.4 / 14.3Total installed power (T/M and Y versions)kVA30404550Total installed power (S versions)kVA4550CL 250 / L 3007,3007,700CL 250 / L 307,3007,700CL 250 / L 307,3007,700Machine weight (without chip conveyor)*kg4,8005,2007,3007,700CL 250 / L 30CL 350 / L 350L 30Y versionsMachine weight (without chip conveyor)*kg4,8005,2007,3007,700CL 250 / L 350CL 350 / L 350L 30Y versionsL	Minimum allowed motor torque (continuum regime)	Nm	18	30	-	-
Maximum axial force kgf 300 500 700 1,000 Power V V 94,714.3 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 19.4/14.3 19.4/14.3 AC Right motor (intermittent regime - built-in) hp / kW 19.4/14.3 19.4/14.3 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.) kg 4,800 5,200 7,300 7,700 Machine weight (without chip conveyor)* kg 4,800 5,200 7,300 7,700 Item M versions Y and S versions T and M versions Y and S versions Y and S versions Height mm 2,009 2,235 2,270 2,350	Automatic tailstock (servodriven)					
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.	Taper hole for body positioning			MT-4	built-in	
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	Maximum axial force	kgf	300	500	700	1,000
AC Right motor (intermittent regime - built-in) hp / kW 19.4 / 14.3	Power					
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.) KVA 45 5,200 7,300 7,700 Machine weight (without chip conveyor)* kg 4,800 5,200 7,300 7,700 GL 250 / GL 300 GL 350 / GL 350 / GL 350 Height mm 2,009 2,235 2,270 2,350	AC Main motor (intermittent regime - built-in)	hp / kW	19.4 / 14.3	25.2 / 18.5	34 / 25	40.8 / 30
KVA 45 50 - Dimensions and weights (approx.) kg 4,800 5,200 7,300 7,700 Machine weight (without chip conveyor)* kg 4,800 5,200 7,300 7,700 GL 250 / GL 300 GL 350 / GL 450 F and M versions Y and S versions T and M versions Height mm 2,009 2,235 2,270 2,350	AC Right motor (intermittent regime - built-in)	hp / kW	19.4 / 14.3	19.4 / 14.3	19.4 / 14.3	19.4 / 14.3
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 300 7,700 CL 250 / GL 300 GL 350 / GL 300 Yersions Yersions Y and Yersions Yersions Aleight Mm 2,209 2,205 2,270 2,350	Fotal installed power (T/M and Y versions)	kVA	30	40	45	50
Machine weight (without chip conveyor)* kg 4,800 5,200 7,300 7,700 GL 250 / GL 300 GL 350 / GL 350 / GL 350 / GL 350 T and M versions Y and S versions T and M versions Y versions Height mm 2,009 2,235 2,270 2,350	Total installed power (S versions)	kVA	45	50	-	-
GL 250 / GL 300 GL 350 / GL 450 T and M versions Y and S versions T and M versions Y versions Height mm 2,009 2,235 2,270 2,350	Dimensions and weights (approx.)					
T and M versionsY and S versionsT and M versionsY versionsHeightmm2,0092,2352,2702,350	Machine weight (without chip conveyor)*	kg	4,800	5,200	7,300	7,700
Height mm 2,009 2,235 2,270 2,350			GL 250	/ GL 300	GL 350	/ GL 450
•			T and M versions	Y and S versions	T and M versions	Y versions
Area (front x side) (*) mm 2,927 x 2,019 3,901 x 2,268 4,230 x 2,360 4,390 x 2,523	Height	mm	2,009	2,235	2,270	2,350
	Area (front x side) (*)	mm	2,927 x 2,019	3,901 x 2,268	4,230 x 2,360	4,390 x 2,523

*without chip conveyor

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 preloaded 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)
- Thermal Compensation
- 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 Plus i-HMI CNC with 15" Touchscreen LED colour monitor and integrated safety system (for T, M and Y versions)
- Fanuc 32i-B Plus 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 transducersvalvulas proporcionais e transdutores de pressão
- 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".

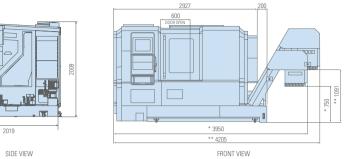
 (D) Must purchase also the accessory: "Bar feeder interface". The accessories: "Modular guide tube" and "Nylon discs set" are not included in the delivery and must be bought separately.
 (E) Only for power supply with voltage different than 380 Vca.
 (F) Contains the following parts: "Pneumatic cleaning system

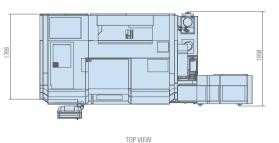
of jaw chucks" and "Linear scale".

 $\ensuremath{\textbf{(G)}}$ Must purchase also the accessory: "Mist exhausting system".

Machine dimensions - dimensions in mm

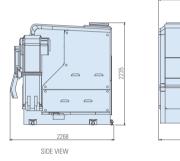
ROMI GL 250 / GL 250M / GL 300 / GL 300M

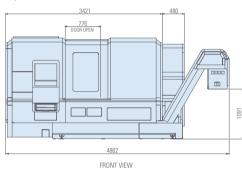


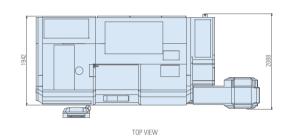


*Smaller layout swarf conveyor / ** Larger layout swarf conveyor

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







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

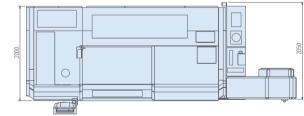


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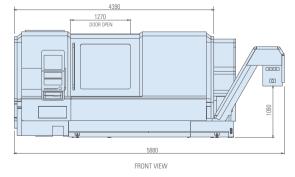
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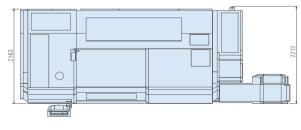


TOP VIEW

ROMI GL 350Y / GL 450Y





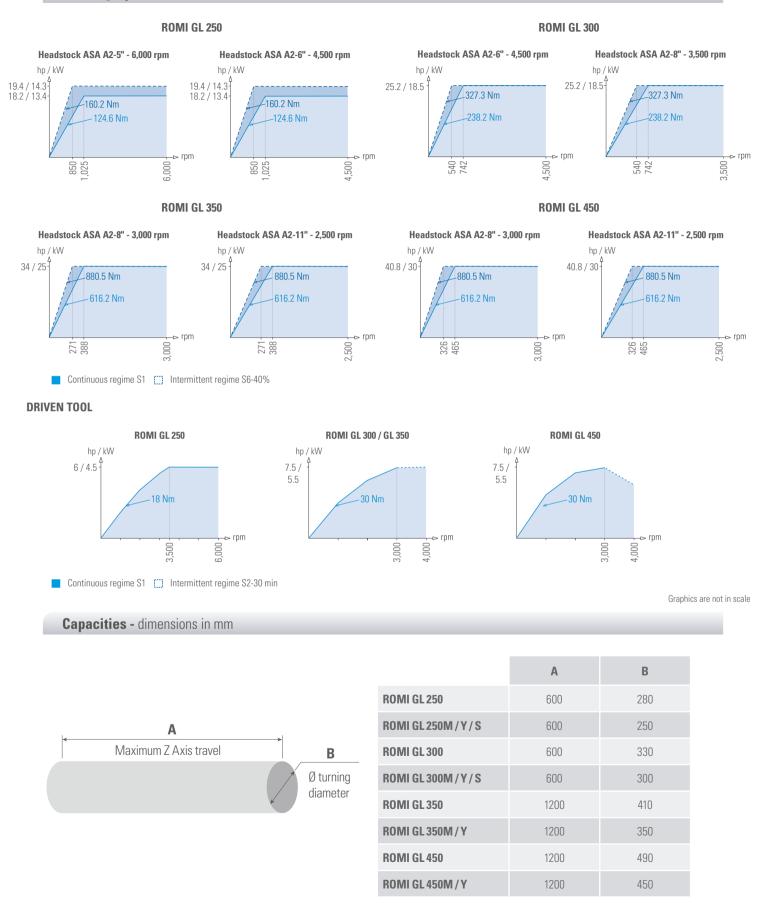


TOP VIEW

20



Power graphs



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



1 - Resources:

- 15" Touchscreen LED monitor
- Qwerty keyboard
- Operation panel
- 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)
- Y Axis angular control (requires installed Y Axis)
- Data protection with 4 access levels
- PCMCIA Interface (SRAM card)
- Interface Ethernet Embedded 10Mb
- Interface USB
- Automatic data backup
- Programmed Codes (T, S, M, F)
- Parts number display
- Clock
- 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

22

- Backlash compensation
- Languages (Portuguese, English, German,
- French, Italian, Spanish)
- Stylus (Touch pen)

2 - Programming Resources:

- Continuous Single Thread and Multi-entry (G33)
- Thread with spherical male thread
- Variable Pitch Thread (G34)

- 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)

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)
- Spindle Orientation (M19)
- Monitoring of current Spindle Speed

• Fixed position stop of active tool (Only for versions with driven tools)

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

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)
- Multi-entry Thread Cutting (G76)
- Multiple Repetitive Turning Cycle (Type II)
- Programming of dimensions directly from the drawing
- Drilling / boring (G83, G85)
- Rigid Tapping (M29 + G84, G88)
- Character engraving cycle (Only for versions

with driven tools)

- Retraction for rigid tapping
- Cylindrical Interpolation (G07.1) (Only for
- versions with driven tools)
- Interpolation in Polar Coordinate (G12.1, G13.1)
- Polygon Turning (G50.2, G51.2) (Only for

• Programming Format Command ISO

Conversational Programming i-HMI
Parameter Configuration

MDI Operation ("Memory Data Input")

• Omission Block ("/") and Omission Block

Restart during program execution

versions with driven tools)Thread Opening Cycle (G78)

• Milling cycle (G79)

Fanuc-10 / 11

11 - Programming Format:

12 - Execution Operations:

Program Comments

Automatic OperationBlock to block Operation

Program Stop (M00)

Optional Stop (M01)

Program Test Function

• Jump "High Speed Skip"

Spindle Controller Speed Key

• Family A, B and C (G Codes)

Search Block "N" Program

Background Editing

(5120 m of Tape)

• JOG Feed

Course Limits

Extend Part Program Editing

• Manual Handle Feed (MPG)

• Key Speed Control of Spindle

13 - Maintenance Functions:

• Emergency functions

Alarm messages

Operating history

Servomechanism

Diagnosis Screen

Maintenance Screen

• User support

Safety

Periodic Maintenance

Analysis of behavior System of

Power consumption monitoring

Integrated Safety System via Dual Check

Alarm History

Tool Return and Manual Intervention

Number of Programs in Memory (1000)

• Security area for jaw chuck and center

• Memory space assigned to the user = 2 Mbytes

Extension ("/")

DNC Function

Reset Axes

• Dry Run Function

Sub-program Call

• Number / Program Research

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



1 – Resources

- 19" Touchscreen LED monitor
- Owerty 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
- 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 of 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
- 19"* Anti-glare protective film

2 - Programming Resources:

- Thread Cutting
- Thread repair

*optional

• Programmable Return for up to 4 reference

** for versions with driven tools

positions (G28, G30 e G53)

- Thread repair
- Thread with spherical male thread
- Variable Pitch Thread
- Tool retract during thread cutting
- Prevention of programming errors

3 – Feedrate Functions:

- Feed in mm/min or inches/min (G94)
- Feed per rotation, mm/rot or inches/rot (G95)

Contour Machining (G73)

Character engraving cycle*

• Milling cycle (G79)

11 - Programming Format:

12 - Execution Operations:

Program CommentsSub-program Call

Automatic Operation

• Program Stop (M00)

Optional Stop (M01)

Program Test Function

• Jump "High Speed Skip"

Spindle Controller Speed Key

• Family A, B and C (G Codes)

Search Block "N" Program

Extend Part Program Editing
 Background Editing

Tool Return and Manual Intervention

• Number of Programs in Memory (1000)

• Interface for Ethernet Data Server

Security area for jaw chuck and center

Analysis of behavior System of Servomechanism

Integrated Safety System via Dual Check Safety

23

Manual Handle Feed (MPG)

• Key Speed Control of Spindle

3 - Maintenance Functions:

• Emergency functions

Alarm messages

Operating history

Periodic Maintenance

Alarm History

User support

Diagnosis Screen

Maintenance Screen

Power consumption monitoring

Course Limits

• Memory space assigned to the user = 4 Mbytes

• Dry Run Function

(10240m of tape)

• JOG Feed

Extension ("/")

• DNC Function

Reset Axes

Block to block Operation

Parameter Configuration

Number / Program Research

Polygon Turning (G50.2, G51.2)**
Thread Opening Cycle (G78)

• External / Internal Turning Cycle (G77)

Conversational Programming i-HMI

• MDI Operation ("Memory Data Input")

• Omission Block ("/") and Omission Block

Restart during program execution

Programming Format Command ISO Fanuc-10 / 11

Thread Opening with Multiple Entries (G76)

Multiple Repetitive Turning Cycle (Type II)

- 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 = 64

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 Y axis installed)*
- 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**
- Spindle synchronization

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)
- Peck drilling along the Z axis (G74)
- Programming of dimensions directly from the drawing

• Polar Coordinate Interpolation (G12.1, G13.1)

- Drilling / boring (G83, G85)
- Rigid Tapping (M29 + G84, G88)
- Retraction for rigid tapping
- Cylindrical Interpolation (G07.1)**

• Stock Removal in Turning (G71)

Stock Removal in Milling (G72)









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characteristics of the products to your country.

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