



CAD/CAM

(13)	Siemens NX7 & NX8 CAD/CAM systems with 3-D solid modeling (13 Seats)
(7)	Oracle AutoVue Pro (7 Seats)
(1)	Autodesk Moldflow Advisor 2010 (1 seat)

TOOL ROOM EQUIPMENT

(1)	Mazak FJV-250 Vertical Machining Center with Mazatrol Fusion 640M; High Speed (30HP) Spindle, Optical Probe
(2)	Trak CNC Vertical Mill
(1)	Mazak Quick Turn 20 CNC Lathe with Mazatrol T-plus
(1)	Mazak FH 6800 Horizontal Machining Center with Mazatrol Fusion 640M; 2 pallets, 41" x 32" x 35" travel
(1)	Graphite / Hard Milling Workcell containing (2) Makino SNC-64 CNC Mills with Erowa ERS Robot System
(1)	Charmilles Robofil 4020.I Submerged Wire EDM
(2)	Charmilles Robofil 4020 SI Submerged Wire EDM with Micro Surf
(1)	Charmilles Robofil 2020 SI Submerged Wire EDM with Micro Surf
(2)	EDM Workcells Containing (4) Makino EDNC-43/43S CNC EDM Machines with C-axis and (2) Erowa ERS Robot Systems
(2)	Sodick K1CN CNC Small Hole EDM Drills
(1)	20" x 40" Okamoto Automatic Surface Grinder
(2)	8" x 18" Mitsui Automatic Surface Grinders
(6)	6" x 12" Mitsui Surface Grinders
(1)	6" x 18" Okamoto Surface Grinder
(1)	6" x 18" Harig Surface Grinder
(4)	Bridgeport Vertical Mills
(1)	Deckel G1-L Pantograph

MOLDING EQUIPMENT

(1)	Toshiba 5-ton Electric Injection Molding Machine, Model EC5V21-0.1A (0.21oz) - 2010
(1)	Arburg 28-Ton Injection Molding Machine, Allrounder Model 270 S 250-60 (.6 oz.) - 1998



(1)	Yushin YA 100S Robot
(1)	Arburg 28-Ton Injection Molding Machine, Model 270 U 250-60 (.7 oz.) – 2005
(1)	Toshiba 60-Ton Injection Molding Machine, Model ISFA 60 P-1.5Y (1.4 oz.) – 1996
(1)	Engel 100-Ton Tiebarless Injection Molding Machine, Model ES330-100 EC 100 (3.7 oz.) – 1999
(1)	Toshiba 110-ton Electric Injection Molding Machine, Model EC2110XV50-2A (3.3oz) - 2010
(1)	Toshiba 120-Ton Injection Molding Machine, Model ISG120V10-3Y (4.3 oz.) – 1996
(2)	Yushin YAI1-150SLL-95 Robots
(1)	Toshiba 190-Ton Injection Molding Machine, Model ISG190V10-10A (16 oz.) – 1996
(1)	Toshiba 60-Ton Model ISF S10-1.4B (2.0 oz) – 1996
(1)	Toshiba 22-Ton Horizontal Electric EC20PV-21-04 (0.46 oz.) – 2005
(1)	Toshiba 22-Ton Horizontal Electric EC20PNIIV30-04 (0.46 oz. / 0.56 oz. with LCP screw) – 2006
(1)	Engel 200-Ton Model TG750/200 US CC100 (12.7 oz.) – 2001
(1)	Engel 300-Ton Model TG 1350/300 US EC100 (20.0 oz.) – 1999
(1)	Engel 45-Ton Vertical Model Insert 80V/45 US - 2011
(24)	Mold Temperature Control Units, 2 per machine
(1)	Mokon Oil Heater, Model H34109-00
(2)	Sterling Model M2B2016MO Extra Hi Temp Hot Oil Mold Temperature Controllers
(1)	Single Temperature Controls High Pressure Hot Water Thermolator (max. temp. 437° F)
(1)	Eagle Sprue Picker
(2)	Apex Sprue Pickers
(1)	Matsui Plas-aid PMD-3.0 Thermal Conduction Dryer (22 ton)
(1)	Whitlock Dryer, Model WD-10MR (28 Ton)
(1)	Bry-Air Dryer, Model RD-20 (60 Ton)
(2)	UNA-DYN Dryer, Model UDC-30 (100 & 120 Ton)
(1)	Bry-Air Dryer, Model RD-50 (190 Ton)
(2)	Conair Dryers, Model RWH14
(2)	Whitlock ACD 10 Compressed Air Resin Dryers
(1)	Motan MLD 0.75-0 Mini Hopper Dryer (cleanroom)



(1)	Fisher Scientific Vacuum Oven MDL 282 (cleanroom)
(6)	D-M-E Smart Series Temperature Control (1 Zone)
(1)	D-M-E Smart Series Temperature Control (2 Zone)
(1)	Fast Heat Conductor Series Temperature Control (8 Zone)
(1)	DME Smart Series Temperature Control (12 Zone)
(2)	DME Smart Series Temperature Controls (20 Zone)
(1)	DuKane 2220 Sonic Welder
(1)	Avalon Vision Systems "Mold Watcher" Vision System
(2)	AEC Closed System Central Chillers
(1)	Yushin RA-100 Robot

QUALITY ASSURANCE EQUIPMENT

(1)	OGP Multi Sensor <i>FLASH 300</i> , 12" x 12" x 12" CNC optical and touch probe inspection system with "MeasureMind 3D software and QC-CALC SPC software
(1)	OGP Multi Sensor <i>FLASH 400</i> , 18" x 18" x 8" CNC optical and touch probe inspection system with "MeasureMind 3D software and QC-CALC SPC software
(1)	RAM Optical OMIS II 6" x 12" x 7" CNC optical inspection system with "Galaxy" inspection software and QC-CALC SPC software
(1)	RAM Optical OMIS III 12" x 12" x 7" CNC optical inspection instrument with "Measure-Mind" inspection software and QC-CALC SPC software
(1)	CGI CSS-1000 Cross-Sectional Scanner with SpecCheck and Innovmetric Polyworks 3D software
(1)	Mitutoyo 24 x 28 x 24 BH 706 CMM with "Geopack" inspection software
(1)	Vision Engineering Dynascope
(1)	Vision Engineering Mantis 3D Stereo-Scope
(1)	Dynisco LMI 4000 series Melt Flow Indexer with MIWORKS software
(1)	Isotemp 280 A Vacuum oven with m2c vacuum pump
(1)	Omnimark HP Mark 2 Moisture Analyzer
(1)	OGP EZ-VDM Video Scope