

# Equipment List



## Engineering

### Software

Unigraphics ® Ver. NX-5  
MoldWizard ® Ver. NX-5  
Key Creator ® Ver. 7.0  
PowerShape ®  
Pro/Engineer ® Ver. Wildfire 4.0  
SolidWorks ® Ver 2008  
SolidView ® Ver 2006  
AutoCAD Lite ® 2007  
PS-Exchange ©

Chicago Mold Engineering stays as current as possible with all the newest software releases. As of the date this list was compiled these are the current revision levels we have installed. Below is our data transfer information for our Engineering Department. Please feel free to contact our Systems Administrator with any questions or inquiries you may have.

### Computer Hardware (O/S)

Pentium IV® Dual Processor with Windows® XP  
Pentium IV® Dual Core with Windows® XP 64bit

### Printing / Plotting Hardware

XES 8850® Plotter / Scanner (Large Format)  
Hewlett Packard® Laser Printers

### Data Transfer Options

3.5" Floppy Disk Drive  
CDROM  
DVD  
E-Mail [engineering@chicagomold.com](mailto:engineering@chicagomold.com)  
FTP  
USB Drive

## Manufacturing

### Production Software

PowerShape ®  
PowerMill ®  
Esprit ®

**CONTINUALLY  
MEETING  
EXPECTATIONS**

[www.chicagomold.com](http://www.chicagomold.com)  
[sales@chicagomold.com](mailto:sales@chicagomold.com)

## CNC Milling Machines

### Horizontal Milling Machines

**FPT-LEM 936** 4th and 5th axis positioning milling and boring machine with a 52" x 118" x 78" work capacity, a Fidia high speed control  
**Giddings & Lewis 8000H 5"** horizontal boring mill with a 60" x 96" x 67" work capacity (G & L8000B control), high speed 3D CNC control (2)

### Vertical Milling Machines

**Droop & Rein vertical milling machine** with a 60" X 96" X 56" work capacity, equipped with a Fidia high-speed 3D CNC control  
**Fidia K197** high speed machining center with a 5-axis continuous bi-rotary milling head, a 65" X 30" X 33" work capacity with a linear axis feed rate of 1180 in./min.  
**Fidia K165** high speed machining center with a 3-axis +2 milling head, a 40" X 24" X 20" work capacity with enhanced angularity capabilities.  
**Fidia K165** high speed machining center with a 3-axis +2 milling head, a 40" X 24" X 20" work capacity.  
**Fidia HS 644** high speed machining center with a graphite milling package, laser tool setter for measuring and dimensioning, 24" X 18" X 16" work capacity.  
**Haas VF5/50** vertical machining center with an automatic tool changer, and a 40" x 85" work capacity.  
**Haas VF9** vertical machining center with a 40" x 85" work capacity.  
**Haas VF9-30** vertical machining center with a 40" x 85" work capacity.

### EDM Equipment & Graphite Milling Work Cells

**ONA Arion K500** full 4-Axis Wire EDM with 11,000 lb. work piece weight capacity, 59 X 47.24 X 15.75 work capacity, and a maximum taper angle of 30 degrees, using Esprit® Wire EDM software.  
**Bridge type machine** with ERM 200 AMP control with 63" x 120" work table; equipped with a 3R orbiting head.  
**Ingersoll CNC-1000E** 40" X 60" capacity with tool changer.  
**Makino 85W CNC** EDM machine with tool changer, 40" X 60" work capacity.  
**Graphite Work Cells -**  
**(2) Makino EDNC 65** EDM machine with tool changers, 30" X 40" work capacity and MGF controls. Sinkers with C-Axis heads and compound angle burning capabilities with **Makino V56** 3-axis + 2 graphite milling machine and a 3R System Robot work piece / electrode changer  
**Makino SNC64** high speed graphite mill with **3R System** Robot equipped with 244 position work piece / electrode changer.

## Inspection Equipment

### 3D Digitization and 3D Coordinate Measurement

**ATOS III** optical 3D digitizing (white-light scanning) system with 3 different measurement volumes of 550 x 550 mm; 300 x 300 mm; and 150 x 150 mm. Fitted with ATOS III enhanced projection unit, two measuring CCD cameras with 4M pixels each, and 1.7M AROBI holding structure extension.

### Coordinate Measuring Machines

**Brown & Sharpe** validator with upgraded Sharpe 32 controller, 48" X 60" work table using **PC-DMIS** software *Curves & Surfaces* Release 3.2063 and fitted with an MH8 Probe Head and TP20 Probe.

### Optical Comparator

Jones & Lamson FC-14.

## General Shop Equipment

### Milling Machines

**Prototrak Moldmaker** milling machines with a 17" X 31" work capacity machine with 3 axis CNC controls. **(8)**

### Lathes

**LeBlond** movable bed type lathe - 42" dia. maximum swing.  
**LeBlond** 17" x 54".  
**Feeler** precision lathe.

### Surface Grinders

**Cincinnati #2** tool & cutter grinders with ID-OD attachments.  
**Cincinnati Universal ID-OD** 10" x 24".  
**Gardner 8" x 18"** 1-1/2 precision surface grinders. **(4)**  
**Mattison** 30" x 72" x 36" surface grinder.  
**Mitsui Hi-column** surface grinders 8" x 18". **(4)**  
**Mitsui Hi-column** surface grinder 6" x 12". **(2)**  
**Okamoto** 24" x 32" surface grinder.

### Cutter Grinders

**Deckel SOE** single lip optical cutter grinder. **(3)**  
**Gorton 375-4** universal cutter grinders. **(3)**

### Drill Sharpeners

**Darex SP2500**  
**Darex TDR82B**

### Jig Grinders

**Moore #3** jig grinder.

## Drilling Equipment

**Eldorado** gun drill sharpeners. **(2)**  
**Giddings & Lewis Bickford Radial** drill press 6' and - 17" column.  
**Horizontal gun drill**, 144" x 72" x 48" with 72" drilling capacity from one side. Drill sizes range from 3/16" to 2".

### Fitting Presses

**Reis Model 180** fitting press 200 ton 60" x 96" work capacity.  
**Reis 42" x 54"** fitting press. **(2)**

### Welding Equipment

**Miller 350** Heliarc welder. **(2)**  
**Miller 250** Wire welder.  
**Microwelders (2)**

### Band Saws

**Do-all 26"** contour band saw.  
**Marvel #8** high column band saw. **(2)**

### Cranes & Capacities

1<sup>st</sup> Bay, (2) 5 ton.  
2<sup>nd</sup> Bay, (1) 5 ton  
3<sup>rd</sup> Bay, (1) 5 ton and (1) 10 ton.  
4<sup>th</sup> Bay, (1) 10 ton and (1) 20 ton

---

ATOS III is the Copyright of GOM mbH, 2004

AutoCAD is a registered trademark of AutoDesk, Inc., in the U.S.A. and other countries.

ESPRIT is a registered trademark of DP Technology Corp., 2001

Hewlett Packard is a registered trademark of Hewlett-Packard Company.

Key Creator is a registered trademark of Kubotek Corporation, 2005.

MoldWizard is a registered trademark of Electronic Data Systems Corp.

Parametric Technology Corporation and Pro/ENGINEER are registered trademarks of Parametric Technology Corporation in the United States and other countries.

Pentium is a registered trademark of Intel.

SolidWorks is a registered trademark of the SolidWorks Corporation.

PCDMIS is a registered trademark of Wilcox Associates, Inc., 1997.

PowerMILL is a registered trademark of Delcam PLC, Birmingham, UK

PowerSHAPE is a registered trademark of Delcam PLC, Birmingham, UK

PS-Exchange is the Copyright of Delcam PLC, 2004.

Unigraphics is a registered trademark of Electronic Data Systems Corp.

Windows XP is a registered trademarks of Microsoft Corp.