

El Dorado Molds, Inc.

Facility and Equipment List

Building Information:

Approximately 16,300 Sq. Ft. with air conditioning and climate control throughout, for close tolerance applications.

Computer Systems:

A well maintained local network of 28 workstations and 5 servers with supportive peripheral hardware. Company and customer data is backed up nightly and stored at secure off site locations. Primary software applications for management, engineering and machining include:

- **IQMS** ERP database system, integrated with our sister company, *N.C.I.M.*
- **MAS 90** accounting database
- **JobBoss** shop scheduling and job management database
- Siemens **Unigraphics NX** CAD systems for engineering and tool design
- Kubotek **KeyCreator** CAD systems for shop design and detailing
- **Mastercam** CNC programming software for 3D machining, graphite and hard-milling applications
- **Esprit** Wire-EDM programming software
- **Microsoft Office** application suites, including **Exchange** and **Sharepoint** services

Electrical Discharge Machining Equipment:

- (1) **Charmilles Robofil 2020** Wire-EDM with complete computerization and automatic threading
- (1) **Charmilles Robofil 2020.1 S.I.** (Surface Integrity) Wire-EDM with complete computerization and automatic threading
- (1) **Charmilles Roboform 200** with complete computerization and 40 cartridge tool changer
- (1) **Charmilles Roboform 200** with complete computerization and 20 cartridge tool changer
- (1) **Charmilles Roboform FO 350s** with Micro Technology, complete computerization and 80 cartridge tool changer
- (1) **Charmilles Roboform 20** with complete computerization
- (1) **Charmilles HD8** hole burner

EDM Auxiliary Equipment:

- (7) **Erowa** system air chucks
- (1) **Erowa** Stainless Steel air chuck
- (1,400) **Erowa** electrode holders

CNC Robotic Cell:

- (1) **Mikron HSM 400** high speed (hard) milling machine with a 42,000 rpm spindle, laser tool presetter, 168 tool-changer magazine, capable of graphite electrode machining and soft and hard materials.
- (1) **Mikron HSM 600** high speed (hard) milling machine with 24,000 RPM spindle, Renishaw digitizing probe, laser tool presetter and 30 tool-changer magazine.
- (1) **Erowa Robot** installed in-between the Mikron 400 and 600 with two magazine racks with a total of 172 pallet stations. The robot has a maximum load capability of 280lbs.

CNC Machining Centers:

- (1) **Matsuura MC-760 VX** with 30 tool magazine - table size 16" x 45"
- (1) **BostoMatic #32-356** Machining Center with 40,000 RPM spindle, 20 tool magazine, Renishaw digitizing probe

Grinding Equipment:

- (1) **Okamoto ACC 16/32 DX** automatic surface grinder with D.R.O.
- (2) **Mitsui 6/18** surface grinder with D.R.O.
- (1) **Okamoto 6/12** linear surface grinder with D.R.O.
- (2) **Okamoto 6/18** linear surface grinder with D.R.O.
- (1) **Mitsui 8/18** surface grinder
- (1) **Harig 6/12** surface grinder
- (1) **Deckel** tool and cutter grinder
- (1) **Baldor** carbide grinder
- (1) 6" pedestal grinder
- (1) 8" pedestal grinder
- (7) **Torit** dust collectors

Vertical Milling Centers:

- (2) **Bridgeports** with EZ TRAK CNC controls
- (2) **Bridgeports** with ACU-RITE III digital readouts

Honing Equipment:

- (1) **Sunnen model MBB-1660** honing machine

Drilling Equipment:

- (1) **Tominaga RH-1300** radial drill press with a Bergonzi tilt table

Lathe:

- (1) **Leblond Makino** lathe with Newall digital readouts

Optical Equipment:

- (1) **Mitutoyo PH350** optical comparator
- (1) **Mitutoyo Series 176** toolmaker microscope
- (1) **Olympus SMZ-1B** zoom stereoscope
- (1) **Nikon** high power stereoscope
- (2) **Fostec** fiber optic high intensity lights

Saw:

- (1) **Kalamazoo H9AW** horizontal band saw
- (1) **Delta 28-263, 14"** vertical band saw

Polishing Equipment:

- (1) **Gesswein Ultramax** ultrasonic polisher
- (1) **DME Ultra Form** ultrasonic polisher
- (1) Heavy Duty Di-Profilor with "Foredom" cable drive
- (2) **NSK 65,000rpm** pencil grinders

Inspection Equipment:

- (1) **Starrett** 8" x 36" x 48" surface plate
- (20) **Mojave** bench style surface plates
- (1) **Collins** table style surface plate 8" x 48" x 60"
- (1) **Mojave** 6" x 24" x 36" surface plate
- (6) **Mitutoyo** precision gage block sets
- (2) **Mitutoyo** ceramic A-grade gage block sets
- (10) Precision sine plates
- (30) **Interapid** .0001/in. dial indicators with stands
- (4) Inspection B-blocks
- (8) Drop indicators -.0005/in. & .001/in. with stands
- (1) Large micrometer set 0-12 inches
- (4) Inspection quality sine bars
- (2) **Mitutoyo** height gages
- (6) Precision angle plates
- (2) .001 - .500 gage pin set
- (4) **Mitutoyo** height monitor 0-18"

Accessory Equipment:

- (5) **Hermann Schmidt** 5" magnetic sine plate
- (2) **Hermann Schmidt** optical radius dresser
- (2) **Hermann Schmidt** squaring block
- (2) **Harig** precision spin fixture
- (2) **Harig** precision spin fixture - motorized
- (1) **Harig** magnetic face plate
- (1) 6" rotary table
- (1) 14" rotary table
- (1) 10" x 15" tilt table
- (6) 6" **Kurt** precision milling vises
- (1) 10" **Kurt** angle lock vise
- (2) **Criterion** boring heads
- (3) **Toolmaster** vises
- (1) **Big Joe** lift cart
- (1) **Infa-Blast** glass beader
- (1) Lift truck
- (6) 2,500 lb. capacity 42" x 60" custom die carts
- (1) **Toyota** 5,000 lb. fork lift
- (1) A-frame and chain hoist, 2200 lb. capacity

Air Compressors:

- (1) **Kaeser SM8** screw type compressor
- (2) **Kaeser KR035** compressed air dryer
- (1) **Ingersoll Rand** 5 H.P. 80 gallon compressor
- (1) 200 gallon compressed air tank

Welder:

- (1) **Miller Synchronwave 250** TIG welder
- (1) **Micro-Welder (TIG)** with supporting equipment