



**GANESH  
MACHINERY**  
*The Edge in Cutting.*

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[www.ganeshmachinery.com](http://www.ganeshmachinery.com)

# **GANESH CYCLONE – 78MSY**

**6-AXIS TWIN-SPINDLE, 16-STATION TURRET  
CNC MILL/TURN LATHE WITH “Y” AXIS**



**3” MAIN SPINDLE BAR CAPACITY**

**8” & 10” 3-JAW CHUCKS INSTALLED**

**7.5-HP MILLING on ALL 16 TOOL STATIONS**

**MITSUBISHI INTEGRAL SPINDLE MOTORS - INCLUDES SPINDLE CHILLERS**

**TRUE “Y”- AXIS, “C” - AXIS on MAIN & SUB SPINDLE**

**POWERFUL MITSUBISHI 720 HIGH-SPEED MULTI-TASKING CNC**

**(Each tool station can hold multiple axial or radial tools!)**

**COMBINE TURNING & MILLING - FRONT & BACK-SIDE  
FOR A FINISHED PART IN JUST ONE OPERATION!**

# **CYCLONE-78 MSY 6-AXIS CNC Turn/Mill Center**

## **16-Station High-Speed Servo Tool Turret**

The 16-station servo driven tool turret features 0.15-second bi-directional indexing and shortest path indexing logic for fast tool changes. The turret disk does not lift out from the turret body during index which prevents chips and coolant from being sucked into and contaminating the turret coupling. The 3-piece face gear coupling locks into position within 3-microns. The tool turret features 7-HP driven tool capability on all 16-tool stations, providing the muscle needed to handle cross and end-working milling. The 6,000-RPM driven tool system provides a constant cutting torque of 14.75 ft lbs (20 nm). The BMT-65 tooling system used on the Cyclone-78 MSY is much stronger with greater rigidity and far superior alignment characteristics than other tooling systems. Mix and match tooling on any station for the ultimate in set-up flexibility. The turret gear train is oil mist pressure lubricated to keep moisture out and to maintain a constant temperature. There are no belts used in the Cyclone tool turret design. The tool count can be easily increased by using toolholders that mount tooling on the front and backside as well as using gang-style tooling using the Y-axis shift.

## **True Linear “Y” Axis Single Axis Motion (Not a compound Y-Axis travel)**

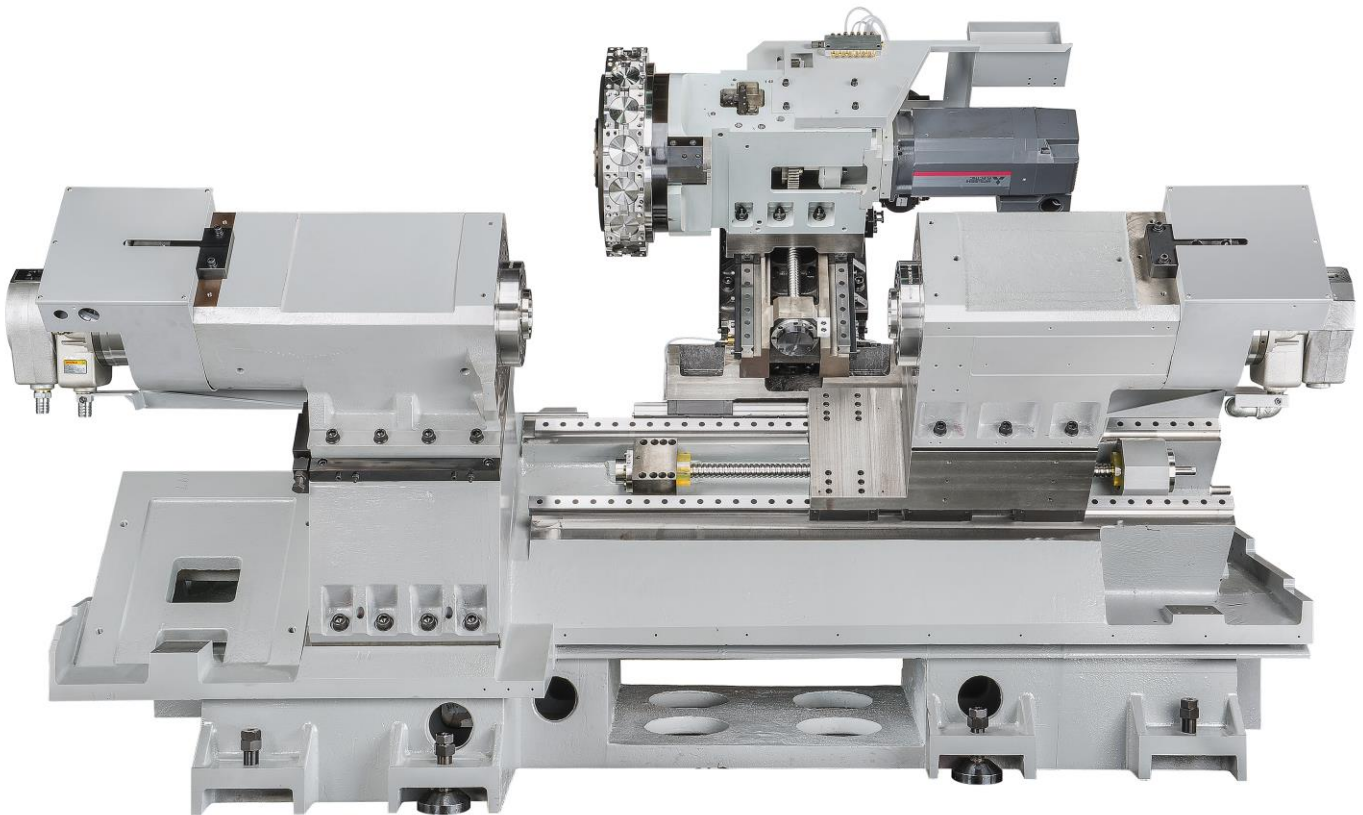
The tool turret features a Y-axis with 3.93” ( $\pm 1.968$ ”,  $\pm 50$ mm) of travel for off center milling and drilling work. The full Y-axis travel is available for machining at any diameter.

## **Full “C” Axis on Main and Sub Spindle**

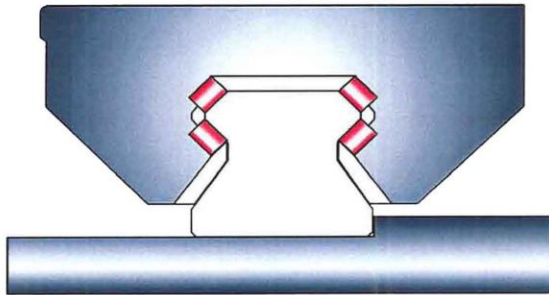
The dual opposed main and the sub spindle are fully synchronized and both feature an independent high-performance “C” axis with a 0.001-degree resolution for 360,000 radial positions and full contouring capability, even 4-axis simultaneous contouring on both spindles. The radial spindle position is secured by a hydraulic disk brake.

## **Integral Mitsubishi Spindle Motors**

Dual wound motors with built-in spindles provide the maximum cutting torque (There are no belts and therefore no parasitic losses to reduce the torque and HP). This design provides the highest rate of spindle acceleration and deceleration greatly reducing cycle time. A spindle refrigeration unit is provided to control heat build-up. Both hydraulic actuation cylinders feature stroke control position monitoring for workholding safety. The subspindle has coolant supplied through the spindle and an air-blast to clean the collet seat or chuck jaws for the next part.

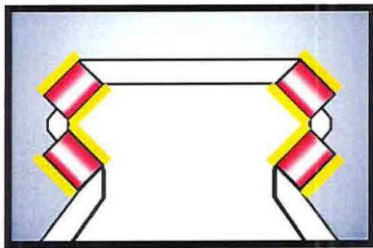


**GANESH** Cross-roller guided ways give our customers:



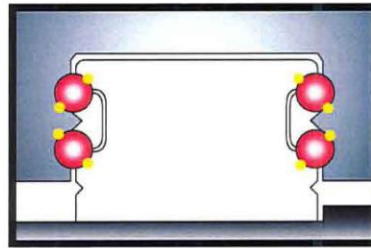
- ▶ Higher Accuracy
- ▶ Great Rigidity
- ▶ Superior load capacity in all directions
- ▶ Excellent crash safety
- ▶ Increased operating life

**GANESH**



**SURFACE CONTACT AREA  
BEARING/RACE TANGENCY**

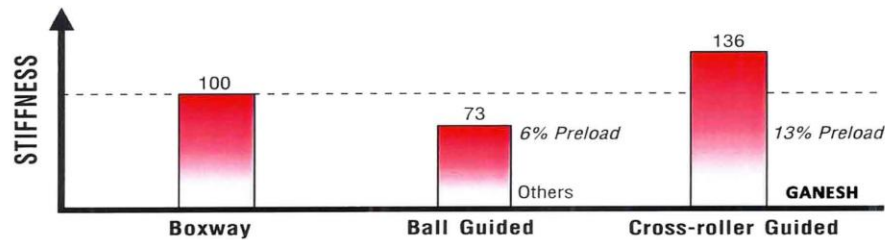
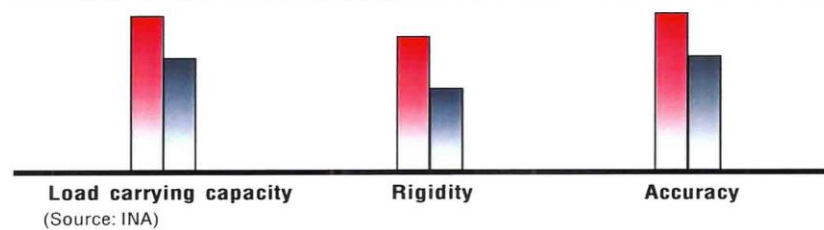
**Others**



**SURFACE CONTACT AREA  
BEARING/RACE TANGENCY**

Ganesh - Cross-roller Guided

Most Competition - Ball Guided



# **GANESH CYCLONE-78MSY 6-AXIS CNC LATHE SPECIFICATIONS**

|   |            |   |
|---|------------|---|
| <b>CAPACITY -</b>   |            |   |
| Maximum Turning diameter  | Inch       | Ø13.38" (340 mm)  |
| Center distance   | Inch       | 42.12" (1070mm) between centers                                 |
| Turning length  | Inch       | 29.13" (740mm)  |
| <b>MAIN SPINDLE -</b>   |            |   |
| Spindle nose / (bearing diameter)   | ASA Size   | A2-6 (bearing diameter 4.72" / Ø120mm)                          |
| Spindle Bar Capacity  | Inch       | Ø3.070" (78 mm drawtube I.D. / Ø88mm spindle bore)              |
| Chuck Size Included   | Inch       | Ø10" (with 78mm bore)   |
| Spindle Center Height   | Inch       | 42" (1,050mm)   |
| Maximum spindle speed   | RPM        | 60 - 4,000 RPM (Integral Spindle)                               |
| Main Spindle motor power 18/22Kw  | Horsepower | 30-HP (30-minute duty rating) / 24-HP (constant duty rating)    |
| <b>SUB SPINDLE -</b>  |            |   |
| <b>Integral Spindle</b>   |            |   |
| Spindle nose  | ASA Size   | A2-6  |
| Spindle Bar Capacity  | Inch       | Ø2.559" (65 mm drawtube I.D. / 86mm spindle bore)               |
| Chuck Size Included   | Inch       | Ø8" (with 65mm bore) (Ø10" optional)                            |
| Maximum spindle speed   | RPM        | 60 - 4,000 RPM (Integral Spindle)                               |
| Main Spindle motor power 11/15Kw  | Horsepower | 20-HP (30-minute duty rating) / 15-HP (constant duty rating)    |
| <b>LIVE TOOL TURRET -</b>   |            |   |
| <b>16-Station Servo Driven Live Tool Turrets</b>                              |            |   |
| Number of turret stations   | 16         | 16 (Any combination of 16 ID, OD or Live tool stations)         |
| Index time (adjacent tool / 180° index)                                       | Seconds    | 0.2 seconds / 1.2 seconds High-Speed Servo Indexing             |
| Live Tool Power / RPM 3.7/5.5KW   | HP         | 7.5-HP / 6,000 rpm, 14.75 ft. lbs. torque (20Nm)                |
| Tool Size / Collet Size   | Inch       | 1" (25mm) (for square tool & 32mm round tools) / ER-32 collets  |
| Tool Holder Type & Size   |            | BMT-65 Base Mount Tooling                                       |
| Turret Thru-The-Tool-Coolant  |            | Rated to 1,000 PSI for High Pressure coolant option             |
| <b>"Y" AXIS -</b>   |            |   |
| Y axis travel   | Inch       | 3.93" of travel - ±1.968" off of centerline (±50mm)             |
| Y axis Rapid Feed Rate  | Inch       | 236 Inch Per Minute (6m per minute)                             |
| <b>"C" AXIS -</b>   |            |   |
| Spindle Radial Resolution   | 0.001°     | 360,000 radial positions with full contouring capability        |
| <b>"B" AXIS - (sub spindle travel)</b>  |            |   |
| B Axis Rapid Traverse Rate  | Inch       | 1,573 Inch Per Minute (40m per minute)                          |
| B Axis Travel   | Inch       | 29.33" (745mm)  |
| <b>AXIS SPECIFICATIONS -</b>  |            |   |
| Axis Travel – X / Z Axis  | Inch       | X 8.97 / Z 27.55" (228mm) / (700mm)                             |
| Rapid Travers Rate – X / Y / Z Axis   | ipm        | 630 / 236 / 1,573 ipm (16 / 6 / 40 m/minute)                    |
| Minimum Programmable Input  | Inch       | 0.0001" (0.001mm = 40 millionths of an inch)                    |
| <b>ANCILLARY SPECIFICATIONS-</b>  |            |   |
| Hydraulic System  | Gallons    | 8- gallons (30 Liters) with 5-HP (3.5kw) pump motor             |
| Coolant Pumps – Dual Coolant Pumps  | HP         | 2x 1.7 hp pumps for tooling & 2 pumps for chip flushing         |
| Coolant Tank  | Gallons    | 70-gallon (280 Liters) coolant tank                             |
| <b>MACHINE WEIGHT -</b>   | Pounds     | 17,650lbs (8,000 kgs) - Shipping Weight 18,680 lbs. (8472kgs)   |
| <b>ELECTRICAL REQUIREMENT -</b>   | KVA        | 50KVA (220vac ±5%, 3-phase, 60 Hz, 130 amps)                    |
| <b>AIR REQUIREMENT -</b>  | PSI        | 85-psi @ 8-cfm for parts catcher, ejector, oil mist lubricator  |
| <b>MACHINE DIMENSIONS -</b>   | Inch       | Length 145"* / Depth 80" / Height 79" (*+48" for chip conveyor) |
| <b>SHIPPING DEMENSIONS -</b>  | Inch       | Length 200" / Depth 90" / Height 93"                            |
| <i>SPECIFICATIONS AND PRICING ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE!</i> |            |   |

**The Cyclone-78 MSY is manufactured in Our Modern  
Certified ISO 9002 Production Facility in TAIWAN.**



# GANESH CYCLONE-78MSY Pricing

## CYCLONE-78MSY CHUCKING PACKAGE

**\$169,990.00**

Including - All standard specifications and all items listed below:

6-Axis Mill/Turn Center with 16-Station Live Tool Turret with 16-Driven Tool Stations

True linear "Y"-Axis with 3.93" of travel,  $\pm 1.968$ " off of centerline ( $\pm 50$ mm)

Coolant pump for thru-the-turret coolant for cutting tools (coolant flow sensor confirmation monitoring)

2-Chip flushing coolant pumps – 2 headwall coolant nozzles on main spindle and 1 on subspindle

Programmable air blast on main spindle and subspindle, 3-Color Machine Condition Display Tower Light

Headwall above main spindle is pre-cut for coolant mist extraction.

Steel-Belt High-Discharge Chip Conveyor (42" Barrel height with "air-curtain" clean-off feature)

10" 3-jaw hydraulic chuck for main spindle w/3" bore, 8" 3-jaw hydraulic chuck for sub-spindle (2-1/2" bore)

12-static BMT-65 toolholders (as detailed in the tooling sheet at the top of the next page)

2-axial driven tools and 2-radial driven tools (as detailed on the top of the driven tool option page)

## CYCLONE-78MSY BAR PRODUCTION PACKAGE

**\$199,990.00**

Including – The above listed machine features without chucks, plus the below listed optional items:

EDGE Rebel-102 Servo Automatic Barloader with installation (for bars up to 4' in length)

Royal Quick-Grip™ QG-80 Accu-Length™ Collet Chucks or ATS S30 Dead Length Collet Chucks

Finished Parts Pick-Off Unit with programmable finished Parts Conveyor Belt, Barloader Interface

### MACHINE OPTIONS

|   |            |
|---|------------|
| Parts Catcher pick-off arm with gripper system and belted parts conveyor system | \$7,995.00 |
|---|------------|

|  |            |
|--|------------|
| Automatic operator door ( <i>pneumatic control</i> ) | \$4,995.00 |
|--|------------|

|  |            |
|--|------------|
| Renishaw Tool Setter – Plug-in style Tool Setter, includes Y-axis & live tool measure function | \$7,995.00 |
|--|------------|

|                                  |            |
|----------------------------------|------------|
| 1-Year Extended Machine Warranty | \$7,995.00 |
|----------------------------------|------------|

|  |        |
|--|--------|
| Voltage Stabilizers & Transformers (Specify voltage) | P.O.R. |
|--|--------|

|  |            |
|--|------------|
| FIRE-TRACE Fire suppression system - installed | \$7,495.00 |
|--|------------|

See Fire Waiver in Ganesh Terms and Conditions

### WORKHOLDING OPTIONS

Note: both spindles must have "dead-length" workholding equipment for linear accuracy!

|  |            |
|--|------------|
| Royal Quick-Grip™ QG-80 Accu-Length™ 3" capacity collet chuck, uses QG-80 collets. | \$3,880.00 |
|--|------------|

|  |          |
|--|----------|
| Royal Quick-Grip™ QG-80 Collet Installation Tool for 10-second collet changeover | \$550.00 |
|--|----------|

(The QG-80 provides .01mm accurate parallel clamping & 1mm-grip range with good chip protection.

The OG-80 system also uses Hardinge Flex-C, Hainbuch, and Micro Centric size 80 collets)

|  |            |
|--|------------|
| ATS S-30 Dead Length 3" capacity collet chuck with S30 master collet | \$5,290.00 |
|--|------------|

|  |            |
|--|------------|
| 8" 3-Jaw TF3X-8 Hydraulic Power Chuck with 65mm thru-bore (1-supplied for sub spindle) | \$3,495.00 |
|--|------------|

|   |            |
|---|------------|
| 10" 3-Jaw TF3X-10 Hydraulic Power Chuck with 78mm thru-bore (1-supplied for main spindle) | \$3,995.00 |
|---|------------|

### TOOLING OPTIONS – See next two pages & separate Ganesh 9-page tooling catalog.

|  |            |
|--|------------|
| Sandvik \$5,000.00 Tooling Certificate (Sandvik will help select the required tooling) | \$4,250.00 |
|--|------------|

### COOLANT OPTIONS

|   |            |
|---|------------|
| Mistbuster-850 Mist Oil Filtration System | \$2,995.00 |
|---|------------|

|                         |          |
|-------------------------|----------|
| Mistbuster installation | \$350.00 |
|-------------------------|----------|

|   |            |
|---|------------|
| Coolant oil chiller unit – (24,000 BTU's) controls coolant I temperature for close tolerance work | \$7,995.00 |
|---|------------|

|                              |          |
|------------------------------|----------|
| Coolant chiller installation | \$495.00 |
|------------------------------|----------|

|  |          |
|--|----------|
| Bag Filter - For filtering fine chips on coolant pump inlet – price per pump | \$695.00 |
|--|----------|

|   |        |
|---|--------|
| Coolant collector - tramp oil / coolant separator system – separates oil and coolant for recovery | P.O.R. |
|---|--------|

|   |            |
|---|------------|
| High-Pressure Coolant System - MP-Systems, 1,000 PSI pump | \$9,995.00 |
|---|------------|

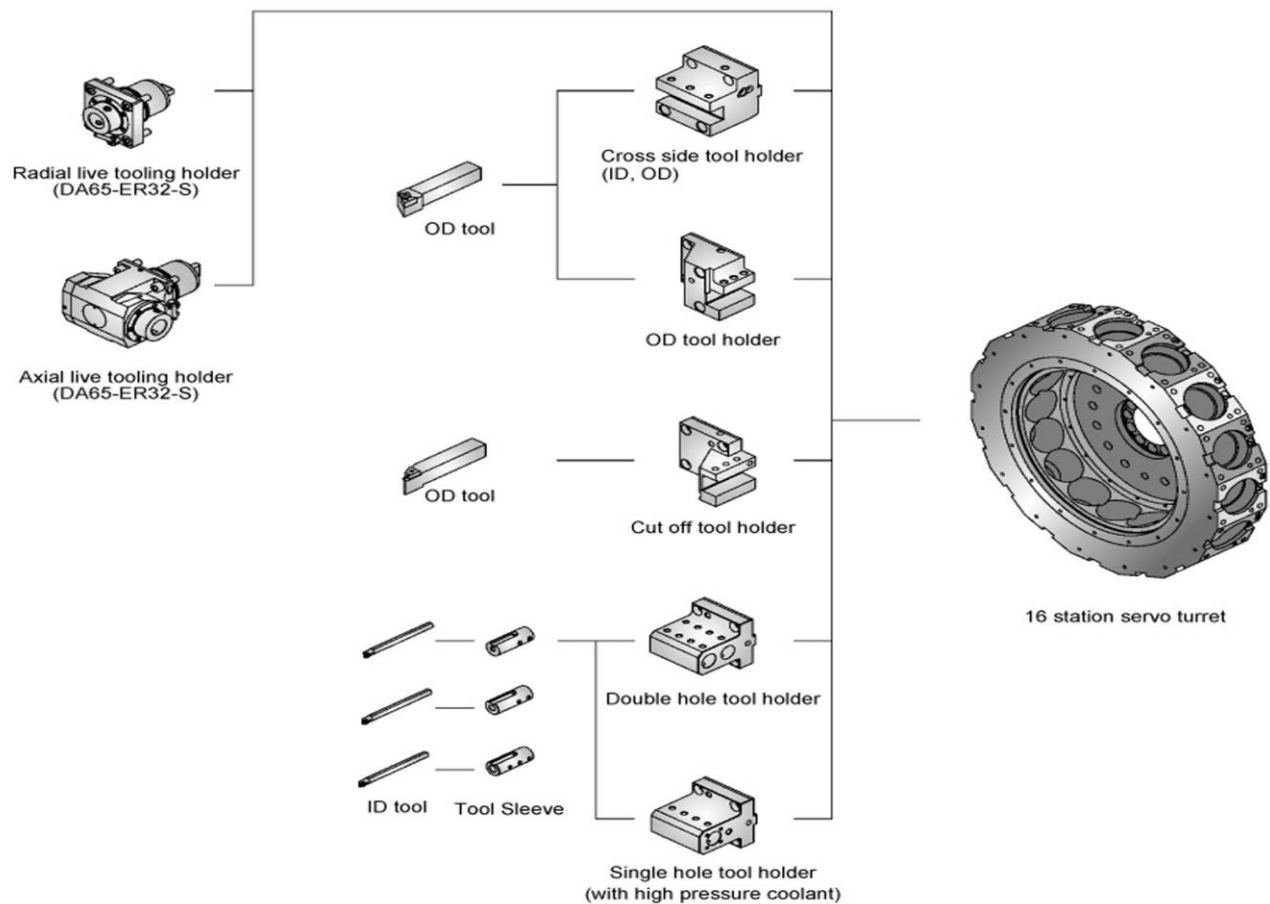
*Programmable 30-liter/minute (8-gpm) high-pressure coolant system.*

## **12-STATIC BMT-65 TOOLHOLDERS for 16-CUTTING TOOLS** **INCLUDED WITH EACH MACHINE - FOR 8 I.D. & 8 O.D. CUTTING TOOLS**

|   |  |
|---|--|
| 4 - Single Ø1" ID toolholders .....             |  |
| 2 - Double-hole Ø1" ID toolholders.....         |  |
| 2 - Double OD toolholders – front/back 1" ..... |  |
| 3 - OD toolholders – 1" .....                   |  |
| 1 - Cutoff toolholder – 1" .....                |  |

### **ADDITIONAL AVAILABLE STATIC BMT-65 TOOLHOLDERS**

|  |          |
|--|----------|
| Single 1" ID toolholder .....                  | \$495.00 |
| Single 1.25" ID toolholder – coolant fed ..... | \$595.00 |
| Single 1.50" ID toolholder – coolant fed ..... | \$695.00 |
| Double-hole 1" ID toolholder.....              | \$695.00 |
| OD toolholder 1".....                          | \$695.00 |
| Double OD toolholder – front/back 1" .....     | \$795.00 |
| Cutoff toolholder 1" .....                     | \$695.00 |
| Axial OD toolholder 1" .....                   | \$695.00 |
| Facing OD toolholder 1" .....                  | \$695.00 |



## **BMT-65 DRIVEN TOOLHOLDER OPTIONS - Base Mount Tooling**

| <b>Tools</b>  | <b>Description – Abbreviated Tool Listing</b>  |
|---|--|
|    | <p>Right-Angle Live Tool Holder for end-working applications<br/>ER-32 collet (2-20mm, 3/4" capacity)</p> <p><b>2-included in production package</b></p> |
|    | <p>Straight Live Tool Holder for cross-working applications<br/>ER-32 collet (2-20mm, 3/4" capacity)</p> <p><b>2-included in production package</b></p>  |
|    | <p>Right-Angle Live Tool Holder with internal coolant,<br/>End-working - ER-32 collet (2-20mm, 3/4" capacity)</p>  |
|    | <p>Straight Live Tool Holder with internal coolant,<br/>Cross-working - ER-32 collet (2-20mm, 3/4" capacity)</p>   |
|   | <p>Adjustable Angle Holder, X to Z axis direction<br/>ER-20 collet (2-20mm, 1/2" capacity)</p>   |
|  | <p>Double ID Mill/Drill Holder<br/>ER-32 collet (2-20mm, 3/4" capacity)</p>  |
|  | <p>Offset Right-Angle Mill Drill Holder<br/>ER-32 collet (2-20mm, 3/4" capacity)</p>   |
|  | <p>Gear Hobber, 20-degree adjustable angle<br/>3/4" arbor</p>  |

**See Ganesh 9-page Static & Driven BMT-65 Tooling Catalog  
for a more complete tool listing and pricing.**

## Barfeeder Options

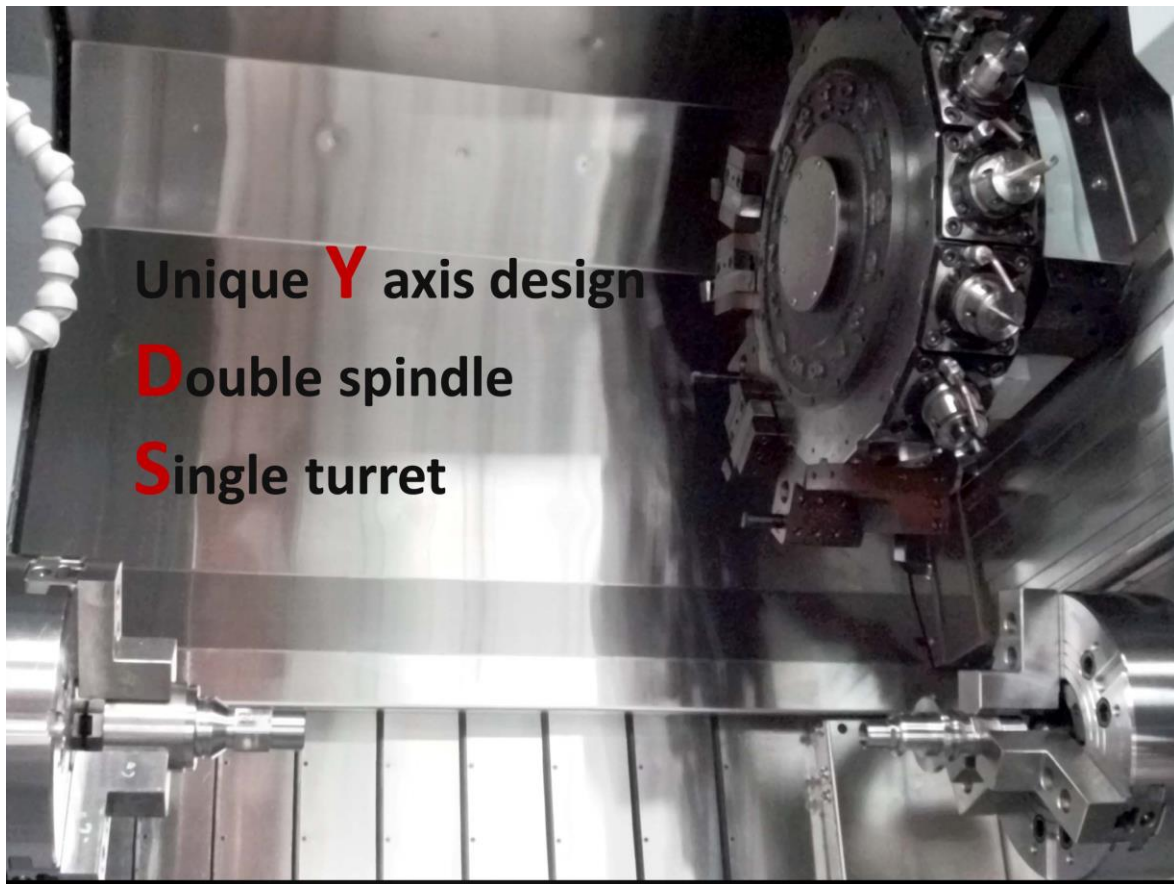
**See the Ganesh Detailed Barfeeder Brochure for a complete line up of Short Bar Loaders and 12' Hydraulic Barfeeders, along with all the needed options.**

Note: Barfeeder interface included with the machine package.



Royal Rota-Rack Rotary Parts Accumulator P.O.R.  
UNMANNED PART UNLOADING  
*(Recommended for Unmanned Operation to avoid part damage)*

## FANUC & MITSUBISHI ROBOTS AND GANTRY LOADERS AVAILABLE



**Accurate full linear Y-axis travel, without compound movement iteration errors.**



# POWERFUL MITSUBISHI M700 HIGH-PERFORMANCE CNC CONTROL

## - Mitsubishi CNC Control – Full Featured, High-Speed, High-Accuracy CNC controller

64-Bit High-Speed RISC processor with 10-Nano Meter (0.000010 mm) system resolution  
Fiber-Optic high-speed backplane for optimal internal communications with axis drives  
135,000 blocks per minute processing speed with 680 block program look-ahead  
The above 3-features work in harmony to provide faster program throughput and greater productivity  
Modal program restart feature. In-position program restart.  
10 Function Keys with Left & Right Function Key extensions  
Intuitive HMI (Human Machine Interface) for rapid setup & changeover and “on the fly” tool offsets  
NC Monitor – remote monitor of active machine screen is available to be displayed on your PC  
On-board electronic control manuals with G-code, parameter, diagnostic and operational information  
Ethernet with RJ-45 connector and RS-232 with DB-25 connector for communications interface  
CF (compact flash) and USB memory cards readers adjacent to the screen w/protective cover  
Both the CF & USB memory can be used for backup media and transparent program transfer.  
The CF card can act as a direct operational 64GB “plug & play” adjunct program memory.  
Least input and command increment: 0.001mm, (0.000040”, “40-millionths”)  
10.4” LCD high-resolution color graphic display w/low radiation emission  
Spindle, axes motors, drives, and absolute encoders all by Mitsubishi Electric  
AC regenerative low maintenance brushless integral spindle motors for main and subspindle  
MPG handwheel retrace for program check-out in both simulation and actual movement

## - Mitsubishi CNC Control – Standard Programming Features

Diameter and millimeter programming with or without a decimal point  
Direct programming using drawing dimensions and codes: A=angle, R= radius, C= chamfer  
Constant cutting speed (G96) and Tool radius compensation (G40-G41-G42)  
Control Axis Superimposition to sync the B-axis (subspindle) to follow Z-axis at a set feedrate  
Canned cycles for turning (roughing, outside/inside finishing, grooving, profile repetition)  
Canned cycles for drilling (chip breaking & chip removal) w/automatic decremting depth  
Canned cycles for thread cutting (G76-G78) including Synchronous Threading (G76.1 / G76.2)  
G10 L14 “Crash Sensing” capability - programmable current limits for each tool  
G16 (G7.1) Cylindrical Interpolation for Milling & Engraving  
G12.1 Circular Contour Milling & Thread Milling w/ C-axis and live tool spindle  
G114.2 (G51.2) Polygon Contour Milling w/ C-axis and live tool spindle  
G84 Axial /Radial Synchronous tapping with pecking and deep hold tapping capabilities  
G114.2 Polygon turning synchronization  
G114.3 Gear Hobbing of splines and gear teeth including both spur and helical gears  
Up to 3 M-codes in one program block  
Input of local coordinates (G52) & Machine coordinate selection for tool change position (G53)  
Work Offsets (G54-G59) 6-48 work offsets available  
Automatic choice of offset value by calling the relevant turret position (T16 = T1616)  
Call of sub-programs (M98) & Call of macro instructions (G65-G66)  
96 Tool wear offsets and tool geometry offsets  
Table of offset values for tool wear compensation with safety limit value (input 0 - 999mm)  
If / Then looping with advanced macro programming, operation logic, and program branching  
Display of actual spindle speed and actual federate (even if G96 or a speed/feed override is active)  
On-the-fly program editing of an active program – optimize the program without having to restart  
Display of operator messages in clear English (or other available languages, e.g. Spanish, French etc.)  
Tool Load Monitoring - Spindle and axis motor load meter display  
Tool Life Management – Controlled by time on tool, or number of workpieces for the tool  
APF – Auto Power-Off Function – Controlled by number of workpieces, or barfeed out-of-stock signal

# GANESH CYCLONE 78MSY OPERATOR PANEL

Power ON / Power OFF P/B's  
 Cycle Start / Feedhold P/B's  
 Emergency Stop Red Mushroom Latching P/B  
 °MPG Driven Program Operation/Simulation Checkout On/Off P/B  
 °MPG Driven Program Operation/Simulation Checkout Rate - Push Button Switches – X1, X10, X100  
 MPG Rotary Increment Dial  
 MPG Rotary Axis Selector Switch for: X, Z, C, Y, & B Axis  
 Feed Hold (red) P/B  
 Cycle Start (green) P/B  
 °Jog Push Buttons for: +B, -B, +X, -X, +Y, -Y, +Z, -Z  
 Feedrate Override Rotary Rate Selector Switch - 0 – 150%  
 Rapid Override Rotary Rate Selector Switch - 0, 25%, 50%, 100%  
 Keyed Rapid/Feed Override Paring Switch for separate or linked operation  
 L-Spindle Override Selector Switch - 50% - 120%, R-Spindle Override Selector Switch - 50% - 120%  
 Turret Index P/B  
 Door Release P/B  
 Parts Catcher Enabled P/B  
 Parts Conveyor Enabled P/B  
 Operator / Setup Lockout Key Switch  
 Edit Lockout Key Switch  
 Mode Selector Switch for:  
     Edit, Memory, MDI, Auto, MPG Handle 1X, 10X, 100X, Jog, Rapid, Zero Return  
 °Function Pushbuttons for: Memory, Single Block, OSP, Dry Run, Block Skip,  
     Machine Lock, Check Interrupt, Cutting Restart (from point of interrupting), Auto Power Off  
 °Spindle Control Pushbuttons for: Left Spindle Armed, Right Spindle Armed, Spindle CW, Spindle Stop,  
     Spindle CCW, Spindle Jog, C-Axis Armed, Spindle Brake, Milling Spindle CW, Milling Spindle CCW  
 °Coolant Selector Pushbuttons for:  
     Main Spindle Headwall Nozzles, Subspindle Headwall Nozzle, Turret Tools, Subspindle Flush  
 Chuck Open/Close Footswitches for main & subspindle workholding

## LED illuminated acknowledgement push-button switches

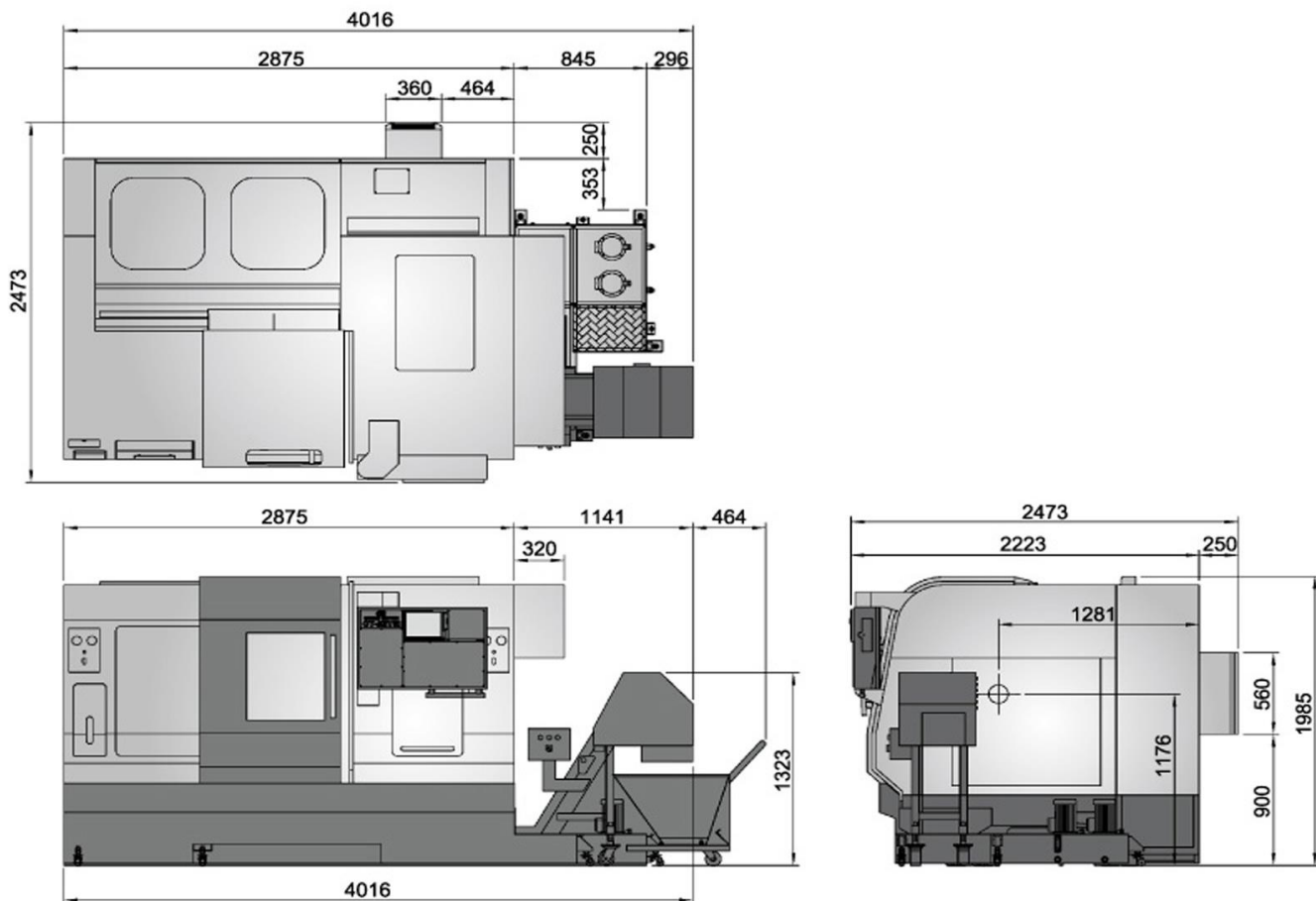
°Parts Catcher  
 °Parts Conveyor  
 °LED Worklight  
 °Chip Conveyor Forward  
 °Chip Conveyor Reverse  
 °Air Blast  
 °Parts Catcher Advance  
 °Parts Catcher Retract  
 °Parts Gripper Open/Close  
 °Tailstock Forward (active for tailstock machines)  
 °Tailstock Retract (active for tailstock machines)

° Indicates that these are LED illuminated pushbutton switches

## LED illuminated status indicators

In-Cycle  
 Feed Hold  
 Machine Alarm  
 NC Control Alarm  
 Lubrication Alarm  
 Turret Alarm  
 L-Chuck Close  
 R-Chuck Close  
 L-Spindle Run  
 R-Spindle Run  
 L-C-Axis Home  
 R-C-Axis Home  
 L-Spindle Brake Lock  
 R-Spindle Brake Lock  
 Parts Catcher Home

## Cyclone - 78MSY Dimensions



Machine Length 159" / Width 80" / Height 79" (includes chip conveyor)  
Chip conveyor features a 42" discharge height and a 12" belt width.  
A wheeled chip tote is included.

Machine operation and service manuals are provided with each machine in electronic format on a USB memory stick.  
Printed manuals are also available for your use for a \$150 printing fee.

**PROVIDING PROFITABLE SOLUTIONS, NOT JUST MACHINES**

## **Training & Terms of Sale**

**Training** – Ganesh Machinery offers a 4-day training program for all production CNC machines at our training center. The intense training program includes basic manual programming, machine setup, operation, and operator level maintenance for those with a working knowledge in the programming & setup of CNC machines. Training does not cover CAD/CAM systems or Manual Guide-i type of programming. There is no charge for the training program at Ganesh for our customers. Turn-key projects are an available option charged at the prevailing hourly rate.

**Travel Package for Training at Ganesh** – Ganesh offers a subsidized travel package for those flying to LAX or Burbank for training at Ganesh in Chatsworth that includes air fare, 4-nights hotel shuttle to and from Ganesh, and lunch for the 4-days of training at \$1,995.00. **Two seats are included free with each new machine!**

**On-Site Training** – Training is offered at the customer site at the rate of \$975 per day plus travel expenses.

**Warranty** – 3-year Mitsubishi control and drive warranty, and 1- year Ganesh machine warranty.

**Service** – Ganesh or your authorized Ganesh trained servicing dealer provides service and training included in the price of the machine. Spare parts are stocked at Ganesh in Chatsworth to support your continued machine operation.

**F.O.B. Point** – Machines ship F.O.B. Ganesh Machinery from Chatsworth, CA 91311.

**Payment Terms** – 20% down payment with your Purchase Order secures the machine. 70% is due prior to machine shipment, and the 10% balance is due net-30 days after installation. **Or the machine can be financed with a Ganesh approved lender.** Leases with \$1.00 buyout are available upon approved credit.

**Delivery Schedule** – Delivery is stock to 12-weeks, subject to prior sales.

**Purchase is governed by the Ganesh Machinery terms and conditions of sale.**

**UL & TÜV ELECTRICAL APPROVAL IS AN AVAILABLE OPTION**

**Prices and specifications subject to change without prior notice.**

**A large compliment of spare parts are in stock at Ganesh to ensure your continued operation.**

**SERVING INDUSTRY SINCE 1985**



**Ganesh Headquarters  
Chatsworth, CA**



**4,000 Square Feet Showroom**



**In-House Training Center**



**Fully Stocked Parts Room**



## **TERMS & CONDITIONS OF SALE**

### **General Offer & Applicable Law**

Products and services furnished by Ganesh Machinery (referred to herein as “we”, “us” and “our”) are sold to you (“Customer”) only on the terms and conditions stated herein. Notwithstanding any terms or conditions on Customer's orders, our performance of any contract is expressly made conditional on Customer's agreement to these terms and conditions of sale. All contracts for the sale of products shall be construed under and governed by the laws of the State of California. All orders shall be subject to our acceptance.

### **Prices & Specifications**

All published prices and specifications are subject to change without notice. Unless otherwise specified in writing, all quotations are firm and expire thirty days after the date thereof. Unless otherwise stated, all prices, published or quoted, shall be exclusive of insurance and any and all taxes and transportation costs.

### **Transportation & Acceptance**

We reserve the right to select the means of transportation and routing if we determine that Customer's instructions are unsuitable. Customer shall be responsible for all risk of loss and/or damage commencing upon delivery of the products to the transportation company at the F.O.B. point. Title to any products shall pass to Customer when products are delivered to the transportation company at the F.O.B. point. All products must be inspected by Customer immediately upon receipt and any claims should be filed with the transportation company when there is evidence of shipping damage, even if the damage is concealed. The furnishing of a product to Customer shall constitute acceptance of that product by Customer unless notice of defect or nonconformity is received by us within ten-days of receipt of the product at Customer's designated receiving address. We may repair or, at our option, replace defective or nonconforming parts after receipt of notice of defect or nonconformity.

### **Performance**

We shall be excused for delay in delivery and/or may suspend performance of any contract for the sale of products and services without liability to Customer in the event and to the extent of a “force majeure” which shall include strike, lockout, riot, war, fire, flood, explosion, act of God, accident, or subcontractor or supplier delays or other events beyond our control. We reserve the right to substitute suitable products, when we determine in our sole discretion that such substitution is necessary due to a force majeure. No order may be terminated by Customer without our written consent. Machines are not designed to conform to UL or OSHA Standards. It is Customer's sole responsibility to verify the electrical standards applicable to any machines purchased subject to these terms and conditions in their locality.

### **Warranty & Liability for Machine Sales**

Our machines, including accessories and spare parts purchased and/or included with the machine sale, are guaranteed to be free from defects in workmanship for twelve months after the date of purchase, unless specified otherwise in writing. This warranty is effective only if the necessary information is provided: serial number of machine and nature of defect, and any part claimed defective is returned prepaid to us. No such return will be accepted unless we issue a returned material authorization (RMA) number. Upon its proper return to us, we shall repair or replace, at our option, the defective part. This warranty applies only if (a) our instructions as to installation, operation and maintenance have been completely followed; (b) the products have been used solely under normal operating conditions or procedures; (c) the products have been properly installed, operated and maintained and have not been affected by misuse, neglect or accident; (d) Customer has not attempted or performed (or caused to be attempted or performed) any type of repair or corrective work or modification without our prior written consent and (e) we shall have received notice of any defect no later than thirty days after Customer first has knowledge of same. **THIS WARRANTY IS EXPRESSLY IN LIEU OF, AND EXCLUDES ALL OTHER EXPRESS, IMPLIED OR STATUTORY WARRANTIES INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, USE OR APPLICATION AND ALL OTHER OBLIGATIONS OR LIABILITIES ON OUR PART.** The remedy of repair or replacement, as provided herein, shall be the Customer's exclusive remedy and will satisfy all our liabilities whether based upon contract, negligence, or otherwise. In no event shall we be liable for incidental, consequential, punitive or special damages, or losses.

### **Warranty & Liability for Accessory & Spare Part Sales**

Accessories and spare parts purchased after the original machine sale are guaranteed to be free from defects in workmanship for 90-days after the date of purchase, unless specified otherwise in writing. This warranty is effective only if the necessary information is provided: original date of purchase and nature of defect, and any part claimed defective is returned prepaid to us. No such return will be accepted unless we issue a returned material authorization (RMA) number. Upon its proper return to us, we shall repair or replace, at our option, the defective part. This warranty applies only if (a) our instructions as to installation, operation and maintenance have been completely followed; (b) the products have been used solely under normal operating conditions or procedures; (c) the products have been properly installed, operated and maintained and have not been affected by misuse, neglect or accident; (d) Customer has not attempted or performed (or caused to be attempted or performed) any type of repair or corrective work or modification without our prior written consent and (e) we shall have received notice of any defect no later than thirty days after Customer first has knowledge of same. **THIS WARRANTY IS EXPRESSLY IN LIEU OF, AND EXCLUDES ALL OTHER EXPRESS, IMPLIED OR STATUTORY WARRANTIES INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, USE OR APPLICATION AND ALL OTHER OBLIGATIONS OR LIABILITIES ON OUR PART.** The remedy of repair or replacement, as provided herein, shall be the Customer's exclusive remedy and will satisfy all our liabilities whether based upon contract, negligence, or otherwise. In no event shall we be liable for incidental, consequential, punitive or special damages, or losses.

### **Indemnity and Hold Harmless**

Customer agrees to indemnify and hold Seller harmless for any and all claims, liability, costs, expenses, or losses arising out of or relating to the sale or use of the products which are the subject of this sale, including, but not limited to, unattended use of the equipment, bodily injury or death or any fire or other calamities resulting from Customer's use of any machine sold hereunder whether any such claims, liability, costs expenses or losses are suffered by customer or any third party.

### **Compliance with Manuals, Instructions and Good Safety Practices; Compliance with Laws**

Customer shall be responsible for ensuring compliance by its personnel and others given access to any products in Customer's possession or control with all operating and maintenance manuals and instructions provided by us or any of our distributors and with other normal safety, operation and maintenance practices commonly observed in the industry. Compliance with local, state or federal laws, codes, directives or regulations relating to the products and their use is the sole responsibility of Customer, and we make no warranty or representation with respect thereto.

### **Terms of Payment**

All payments for products released and shipped on approved credit accounts shall be due in full thirty days from the date of invoice. Past due balances shall be subject to a service charge of 1.5% per month. Partial shipments will be billed as made and payments therefore are subject to the above terms. We may cancel or delay delivery of products or services in the event Customer fails to make prompt payment therefore or in the event of arrearage in Customer's account. We maintain all rights of a secured party by reference to applicable Uniform Commercial Code provisions in effect in each state in which the products are located.

### **Arbitration**

All disputes under any contract concerning products sold to Customer pursuant to these terms and conditions that are not otherwise resolved between Customer and us shall be resolved through mandatory and binding arbitration to be conducted in Los Angeles, California and in accordance with the Commercial Arbitration Rules and Mediation Procedures of the American Arbitration Association (“AAA”) strictly in accordance with the terms of the contract, these terms and conditions and the substantive laws of the State of California, before a single arbitrator knowledgeable in the subject matter of the dispute selected in accordance with the procedures of the AAA. The parties hereby consent to the service of process by registered mail, return receipt requested or by any other manner provided by the laws of the State of California and hereby waive any claims or defenses based on venue or forum non conveniens. Any related arbitration award will be final, conclusive and binding upon the parties and any judgment thereon may be entered and enforced in any court of competent jurisdiction. To the extent reasonably practicable, all disputes of a similar subject matter relating to more than one contract between any one Customer and us concerning products sold pursuant to these terms and conditions shall be consolidated into a single arbitration proceeding.

### **Attorneys' Fees**

Should any legal action or arbitration be brought for the enforcement of these terms and conditions, or due to any alleged dispute, breach, default or misrepresentation in connection with any provisions herein, the non-prevailing party shall pay all reasonable attorneys' fees, expert witness fees and other costs and expenses, as well as arbitration costs and recoverable court costs, incurred by the prevailing party in any such action or proceeding and any action to enforce a judgment (including bankruptcy representation) and any appeal, in addition to such other relief, as may be granted to the prevailing party by the arbitrator or, if applicable, a court.

### **Fire Waiver**

Customer shall be solely responsible for the appropriate use of the products, including, without limitation, the machining of certain metals that use oil as the cutting and cooling medium which can provoke the ignition of oil mists, fillings, chips or parts of a machine which could cause considerable damage to a machine and its surroundings. By accepting the products sold hereunder, Customer assumes this risk and is hereby required to use best efforts to avoid such incidents and to limit any potential risk or exposure to life and property arising therefrom.