

TrodeMaster™

METHODS MACHINETOOLS



A complete high-speed graphite machining center... at half the price of competitive machines!

The Only 30-Taper Electrode Machining Center

The Methods TrodeMaster™ is a FANUC RoboDrill heavy-duty, high-speed VMC specially equipped for cutting graphite electrodes. With exceptional 3-D contouring and a full Torrit dust collection system, the TrodeMaster provides capabilities and performance of machines at more than twice the price. It is the ideal machine for both small job shops and large in-house EDM facilities.

Exceptional Speed and Precision

The TrodeMaster offers milling capabilities unmatched in a 30-taper machine. With feedrates to 2362 ipm, rapid traverses to 2125 ipm, accelerations to 1.5 G, a 24,000 rpm Big Plus™ spindle, and 1.1-second tool changes, it dramatically shortens the machining time of even the most complex electrodes. The FANUC

31-iA5 CNC with 1000 block look-ahead and 0.4 millisecond block processing speed enables hesitation-free contouring even at high feedrates. Spindle HRV control and thermal compensation ensure dynamic accuracy and circularity to .00011" TIR.

The Rigidity to Cut Metal

The TrodeMaster is a modified FANUC RoboDrill — a machine designed for the continuous long-term cutting of metal parts. Its exceptional rigidity makes it ideal for hard die milling as well as the production of copper electrodes.

Performance Enhancing Options

The TrodeMaster is available with a range of productivity- and precision-enhancing options including 4th and 5th axes, spindle measuring probes, and laser tool setters.

Standard Features



Big Plus™ 24,000 rpm spindle and 0.9-second tool changer



Full Torrit dust collection system



Fanuc 31-iA5 CNC with 1000 block look-ahead and block processing speed of .04 milliseconds

TrodeMaster™:

A Complete Graphite Machining Package

Fanuc RoboDrill high-speed CNC graphite machining center

- Designed for metal cutting rigidity
- Full enclosure including clear top cover
- Torrit DFO 2-2 1000 cfm graphite dust collector
- AI Nano High-Precision Contour Control II with RISC processor
- Feedrates up to 2362 ipm
- 1000 block look-ahead feature
- 1.5 G acceleration
- Standard Big Plus™ 24,000 rpm spindle
- Thermal growth compensation
- Renishaw NC-3 laser tool gauge
- 1 GB ATA data server
- Flash memory slot
- Ethernet
- Circularity to 0.00011" TIR

Specifications / Dimensions

Axis Travels	X Axis inches	19.7
	Y Axis inches	15.7
	Z Axis inches	13.0
	Spindle-to-table inches	5.9 ~ 17.7
Table	Dimensions inches	25.6 W x 16.1 D
	Load capacity pounds	550
Spindle	Motor HP	2.0 / 5.0
	Speed rpm	24,000
	Taper	BT-30 / Big Plus™
Feedrates	Contouring ipm	2362
	Rapid traverse ipm	2125
	Accelerations G	1.5
Automatic Tool Changer	Type	14-station turret
	Maximum tool diameter inches	3.15
	Tool selection method	Bidirectional shortest path
	Tool change time (tool-to-tool) seconds	1.1
Dimensions	Footprint inches	61.0 W x 75.2 D
	Height inches	88.1
	Floor area (without collector) inches	98.0 W x 111.0 D
	Weight pounds	4400
Dust Collector	Model	Torrit DFO 2-2
	Capacity cfm	1000
	Motor HP/rpm	3.0 / 3450
	Power requirements 3-phase TEFC	230 / 460 V, 60 Hz
	Air requirements psi	60
	Container capacity cubic feet	1.8
	Noise level dB	
	1.5 m high and 1 m from source	68
	Spikes during pulse cleaning	78
	Dimensions inches	62.0 W x 27.0 D x 74.0 H
	Weight pounds	975
	Optional silencer	Torrit

Specifications subject to change without notice.

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