



# Romi G 50 M Price List

November 1, 2005

## Romi G 50 M and G 50 M HT High Torque High Performance Multi Axes CNC Turning Centers with GE-Fanuc 21i-T Conversational Control.

The Romi G 50 M incorporate the latest innovations in heavy duty turning. The G 50's are rugged slant bed lathes with solid ways, a 2,000 RPM spindle with integrated C axis, center distance of 51.2", a VDI 50 turret prepared for live tooling and high-speed axes drives for manufacturing a wide range of parts. The G 50 M HT incorporates a ZF gearbox for even more torque and speeds to 2,000 RPM

### Features include:

- Permanently lubricated high precision 2,000 RPM spindle
- **50 HP 30 minute duty rated** spindle motor
- **10 HP 30 minute duty rated** variable speed motor for live tools (**3-3,000 RPM**)
- VDI 50 Romi 12 Station "no rise" Turret, servo driven, hydraulically clamped
- Turret prepared for live tooling with 12 standard tool holders and 7 reduction sleeves
- Fast .7 second index time including unclamp and clamp
- One piece "L" shaped slant bed with solid way construction
- Absolute encoders, it is not necessary to "home" the machine
- .063" thick Turcite anti-friction material
- Double anchored X and Z ball screws, X axis is pre-tensioned
- Double nut ball screw construction for long life, dual flank pressure and thermal stability
- 945 IPM rapid traverse in Z and 708 IPM rapid traverse in X
- Bar Feeder Interface
- Automatic lubrication system with line filter
- Coolant system 100 PSI, 2.6 GPM, 2 HP
- Special inside cover cleaning system with separate pump
- Transformer 200-250 / 360-390 / 410-480V 50/60 HZ, 60 KVA
- Easily accessible work areas for maximum operating and service efficiency.

<b>Cutting Capacity:</b>	<b>G50 M</b>	<b>G50 M HT</b>
Swing over Z Cover		26"
Cutting Diameter		15.04 "
Cutting Length		51.2"
<b>Headstock:</b>		
Spindle Nose	A2-8"	A2-11"
Spindle bore diameter	4.1"	5.39"
Bar Capacity	3.54"	4.52"
Speed Range	2- 2,000 RPM	2-2,000 RPM
Spindle Drive (AC-30 minute rating)		50HP
Spindle Torque (30 minute rating)	510 lbf.	1,619 lbf.
Hydraulic 3-Jaw Chuck Diameter	12.4"	15.75"
<b>Travels and Feeds:</b>		
X-axis Travel		11.02"
Z-axis Travel		51.2"
X-axis Rapid Traverse		708 IPM
Z-axis Rapid Traverse		945 IPM
Maximum X-axis Thrust		5,515 lb

Maximum Z-axis Thrust 7,380 lb

**Accuracy:**

Positioning X-axis 160 millionths  
 Z-axis 310 millionths  
 Repeatability X-axis +/-40 millionths  
 Z-axis +/-80 millionths

**Tool Turret:**

Number of Tools 12  
 Type Electric Servo/Hydraulic Clamp  
 Tool Selection Bi-Directional  
 Index Time Next Station Incl. Unclamp and Clamp .64 second  
 Index Time 180° Includes Unclamp and Clamp 1.04 second  
 Indexing Accuracy +/- 8 arc seconds  
 Indexing Repeatability +/- 2 arc seconds

**Tool Capacity:**

Square 1 1/4"  
 Boring Bar 2"

**Tailstock:**

Programmable Tailstock Body Travel 45"  
 Quill Travel 5.1"  
 Quill Diameter 4.72"  
 Quill Taper 5 MT  
 Quill Thrust 1,400 lbf.

**Auxiliary Units:**

Coolant Tank Capacity 60 Gal.  
 Pump Horsepower 2  
 Rated Flow 2.6 GPM @ 100 PSI  
 Automatic Lubrication System LUBE 1/2 Gal. Reservoir  
 Hydraulic System 15.58 Gal.  
 Optional Chip Conveyor Side or Rear Exhaust

G50 Power Requirements		
3 Phase, 50/60 Hz		
Power (KVA)	Voltage (VAC)	Current (Amps)
57	200	160
	210	157
	220	150
	230	143
	240	137
	250	132
	360	91
	380	87
	390	84
	410	80
	420	78
	440	75
	460	72
	480	69

See the Electrical Diagrams for additional information.

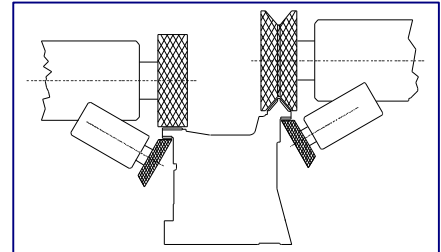
**Machine Parameters:**

Length 239.57"  
 Width 86.61"  
 Height 77.48"  
 Working Height 42.5"  
 Machine Weight 15,872 lbs.  
 X-Axis Ball Screw Diameter 1.42"  
 Z-Axis Ball Screw Diameter 1.77"  
 Power Requirement See Chart

## **Descriptions**

**Bed:** The bed is a one piece "L" shaped casting. The casting is poured in our own foundry to DIN 1691 standards. Our foundry is ISO 9002 certified and has been since 1994. The bed casting is heavily ribbed and provides excellent vibration dampening. The Romi "L" shaped design creates a rigid base fully supporting the headstock. The slant bed design provides good chip fall into the roll out chip pan or roll out chip conveyor.

**Guide ways:** The Z-axis moves on the slant bed which has an oversize inverted vee way and a rectangular way. This design has been used on precision grinding machines for many years. Romi's patented manufacturing process grinds all way surfaces in one set up for maximum machine accuracy. The Romi guide way and carriage system permits heavy cutting in both the clockwise and the counter clockwise direction. .063" Turcite on the underside of the carriage ensures minimum friction and long life. The bed ways and ball screws are isolated from chips and coolant by one stainless steel cover on each side of the carriage. Romi's machine design is ideal for heavy stock removal using either clockwise or counter-clockwise turning.



**Headstock:** The Romi headstock design anchors the spindle on thermal pads on both sides of the headstock. The headstock support casting is relieved directly under the spindle. As the spindle warms during startup it grows down as well as up. The maximum center line displacement is less than .0003". Additionally, the thermal pads isolate any heat from the rest of the machine structure. Spindle bearings are P4 (AFBMA-B7) double angular contact ball bearings and double row cylindrical roller bearings in front and P4 double roller bearings at the rear of the spindle.

**Carriage and Turret:** The carriage is a rugged 20 degree casting with a wide stance to eliminate any twisting due to cutting forces. The oversize vee guide way provides straight movement through the entire Z axis travel without gib adjustment. Two rectangular ways provide accuracy for X axis movement. Turret index is bidirectional, no rise, non-stop. The turret is driven by an electric servo motor and hydraulically clamped on a curvic coupling. The VDI 50 turret disc is designed for mounting I.D. or O.D. tools in any station. The turret disc and body are designed to give way under the stress generated in an accident, preventing damage to the spindle, ball screws, etc.

**Driven Tools** Powered by a 10 HP variable speed motor tools rotate at 3 to 3,000 RPM. Full horsepower is achieved at 1,500 RPM. Both axial and radial tool holders use ER- 40 collets.

**Ball Screws:** Ball screws are manufactured and ground by Romi where complete control over the accuracy and quality is insured. We are not dependent on commercially available products. The double ball nuts are large in width and diameter. The double nut design provides positive location by mating with both flanks of the screw at all times. This design also minimizes heat distortion. Thermal gauging or temperature reduction systems are not required. The Z axis ball screw is set nearer to rear way to put it at the center of the carriage. Both ball screws are anchored at both ends and directly mounted to the A.C. servos. No problematic clutches are used to weaken the connection. The X axis is pre-tensioned using P4 angular contact ball bearings.

**Tailstock:** The tailstock moves on vertically mounted, precision ground, vee and square ways. The body is positioned automatically over 21.38 or 45 inches and the quill is controlled by either

program or push button. Quill travel is 5.1 inches. The quill is 4.72 inches in diameter with a 5 MT. A built in live center is standard.

**Lubrication:** Automatic lubrication is standard. The lubrication reservoir is located in a protected inset in the front of the machine's sheet metal guarding. It is in plain sight and easy to refill, but it is protected from accidental damage. The reservoir has 1/2 gallon capacity.

**Guarding:** Romi uses 10 gauge, powder coated steel for all external guarding. In the back of the machining area there is a one piece stainless steel guard to guide chips and coolant into the chip conveyor. No accordion guards are used. The door is easy to open and close gliding on multiple rollers. The double overlapping seal ensures that coolant remains in the cutting area, not on your floor. A large safety window allows the operator to monitor machine operations.

**G 50 M Turning Center Includes as standard:**

ASA A2-8" spindle nose, with 4.1" (104 mm) diameter through hole  
Continuously variable spindle speed, from 2 to 2,000 rpm  
50 HP (37 kW) variable speed spindle motor  
12.4" (315 mm) hydraulically operated chuck with 3.54" (90 mm) bar capacity, one set soft jaws

**G 50 HT Turning Center Includes as standard:**

ASA A2-11" spindle nose, with 5.39" (137 mm) diameter through hole  
Continuously variable spindle speed from 1 to 2,000 rpm.  
Two-speed ZF gearbox 1-490 RPM and 2-2,000 RPM  
50 HP (37 kW) variable speed spindle motor  
15.75" (400 mm) hydraulically operated chuck with 4.52" (115 mm) bar capacity, one set soft jaws

**Both Turning Centers Include as Standard**

12-position VDI-50 automatic turret, servomotor driven, hydraulically clamped  
7 turning tool holders  
4 boring bar holders 2", with 7 reduction sleeves (1/2, 5/8, 3/4, 1", 1 1/4", 1 1/4", 1 1/2")  
1 facing tool holder

Tailstock with programmable body and hydraulically driven quill with built in live center 5 MT

10 HP (7.5 kW) variable speed motor for driven tools

Automatic lubrication system with low level sensor and line filter

Bar feeder interface, plug in

Chip conveyor interface, plug in

Coolant system

Electrical system 230 V, 50/60 Hz, 50 KVA

Transformer 200-250 / 360-390 / 410-480V 50/60 HZ, 60 KVA

Pushbutton control for hydraulic chuck and tailstock

Chuck clamp and unclamp confirmation proximity switches

Fully enclosed splash guard, with interlocked sliding door

Inside cover cleaning system with separate pump

GE-Fanuc control Series 21i-T with 10.4" color monitor

Hydraulic power unit

Roll out chip box and coolant reservoir

Set of leveling screws and nuts

Set of operating, maintenance, programming, installation, parts manuals and electrical schematics

Set of wrenches for machine operation

Sealed work light

**ROMI G-SERIES GE-Fanuc 21i-T Standard Equipment**

Automatic Tool Wear Compensation	Background Edit
Canned Cycles for Drilling (G81-G86)	Rigid Tapping
Turning, Threading (G77, G 78, G 79)	Chamfering and Corner Rounding
Chuck and Tailstock Barrier	Conditional Jump M80
Constant Surface Speed (G96)	Continuous thread cutting (G 32)
Conversational Programming (Manual Guide)	Custom Macro B
Direct Input Drawing Dimensions	Extended Part Program Editing
External Message Ladder	G Code Family A, B, C
Graphic Display	Inch/Metric Conversion
Jaw Machining	Manual Handle Feed
Maintenance, Alarms and Operating History	Multiple Repetitive Cycle (G70-76)
Multiple Thread Cutting (G 33)	Part Program Storage approx 64K 160M
Reader/Punch Interface RS-232	SRAM Card Part Program Storage
Run Hour and Parts Count Display	Spindle Positioning (M 19 & G 64)
Stored Pitch Error Compensation	Sub-Program Editing
Tool Geometry Offset/ Wear Offsets (32)	Tool Life Management
Tool Load Monitoring System	Tool Nose Radius Compensation (G40-G42)
Work piece Coordinate Preset (G92,G92.1)	Work piece Coordinate System (G52-G59)
Work Shift	

<b>Romi G 50 M 51.2" C. D. Programmable Tailstock &amp; Transformer</b>	<b>\$168,935.</b>
<b>Romi G 50 M HT 51.2" C. D. Programmable Tailstock &amp; Transformer</b>	<b>\$192,495.</b>

**FOB Erlanger, Kentucky**  
**Terms of Payment are 20% with order**  
**Balance due 30 days after shipment**  
**Terms are subject to credit approval by Romi Machine Tools, Ltd.**

**Machine Accessories**

Price reduction for omission of Tailstock	-\$ 6,500.
<b>OPE02194</b> -Automation Interface: includes 8-M Codes	<b>\$ 2,070.</b>
<b>X42149</b> -15.7", 2,000 RPM 3-jaw Chuck for Standard G50 instead of 12.4" Chuck	<b>\$ 4,510.</b>
<b>X33111</b> -Air blast chuck cleaning system	<b>\$ 565.</b>
<b>OPE01876</b> -Automatic door, electric motor driven 51.2" (1300mm)	<b>\$ 2,020.</b>
<b>OPE01993</b> -Pneumatic top door for gantry loading only. Cannot be used w/OPE01876	<b>\$ 3,515</b>
<b>X38188</b> -Chip conveyor, hinged belt, side exhaust	<b>\$ 5,570.</b>
<b>X38847</b> -Chip conveyor, hinged belt, double, rear exhaust	<b>\$11,030.</b>
Other Style Chip Conveyors, Scraper, Magnetic and Rear Exhaust	Price on Request.
<b>S16247</b> -Extra set of Romi operating, maintenance, installation and parts manuals	<b>\$ 145.</b>
<b>OPC00581</b> -Technical documentation and labels in Spanish	<b>\$ 320.</b>
<b>OPC00580</b> -Canada(UL/CSA certified main breaker, delayed fuses and bases)	<b>\$ 1,130.</b>
<b>X36038</b> -Foot Switch for Hydraulic Chuck	<b>\$ 235.</b>
<b>OPE02192</b> -Foot Switch for Tailstock Quill	<b>\$ 235.</b>

<b>X36039</b> -Double Foot Switch for Hydraulic Chuck & Tailstock Quill	\$ 490.
<b>OPE00893</b> -217 PSI Coolant, 2.6 GPM, 4 HP Pump	\$ 2,655.
<b>X38841</b> -Linear scales for X-axis	\$ 5,795.
<b>X36047</b> -Mist exhaust system	\$ 4,465.
<b>X39304</b> -Parts catcher, G 50 M Standard only Capacity up to 3.94" X 7.87" length	\$ 4,230.
<b>X36189</b> -Status indicator light	\$ 350.
<b>X32885</b> -Tool Setter with semi-automatic operation software	\$ 2,940.
<b>X38329</b> -Tool Setter HT, with semi-automatic operation software	\$ 3,265.
<b>X36045</b> -Wash gun	\$ 1,335.
<b>X45341</b> -Oil Skimmer	\$ 745.
<b>X38590</b> -Steady rest open with rollers 3/8" to 11.8" (10-300mm) capacity	\$ 7,515.
<b>X39117</b> -Hydraulic self centering steady rest, SLU-3.2, Z axis Programmable Body Positioning, Capacity 2" to 8" (50-200 mm) for G 50 LB	\$17,985.
<b>X11111</b> -Romi Interface for Programmable steady rests	\$ 4,500.
-Other Styles and Sizes of Steady Rests are available	
<b>X</b> -SMW Autoblok 18" (450 mm) 3-jaw chuck instead of 15.75" (400 mm) chuck with set of soft jaws for A2-11 mount -- For G 50 HT only	\$ 8,700.
<b>OPC00551</b> - Extended Warranty 12 to 24 months, parts only	\$ 3,500.

#### Hydraulic chuck accessories

<b>R86931</b> -Set of three hard jaws for 12.4" Chuck	\$ 1,035.
<b>R74243</b> -Set of three soft jaws for 12.4" Chuck	\$ 275.
<b>S29483</b> -Set of three hard jaws for 15.75" Chuck	\$ 1,290.
<b>S29484</b> -Set of three soft jaws for 15.75" Chuck	\$ 355.

#### Collet chucks

<b>45118</b> Royal Pullback CNC Collet Chuck S35 (A2-8) with 3.5" Bar Capacity including Master Collet and draw tube adapter in addition to 3-Jaw Chuck	\$ 3,590.
<b>45120</b> Royal Pullback CNC Collet Chuck S40 (A2-11) with 4" Bar Capacity including Master Collet and draw tube adapter in addition to 3-Jaw Chuck	\$ 4,880.
<b>785AF111-80</b> ATS true length Collet chuck S 35 (A2-8) with 3.5" Bar Capacity with draw tube adapter in addition to 3-Jaw Chuck	\$ 5,995.
<b>740AC322-11</b> ATS true length Collet chuck S 40 (A2-11 with 4" Bar Capacity with draw tube adapter in addition to 3-Jaw Chuck	\$ 7,490.
<b>X38856</b> - Credit for non-supply of G 50 Standard 3-Jaw Chuck	\$ 1,650.
<b>X38857</b> - Credit for non-supply of G 50 HT Standard 3-Jaw Chuck	\$ 2,200.

#### Additional Turret Tooling (Set of 12 holders and 7 sleeves standard, see above)

<b>S51744</b> -VDI-50 Boring bar holder 2"	\$ 995.
<b>S51745</b> -Reduction sleeve 1/2" x 2"	\$ 155.
<b>S51746</b> -Reduction sleeve 5/8" x 2"	\$ 155.
<b>S51747</b> -Reduction sleeve 3/4" x 2"	\$ 155.
<b>S51748</b> -Reduction sleeve 1" x 2"	\$ 155.
<b>S51749</b> -Reduction sleeve 1 1/4" x 2"	\$ 155.
<b>S51750</b> -Reduction sleeve 1 1/2" x 2"	\$ 155.
<b>S51751</b> -VDI-50 Turning tool holder (left hand) 1 1/4" x 1 1/4"	\$ 1,085.
<b>S51752</b> -VDI-50 Turning tool holder (right hand) 1 1/4" x 1 1/4"	\$ 1,085.
<b>S51753</b> -VDI-50 Facing tool holder (front mounted) 1 1/4" x 1 1/4"	\$ 1,275.
<b>S48103</b> -VDI-50 Axial tool holder (Uses ER-40 Collets)	\$ 4,920.

<b>S48115-VDI-50 Radial tool holder (Uses ER-40 Collets)</b>	<b>\$ 9,780.</b>	_____
<b>Set-up of first part by Romi Application Engineering</b>	<b>\$ 2,750.</b>	_____
Drawings and tooling preferences must be submitted at least 4 weeks prior to delivery. Tooling to run the first part will be quoted at extra cost.		

**ROMI MACHINE TOOLS, LTD.**  
**TERMS AND CONDITIONS OF SALE AND LIMITED WARRANTY**

**ACCEPTANCE** – Acceptance of the products by dealer/end-user (“Customer”) is EXPRESSLY LIMITED TO THE TERMS AND CONDITIONS HEREIN CONTAINED. Any term or condition in any purchase order or other form in conflict with these Terms or Conditions is hereby expressly rejected and shall not be binding on ROMI MACHINE TOOLS, LTD. (the “Company”). Buyer shall make an examination and test of a product immediately upon receipt at Buyer’s place of business, and failure of Buyer to give notice of any claim within 7 days after receipt of such product shall be an unqualified acceptance of such product.

**PRICES** – Prices are:

1. Subject to change without notice prior to acceptance of Buyer’s order by Company.
2. Exclusive of all Federal, State, Municipal or other Government excise, sales, use, occupational or like taxes now in force or to be enacted in the future;
3. Subject to an increase equal in amount to any tax by the Company may be required to collect or pay upon the sale of the items quoted;
4. Subject to change at any time by Company in the event of any change in the Buyer’s requirements or terms and conditions.

**SHIPPING and DELIVERY**

1. The shipping and delivery dates provided are estimates and not guaranteed or warranted.
2. Company shall in good faith endeavor to ship products by the estimated shipment date. Company will not be liable for any damages resulting directly or indirectly from shipping delays, regardless of cause.
3. Any company shall have the right to select the carrier unless Buyer and Company agree otherwise. Upon delivery of the goods by the Company to a carrier, the carrier shall be deemed to be the agent of the Buyer and risk of loss shall be on the Buyer.
4. All products shall be shipped F.O.B. point of origin.

**RESERVATION OF RIGHTS** – Company reserves the right to make improvements/changes in the design of its products without any obligation to make such changes or improvements on the products that are the subject of this order or on products previously manufactured and sold by Company.

**LIMITED WARRANTY** – Company warrants to the dealer/end-user (“Buyer”) that the products covered will be free from defects in material and workmanship under normal conditions of use for a period of one (1) year from the date of delivery based on single shift operation. This limited warranty does not apply to defects arising out of: (i) material provided by, or out of a design stipulated by Buyer, (ii) Buyer’s faulty or improper installation, operation or maintenance of the products, (iii) alterations or modifications carried out without the Company’s prior consent in writing, (iv) repairs carried out improperly by the Buyer or by third parties, or (v) normal wear and tear, accidents or misuse.

THE COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES OF ANY KIND INCLUDING BUT NOT LIMITED TO ANY WARRANTY CONCERNING THE QUALITY OR CONDITION OF THE PRODUCTS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The Company makes no warranty or representation that the products comply with the requirements of any federal, state or local laws, regulations, rules and/or industrial codes. Buyer acknowledges that it is Buyer’s responsibility to provide proper safety training, devices and equipment for the particular application or use intended by Buyer so as to protect the operator and others from harm, and to comply with all federal, state and local laws, rules and regulations relating to safety standards and all industry safety standards. Buyer agrees to indemnify and hold Company harmless from and against any such liability, as well as all claims and expenses resulting from Buyer’s modification of the goods or failure to implement any changes to the goods directed by Company.

The Company’s liability for any breach shall be limited to, at the Company’s option, the repair or replacement of any part or parts which are determined by the Company to be defective after it examines such part(s) or the refund of the purchase price for such defective part(s). The Company shall bear the cost and risk of shipment of parts and of repaired or replaced parts both to and from the Company. The cost of service for any work not covered under this limited warranty shall be as agreed in writing by the Buyer and the Company. This limited warranty completely and exclusively states the obligations of the Company for any breach of the limited warranty.

Any claim for breach of this limited warranty must be made in writing addressed to the Company and set forth in sufficient detail to permit identification of the defect. Any claim for breach of warranty must be made within 12 months from the date of shipment of the applicable product. If not made within said 12-month period, it shall be conclusively deemed to have been waived.

UNDER NO CIRCUMSTANCES SHALL THE COMPANY BE LIABLE FOR ANY OTHER DAMAGES OF ANY KIND WHETHER SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR ANY OTHER SORT EVEN THOUGH THE COMPANY MAY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE COMPANY’S LIABILITY EXCEED THE PURCHASE PRICE OF THE PRODUCT(S).

**GOVERNING LAW** – The Company’s sale of products to Buyer, these Terms and Conditions and any dispute arising hereunder shall be governed and interpreted under the laws of the Commonwealth of Kentucky.

