



EXTREME TOOL & ENGINEERING, INC

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Extreme Tool & Engineering Equipment List

Toolroom Equipment

- (1) Makino V55 High Speed Mill
- (1) Makino F5 High Speed Mill
- (1) Makino S56 CNC Vertical Machining Center
- (1) Roders RXP 500 High Speed Graphite/Steel Mill
- (1) Roders RFM 600 High Speed Graphite/Steel Mill
- (1) 3R Workmaster Robot and Steel Machining, has integrated 4th axis/indexing, And changes steel, electrodes, tools/cutters, and all tool holding systems including 3R Coin, Macro, and Dynafix Pallets
- (3) Fanuc CNC Wire EDM's
- (2) Mitsubishi EX 22 CNC Sinker EDM's w/32 pos. Toolchanger and combi-chuck
- (1) Mitsubishi EA8 CNC Sinker w/16 pos. Toolchanger and combi-chuck
- (2) Mitsubishi EA12 Sinkers EDM's with intergrated 3R Workmaster Robot/Automated EDM Cell

*All EDM/CNC equipment equipped with 3R macro and mini tooling capability

- (2) Haas VF-1 CNC Vertical Machining Centers
- (1) EC400 Haas Horizontal Machining Center with pallet changer
- (1) Moore Jig Grinder
- (1) Bridgeport EZ Trak 3 axis Mill
- (4) Bridgeport Series 1 Vertical Mills w/DRO's and Power Feeds
- (1) Willis, 4' Radial Arm Drill Press
- (1) Okamoto 12.24. DX Hydraulic Surface Grinder
- (5) Mitsui 612 Surface Grinders w/DRO's
- (1) Mitsui 818 Surface Grinder w/DRO
- (1) K.O. Lee Surface Grinder
- (1) Harig Surface Grinder
- (1) Clausing Engine Lathe
- (1) Johnson Band Saw
- (1) Rofin Laser Welder
- (1) Miller Maxstar TIG Welder
- (2) Hupp-Co Heat Treat Furnace w/ programmable timer
- (1) Clark Fork Lifta
- (1) IPSCO EJ Pin Cut Off Machine

Engineering

- (14) Pro Engineer Seats
- (5) Pro Mold / Pro Manufacturing Seats
- (1) ProE/Moldflow Part Advisor Module
- (1) ProE CMM Program Module
- (1) Moldex 3D Mold Simulation Software, Flow, Cool, Warp, Shrink, and Fiber Orientation
- Expert Moldbase Extension (EMX) Seats
- (3) MasterCam Seats
- (2) Solidworks 2008 Licenses
- (2) Windows 2003 Network Server
- (3) Cadkey Seats
- (1) Solidview

- (1) HP Design Jet 430 E Size Plotter
- (6) Misc. HP Printers, Laser/Jet
- (1) Fully Equipped office; fax, E-mail, and FTP file capability

Molding Equipment — Sampling/Process Dept.

- (1) Class 100,000 Cleanroom Enclosure (3 Presses)
- (1) [2001] Battenfeld 80 Ton Molding Machine
- (1) AEC Central Material Handling System
- (1) RJG Portable E-Dart Unit
- (1) 2007 Niigatta 385 Ton Electric Molding Machine
- (1) Star Automation TW-1000VI Servo Robot (on 385 ton)
- (1) 2005 Cincinnati RoboShot 110 Ton Electric Molding Machine
- (2) Portable Core Pull Units for Roboshot/Niigatta
- (1) 2001 Battenfeld 80 Ton Molding Machine
- (1) 2010 Nigatta 310 TON Electric Molding Machine
- (1) 2000 28 Ton Battenfeld Injection Molding Machine
- (1) Star Automation Servo Robot (on 310 TON)
- (1) Star Automation NPW-800GII Servo Robot (on 110 TON)
- (2) 5 Ton Conair Chiller
- (1) AEC 100lb. Hopper Dryer
- (2) Magurie/Dry-Air Dryers
- (2) AEC/Whitlock ED-25MR Dryer
- (2) Thermolator's, AEC/Advantage
- (1) AEC TDH4Q Hot Oil Controller
- (5) Conveyors, Star/EMI

Quality/Lab

- (2) Brown and Sharp Global Image Fully Automated CMM
- (1) OGP Flash 200 Smartscope - Automated Vision System
- (2) Nikon - MM40 Toolmakers Microscope

Secondary Operations

- (1) Dukane Ultra 210 Sonic Welder
- (1) Aero 130 Pro Printer (Pad Printer)
- (1) Primo Cure Drying Tunnel
- (1) Miscellaneous Tools for Assembly/Secondary Operations

** All Secondary Operations Equipment in Class 10,000 Cleanroom

Facility One: (Mold Manufacturing Plant)

12,000 Sq. Ft. Facility Customized for Injection Mold Toolmaking. Support Equipment as required for precision moldmaking, including 6'x 8' Granite Plate

Facility Two: (Mold Sampling/Validation/Post Sample Toolwork Plant)

12,000 Sq. Ft. Facility Customized for Injection Mold Sampling, Process Development, Quality Control and Validation, and Post Sample Toolwork including Debug, Tweaking/tuning, Engineering Changes, and Mold Repair.

(24,000 sq. feet total)