

# The HIGH SPEED *EAGLE V9* (Graphite Version)

New Design - Innovative Technology - High Performance

*HIGH SPEED*  
**EAGLE V9**  
New 3/5-Axis Design



Compact 3/5-Axis Solution!

Machine Footprint: W x D x H  
120.6 x 85.7 x 112.2 inch

Axis Travel: X x Y x Z  
31.5 x 23.6 x 19.7 inch

Optional 3-Axis Table Size:  
X 39.3 x Y 26.0 inch

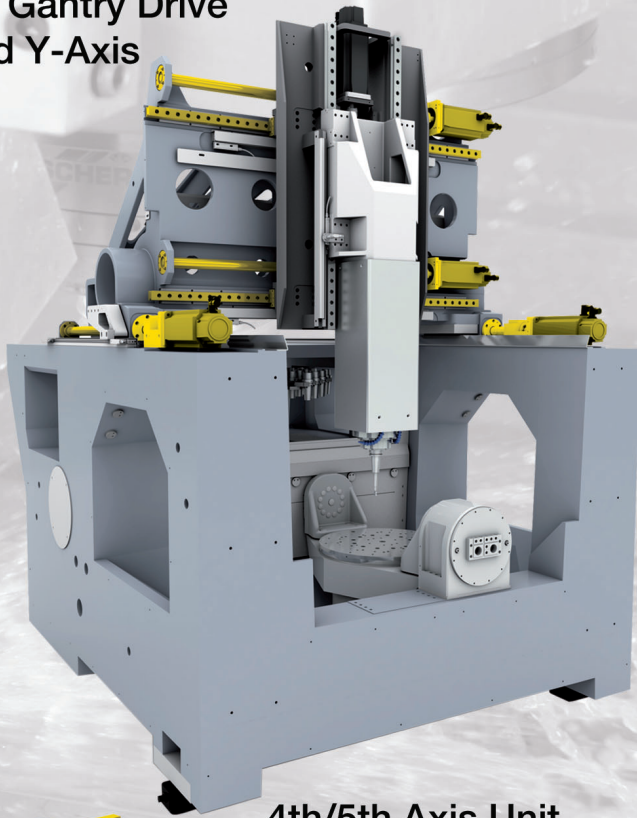
Standard Rotary Table Size/Tilt:  
23.6" Dia / +140° ~ -60°

## Features:

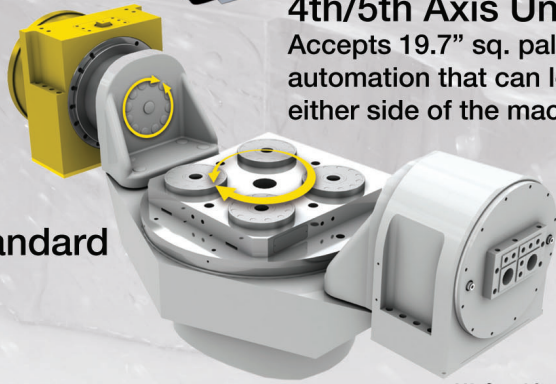
- **Polymer Concrete Base-Design** and topology optimized structure for optimal stiffness, temperature symmetry and vibration damping machine bed with a 3-point foundation set-up.
- **Active Thermal Control** uses a system of active cooling lines running throughout the machine structure where ever heat is generated such as, the machine base, spindle mounts, floating and fixed bearings, guide ways, etc. to maintain the highest possible machining accuracy.
- **Double Gantry Drive** in both the X and Y-axis uses two motors, ball screws and Heidenhain glass scales in each axis to provide the highest dynamics to meet the required drive rigidity and accuracy.
- **Standard 4th/5th Axis** is a high dynamic tilt/turn axis capable of holding 1100 lbs with a gear driven B-Axis tilting +140° ~ -60° @ 25 RPM and a 100 RPM Direct Drive 360 degree C-Axis.
- **Four Spindle Sizes Are Available:** The standard 36,000 RPM HSK-E50 spindle can be optioned to a 42,000 RPM HSK-E40, a 26,000 RPM HSK-A630, or 18,000 RPM HSK-A63 spindle to best fit your application.
- **Heidenhain 3/5-Axis Control** is the TNC-640with 15" display provides a 0.5ms (120,000 BPM) processing speed with a 5000 block look ahead and a premium software package to produce the smoothest 3D profiles.



# Double Gantry Drive in X and Y-Axis

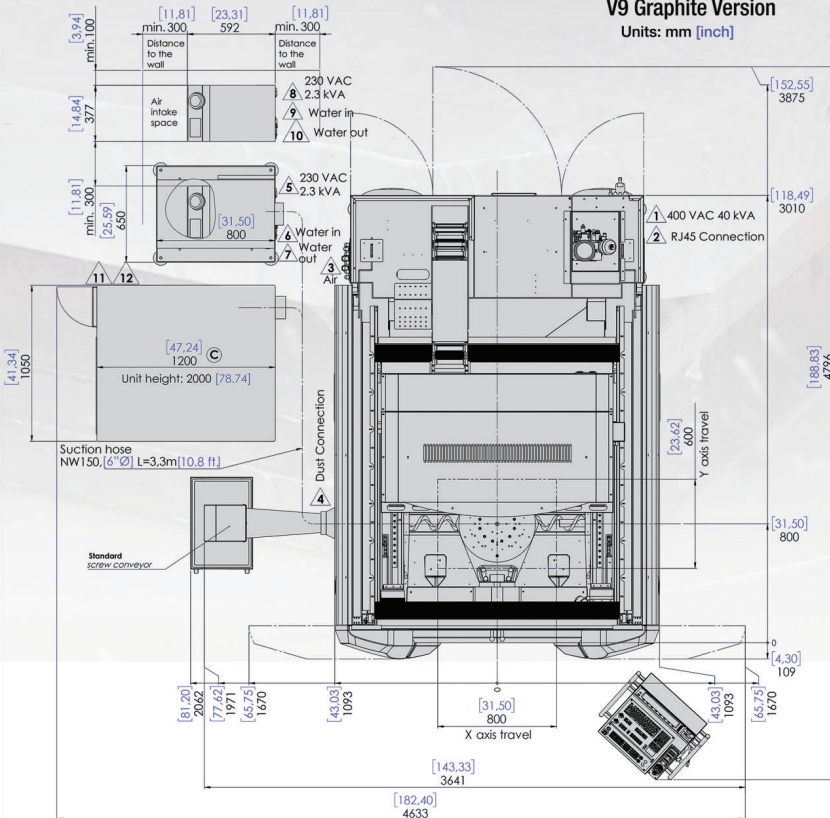


**4th/5th Axis Unit  
Accepts 19.7" sq. pallets for  
automation that can load from  
either side of the machine.**



**Standard**

**V9 Graphite Version**  
Units: mm [inch]



## Technical Data

Axis-travel	X 31.5" x Y 23.6" x Z 19.7" X 800 mm x Y 600 mm x Z 500 mm
Feedrates	max. 1,181"/min. : 30 m/min
Acceleration	max. 590.5"/s <sup>2</sup> : 15m/s <sup>2</sup>
3-Axis T-slot table (option)	T-slot-table can be build over 4 <sup>th</sup> /5 <sup>th</sup> -axis
Max. load: T-slot-table	up to 4,400 lb. : 2.000 kg
3-Axis table clamping surface	X 39.4" x Y 26.0" : X 1,000 mm x Y 660 mm
T-slots	4 x 18 mm H12
Distance spindle nose – table min./max.	2.7" / 22.4" : 70 / 570 mm
Workpiece size 3-axis	X 31.5" x Y 23.6" x Z 19.7" X 800 x Y 600 x Z 500 mm
Workpiece size 5-axis	Ø 23.6" / H = 21.6" (1,102 lb.) Ø 600 mm / 550 mm (500 kg)
Power requirements	40 kVA
High-frequency spindle – selection * standard equipment	HSK E40: 1 - 42,000 rpm - 20 HP (15kW) HSK E50: 1 - 36,000 rpm - 23 HP (17kW)* HSK A63: 1 - 26,000 rpm - 34 HP (25kW) HSK A63: 1 - 18,000 rpm - 34 HP (25kW)
Tool changer – selection * standard equipment	88 positions (HSK E40) 72 positions (HSK E50)* 48 positions (HSK A63)
Minimal quantity lubrication	included
CNC-control	HEIDENHAIN TNC 640 with 15" Screen
Machine dimensions	W 85.7" x D 120.6" x H 112.2" W 2,177 x D 3,064 x H 2,850 mm
Total weight	25,353 lb. : 11,500 kg
5-Axis rotary table	B-axis +140 degree / -60 degree C-axis 100 rpm workpiece weight: 1,102 lb. : 500 kg

Options * standard equipment	Laser system for tool measuring* Automatic cutter cleaning station Infrared measuring probe* PowerInspect - 3D-measuring Graphite exhaust system Oil mist exhaust unit Sound absorber for exhaust system ATS - Aerosol dry lubrication DCM (Dynamic collision monitoring) SMS alarm Ready for automation HEIDENHAIN software options EcoTec
---------------------------------	---

## Workpiece Dimensions

**3-AXIS**

optional table



X x Y x Z: 31.5" x 23.6" x 19.7"  
800 x 600 x 500 mm  
max. 4,400 lb. 2.000 kg

**5-AXIS**



Ø 23.6" 600 mm / H = 21.6" 550 mm  
max. 1,102 lb. 500 kg

**MC MACHINERY  
SYSTEMS, INC.**

a subsidiary of Mitsubishi Corporation

MC Machinery Systems Inc.  
85 NorthWest Point Blvd.  
Elk Grove Village, IL. 60007  
Phone: (630) 616-5920  
Fax: (630) 616-4068  
www.mcmachinery.com