MILLING

Bridgeport GX 250 5F (4+1) Machining Center

Quotation to: Quotation Number: Contact: Address: ABMNameAlpha SOHDocumentOrderInvoice Contact Name ShipToAddressLine1 ShipToAddressLine2 ShipToAddressLine3 ShipToAddressLine4 ShipToCity1, ShipToState,

Date: Month/Day/Year Prices Valid for 30 Days

Your Hardinge Representative Sales Person Name Phone Email Address 1 Address 2 City, State, Zip

TURNING MILLING GRINDING WORKHOLDING



Machine Summary and Quotation

Bridgeport's new generation GX 250 5F (4+1 Axis) Vertical Machining Center is a fully digital, high quality machine tool, designed to achieve maximum capacity and performance in the Aerospace, Mold & Die, Medical and Automotive Industries and many other manufacturing sectors. This machine has been developed to provide a powerful and precise solution to meet the demands of the metal cutting user.

Manufactured from quality sourced grey cast iron to the highest standards, the GX250 5F (4+1) is packed with features to meet the demands of all sectors of industry. A fully digital machine with fast rapid traverse of 1181 inch / min, and a highly sophisticated yet user-friendly Fanuc 0i-MD control with a 10.4" LCD.



Included Features

- Work Light
- Air Hose with gun
- CT 40 Big Plus spindle
- 15,000 RPM Direct Drive Air/Oil Spindle w/ oil chiller
- Fully interlocked machine guarding
- Leveling pads and screws
- Tri-color light tower
- Coolant Flush System w/ Manual Wash Gun
- Tool Magazine Auto Door
- Scraper Style Chip Conveyor
- Part Probe Pre-Wiring for OMI 2T
- Prep for Thru Spindle Coolant w/ Rotary Union
- CNC Control Fanuc 0i-MD

"No tool holders are provided as standard equipment with this machine – these must be purchased separately. We offer an extensive line of high-quality tool holders. Please consult with your sales representative for a complete list."

Please refer to the attached lists for available options and full machine specifications.

Machine Options

Tool Changer Factory installed pricing only 30 Position 40 Taper Tool Magazine	GX 250 5F (4+1) Standard	LIST PRICE INCLUDED
ControlFactory installed pricing onlyFanuc 0i-MD with 10.4" LCD•User-friendly layout and configuration•Manual Guide i conversational programming•Polar coordinate command•Cylindrical interpolation•Helical interpolation•Helical interpolation•Simultaneously controlled 4-axes•Custom Macro B•AICC Contour Control II•NANO Smoothing•Automatic acceleration/deceleration•Tool life management•Self-diagnostic function•Dynamic graphic display•Workpiece coordinate system, G52-G59•Self diagnostic function•Tilted Working Plane Command	Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard	INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED INCLUDED

<u>Spindle</u>

15,000 RPM, 20 HP	Standard	INCLUDED
CT-40 Big Plus, Includes High Retention Drawbar	Standard	INCLUDED

Miscellelaneous Options

- A Axis Rotary Encoder (factory fit only)
- A/C Axis Rotary Encoder (factory fit only)
- Hinge Belt Chip Conveyor (in lieu of std. scraper style) •
- Coolant Through Spindle (280 psi)
- Oil Mist Collector
- Coolant Wash Down Gun Automatic
- X/Y/Z Axis Linear Scale (factory fit only)
 Through Spindle Coolant (280 PSI)

Machine Specifications

<u>Axis Travel</u>

Table (X axis)	11.8 in
Saddle (Y axis)	15.7 in.
Head (Z axis)	16.9 in.
A Axis (tilt)	+30°~-120°
C Axis (rotary)	360° (cont)
Max Swing diameter	9.8 in
Y-Axis throat distance	18.5 in
Minimum Resolution	.0001
Rapid Traverse Rate (IPM) X, Y & Z Axis	1,181

Accuracy ISO 230-2 with Optional Scales

X, Y, Z-Axis Positioning ,Full Travel	.0002" (0.005mm)
X, Y, Z-Axis Repeatability	.0001" (0.003mm)
A Axis Positioning (Arc sec)	20
C Axis Positioning (Arc sec)	10
A Axis Repeatability (Arc sec)	4
C Axis Repeatability (Arc sec)	4

Accuracy ISO 230-2 without Scales

X, Y, Z-Axis Positioning ,Full Travel	.00028" (0.007mm)
X, Y, Z-Axis Repeatability	.00016" (0.004mm)
A Axis Positioning (Arc sec)	50
C Axis Positioning (Arc sec)	20
A Axis Repeatability (Arc sec)	8
C Axis Repeatability (Arc sec)	4

<u>Spindle</u>

Spindle Speed Range Direct Coupled	15,000 RPM
Spindle Motor HP Rating (10min)	20 HP (15kw)
Spindle Torque 15,000 RPM (10min)	70.4 ft/lb (95.5Nm)
Spindle Taper	No. 40
Tool Holder	CT40
Spindle taper	Big Plus Face & Taper 40

5 Axis Rotary Table (4+1)

Rotary Table Diameter	8.26" Dia (210mm)
Table load	Vertical 110lbs. (50kg) Horizor
Number of T-Slots	4 Radial Slots
T-Slot Size	.472" (12 mm)
Tilting degree (A degree)	+30°~-120°
Table rotation degree (C degree)	360°
Clamp Torque in Rotary (C axis)	254Nm
Clamp Torque in Tilt (A axis)	294Nm

ontal 165lbs (75kg)

Machine Specifications cont.

Fanuc 0i-MD

Standard

Automatic Tool Changer (ATC)

Taper	NO.40
Туре	Swing Arm
ТооІ Туре	CT-40, Big Plus
Tool Selection	Bi-directional
Tool Capacity	30 Tools
Max Tool Diameter (adjacent pockets) Max. Tool Diameter (without adjacent pockets)	3" (76.2 mm) 5.12" (130 mm)
Max. Tool Length	9.5" (240 mm)
Max. Tool Weight	15 lbs (7 kg)
Tool Change Time (C-C) ISO 10791-9	4.3 sec

Coolant

Swarf removalChip ConveyorCoolant tank capacity45 US gallons (170L)Coolant Flush SystemStandardWash gunStandardStainless chip panStandardNote: The chip conveyor is a general purpose scraper type. For fine chip applications, such as – Aluminum, Cast Ironor Brass we suggest adding the optional coolant filtration systems.

Machine Size

Machine height Machine length Machine depth Machine weight

Service Requirements

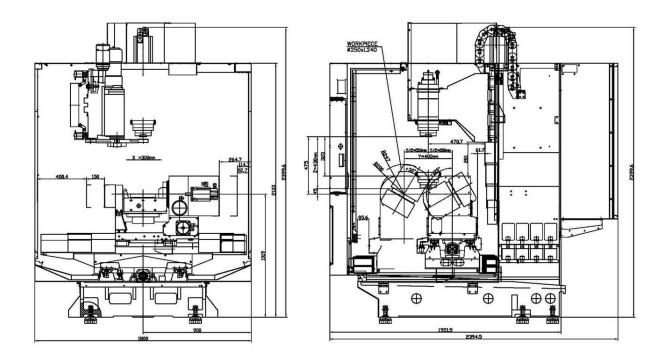
Electrical Supply (Input) Structure Cycles Power Voltage **Note: Other voltages require an external transformer** Compressed Air (Pressure Flow) Coolant Tank Capacity Nozzle Coolant (Pump @ 60hz) Through Spindle Coolant

Wash Down (Pump @ 60 hz)

101 in. (2,568mm) 71 in (1,800mm) 105 in (2,663mm) 12,698 lbs (5,750 kg)

Balanced 3-phase 60 Hz 25 KVA 220 volt

6kg/cm2 45 gallons 34.3 gal (130L) min @ 18.5psi 280 psi 5.2 gal (20L) min @ 72.5psi



Foundation Requirements:

To maintain the accuracy of this machine, we recommend that the machine is placed on a flat area free from cracks and expansion joints. The composition of the floor and sub-structure should be of suitable construction to bear the weight of this machine. Any friable areas should be using accepted building construction techniques (to code).

Once a suitable foundation is in place, we recommend that the machine is rigidly bolted to the floor using the bed fixing/ jacking positions to prevent movement or vibration.

All features, benefits and specifications are subject to change. Hardinge Inc. is not responsible for any typographical errors, omissions or misprints

Investment Summary for ABMNameAlpha

Quote Number: All Prices in: SOHCurrencyCodeFrom

Qty UOM Description

Unit Price Extended

Total Investment: \$XXXX