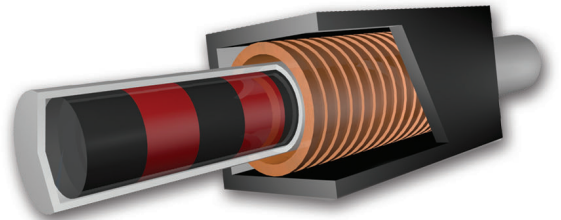


# MX600

**New Fine Wire  
Auto-Threading  
0.0008" dia.**

**ADVANCE PLUS**



## All New (NANO) Cylindrical Drive Technology

The MX Series utilizes a totally new non-contact, friction free, round linear shaft motor system to drive the X Y U & V machine axes through an all optical fiber servo system.

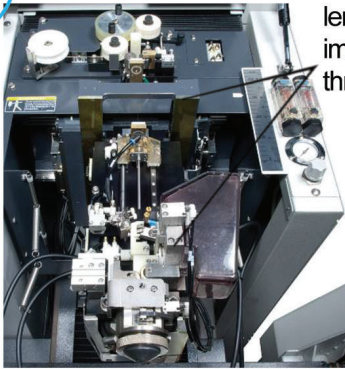
## Features:

- **New Thermal Buster Temperature Control with Isolation Structure** The MX Series is enclosed in an isolation structure to minimize accuracy degradation by shutting out the effects of environmental temperature changes and vibration. Thermal stability is synchronized through thermal sensors on the machine casting while circulating the fluid through key areas of the machine structure.
- **New Linear Shaft Motor Drive and Glass Scale Feedback** ensure friction free, highly accurate column movement throughout the entire X, Y, U, & V Axes machining range.
- **Highly Rigid Machine Structure** incorporates a "T" shape meehanite base casting with the X & Y axes independently mounted using Ultra-High accuracy linear guides installed to a linear straightness of 1-2  $\mu\text{m}$ . A hardened stainless steel machine table is mounted on a granite base, protecting it from the effects of floating capacitance issues providing high accuracy fine finish machining.
- **The Oil Dedicated nPV Power Supply** provides Nano-Pulse control improving surface finish based on low-voltage short-pulse machining conditions, which is ideal for preventing edge softening and cobalt depletion during carbide machining.
- **DMX-S (Digital Matrix Sensor)** combined with the nPV generator specifically shapes the spark pulse to reduce electrode wear and save energy. This allows for a lower wire speed which reduces wire and energy costs by as much as 60%.
- **New Intelligent Thin Wire Auto-Threading System** has been redesigned to anneal and insert thin wire sizes as small as 0.0008" diameter into start holes as small as 0.0012" diameter.
- **Powerful Support Functions Improve Productivity** The M700 Advance Plus series control uses Windows 7 Embedded operating system with many levels of automated machine functions to allow even an inexperienced operator to cut parts with confidence.

# MX Series Oil Dedicated Productivity Improvements

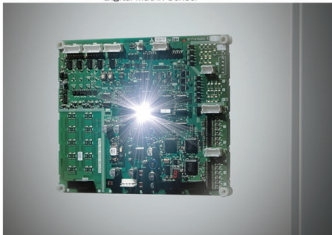
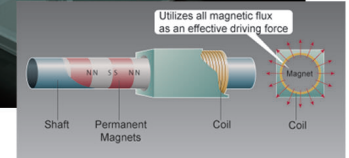
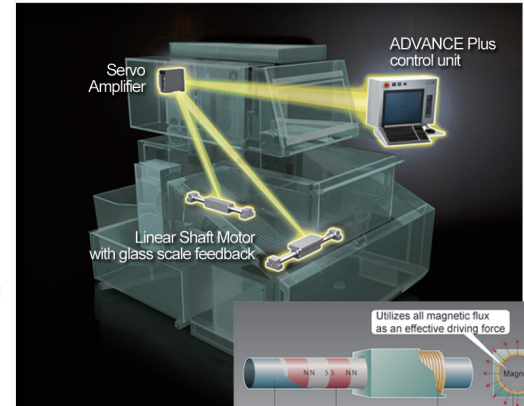


Intelligent AT



Advanced wire annealing at over 12" in length reduces wire curl to less than 10% improving fine wire threading and reinsert through the gap while submerged.

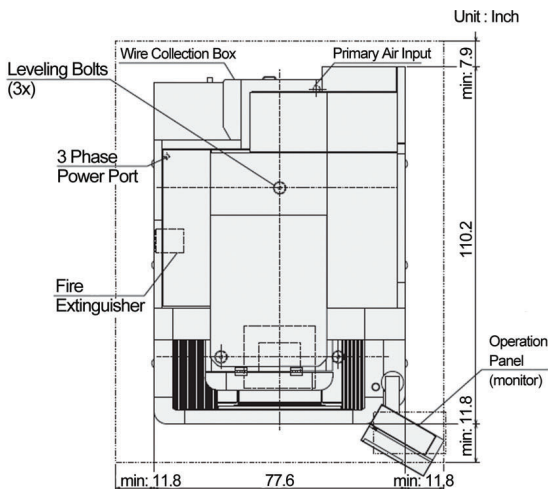
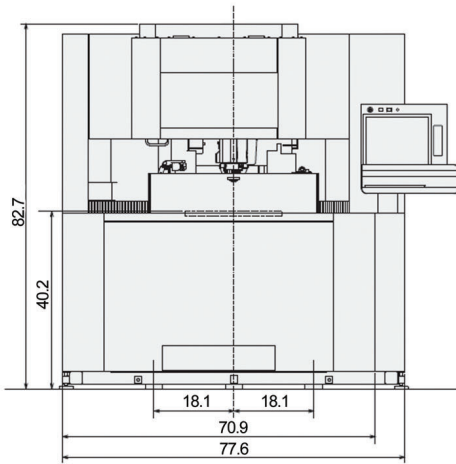
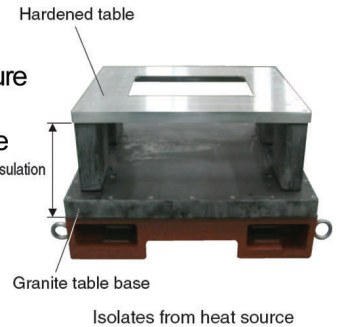
The new Advance Plus control combined with the Optical Drive System provides 4 times the communication speed between the servo system and the XYUV axes Linear Shaft Motor drives.



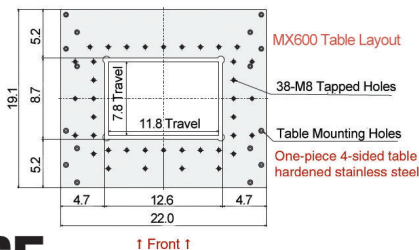
The nPV Nano-pulse power supply and DMX-S, Super Digital Control sensor, specifically shape each spark to improve surface finish in oil, reduce vibration and minimize electrode wear. This reduction in wear allows up to a 60% reduction in wire consumption.



The Rigidity & Isolation Structure uses a ceramic insulator between the granite table base and the new hardened SS work table reducing floating capacitance which improves nPV oil machining surface finish.



Machine Specifications		MX600
Machine Unit	Max Workpiece Dimensions (WxDxH)	in 24.4 x 24.0 x 3.9
	Max Workpiece Weight	lb. 660
	Table Dimensions	in 22.0 x 19.1
	Machining Range (XxYxZ)	in 11.8 x 7.8 x 7.1
	Wire Dia. by AT Device	in .0008 ~ .008 (US standard)
	Automatic Wire Threader	Standard
	Min. Start Hole Dia.	in 0.0012 (w 0.0008 wire)
	Taper Machining Unit	Standard
	Taper Unit Travel (U x V)	in ±1.4 x ±1.4
	Max. Taper Angle	deg 15 deg @ 3.9" Thickness
	Overall Machine Dimensions (WxDxH)	in 77.6 x 110.2 x 82.7
	Machine Weight	lb. 7495
Fluid System	Tank Capacity	gal. 80 (oil)
	Filtered Particle Size	µm 3
	Filter Elements	2 / Paper
	Fluid Level Adjustment Range	in 2.0 ~ 6.7
	Overall Dimensions	in Incorporated in foot print
	Dry Weight	lb. Included in mach.weight



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