

# GANTRY EAGLE

# 1400

**BIGSIZE**



**Axis-Travel: X / Y / Z**  
49.2 / 90.1 / 27.5"

**Work-Tank: W / D / H**  
59.4 / 101.2 / 31.1"

- Ingersoll introduces the new EAGLE POWERTEC Touch Screen Control using 2 x 32-bit PC/NC processors, a Sercos interface at .25ms cycle time and Windows XP OS.
- EAGLE POWERTEC - Generator PT 60 is the worlds first "**Adaptive Current-Shape**" power supply. Each discharge pulse calculates and creates the ideal current shape to match the exact discharge requirements of the moment.
- The Gantry Eagle 1400 also features EAGLE POWER JUMP which now provides jump speeds up to 18 m/min.(708"/min) which can improve processing time by 50%.

OPS  **INGERSOLL**  
Fly with the eagle!

**MC** **MACHINERY  
SYSTEMS, INC.**  
a subsidiary of  Mitsubishi Corporation





The Gantry EAGLE 1400 provides a flexible and future-orientated solution for the EDM tasks of the tool and mold industry.

## GANTRY 1400 Technical Specifications

Axis Travels (X x Y x Z)	in	49.2 x 90.1 x 27.5
Worktank Internal Dimensions (W x D x H)	in	59.4 x 101.2 x 31.1
Max Dielectric Fluid Level	In	29.5
Table Dimensions (W x D)	in	52.7 x 94.9
Max Workpiece Weight	lb	22,046
Max Electrode Weight	lb	660
Table to Ram Platen Distance min/max	in	7.8 / 35.4
Rapid Travel Speed (in/min)	in	196.8
Machine Install Dim (W x D x H)	in	158 x 185 x 155.6
Machine System Weight (wet)	lb	41,890
Fluid System Capacity	gal	1,585
Filtering Method/ Size	Sq/ft	4 Paper Cartridge 344
ATC Standard (Linear)	pos	13
ATC Optional (Rotary)	pos	30, 48, 18/+2 Pallet
C-Axis RPM (Adjustable)	RPM	1 ~ 20
Max Single Electrode Weight ATC	lb	55
Max Total Load 13 Pos ATC	lb	330
Min Indexing Angle	Deg	0.001
Power Supply Peak Current STD (optional)	AMPS	PT60 = 83 (PT100=110)
Required 3-Phase	V	400 Fused to 50 AMP
Current Draw Continual Load	kVA	23.0
Automatic Lubrication System		Standard

### EAGLE POWERTEC

#### Generator-Technology

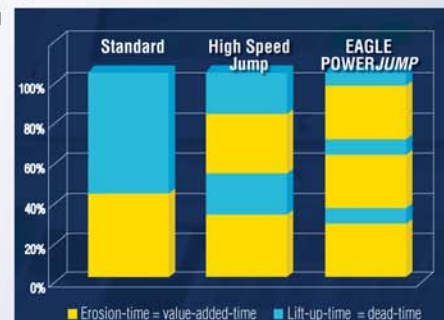
Introducing the worlds first EDM power supply with "**Adaptive Current-Shape**" By means of high-speed monitoring and process control, rough machining speed is doubled while the spark gap is reduced. At the same time electrode wear is dramatically reduced providing much improved accuracy and finish.



### EAGLE POWER JUMP

#### Higher Jump-Speed: up to 18 m/min.

Processing time can be reduced by as much as 50% due to the effectiveness of the upgraded ratio between erosion time and lift-off-time. A shorter dead-time creates a shorter burn cycle which in-turn provides higher process-stability in difficult burning conditions.

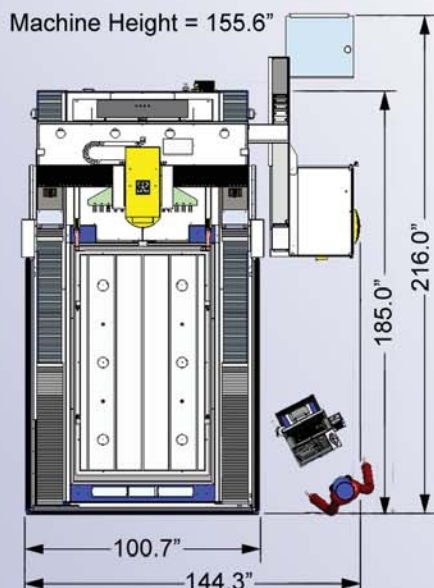


Comparison of burn-time vs dead-time

### Drives

#### Highest Precision

The High-Performance Servo-System accelerates the Z-axis with 1.4 G to an interval-speed up to as much as 18m/min. A specially designed ball screw along with an optimized lubrication and cooling system were developed to maintain reliability. An improved measuring system in the Z-axis was developed to ensure high precision and long life of the machine components providing premium results for all EDM applications.



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