



**PRECISION TOOL
TECHNOLOGIES, INC.**

FACILITIES LIST

PHYSICAL PLANT	SIZE
Primary Manufacturing Area	15,000 sq. ft.
Secondary Manufacturing Area	2,400 sq. ft.
Office Area	3,000 sq. ft.

CNC MULTI-TASKING MACHINING

UNATTENDED MANUFACTURING CAPABILITIES

MACHINE	RPM	OTHER FEATURES	MAX. THRU CAPACITY, inches	MAX. PART LENGTH, inches	MAX. DIAMETER, inches
(3) DMG Mori/Seiki NLX2500SY/700 Twin Spindle CNC Lathe/Mill <i>25 H.P. Main Spindle, 15 H.P. Second Spindle</i>	12 Turret: 10,000	Live Tooling	3.15	27.7	10.8
DMG Mori/Seiki NLX2500 Single Spindle CNC Lathe/Mill <i>25 H.P. Main Spindle</i>	12 Turret: 10,000	Live Tooling	3.15	27.7	10.8
Willemin-Macodel 508MT2-300 5-Axis Machining Center <i>72 Tool Magazine Fanuc 6-Axis Robot Cell</i>	Main Spindle: 42,000 Turn-Spindle: 3,000 Sub-Spindle: 8,000	Gear Hobbing Capability	2.56	9.8	4.0
Willemin-Macodel 508MT2-400 5-Axis Machining Center <i>72 Tool Magazine Fanuc 6-Axis Robot Cell</i>	Main Spindle: 42,000 Turn-Spindle: 3,000 Sub-Spindle: 8,000	Gear Hobbing Capability	2.56	13.7	4.0
Citizen Miyano BNX-51MSY Two Spindle CNC Lathe/Mill <i>Clear Shift Spindle with Superimposition of Control Axes</i>	12 Turret: 6,000	Live Tooling	2.0	5.9	-

CNC 5 AXIS MACHINING

MACHINE	RPM	OTHER FEATURES	X, inches	Y, inches	Z, inches
DMG Mori DMU 50 <i>Swivel Rotary Table</i>	20,000	5 Axis Simultaneous Machining, Infrared Renishaw Probe, Laser Tool Measuring, 60 Station Tool Changer	25.6	20.5	18.7

EQUIPMENT

CNC VERTICAL MACHINING

MACHINE	RPM	OTHER FEATURES	X, inches	Y, inches	Z, inches
Makino S56	20,000	Programmable 4th Axis, Renishaw Touch Probe, Renishaw NC4 Tool Pick Up Laser, Mold and Die Capabilities, 20 Station Tool Changer	33.5	19.7	17.7
Fadal VMC 3016 MAG	10,000	Renishaw MP12 Touch Probe, 21-Tool Automatic Tool Changer	30.0	16.0	24.0
(3) Sharp AccuRite Mill Power	-	-	10.0	54.0	-

CNC TURNING CENTERS MACHINING

MACHINE	HP	CHUCK, inches	BAR CAPACITY, inches	LENGTH, inches
Daewoo Puma 10HC Lathe	30	14.75	3.0	26.0

MANUAL LATHES

MACHINE	CAPACITY, inches
Hardinge HLV-H Tool Room Lathe <i>AccuRite 200S 2-Axis DRO 1-1/4" Hole Thru Spindle</i>	Rated Capacity: 11 x 18 Swing Over Bed: 11 Swing Over Cross Slide: 6 Between Centers: 18
Monarch Engine Lathe	Max. Diameter: 16 Max. Length: 54
Trak 1630HS-RX Tool Room Lathe <i>2-Axis CNC 1.57" Hole Thru Spindle</i>	Swing Over Bed: 16 Swing Over Cross Slide: 8.6 Between Centers: 30

PRECISION SURFACE GRINDING

MACHINE	CAPACITY, inches
(3) Mitsui MSG-200MH <i>Auto Lubrication, Sony LG10 2-Axis DRO</i>	Maximum Wheel Size: 8 x 3/4 Electromagnetic Chuck with O.S. Walker Chuck Controls: 6 x 12
Mitsui MSG-400HMD <i>Sony 2-Axis DRO</i>	Electromagnetic Chuck with O.S. Walker Chuck Controls: 16 x 32
<i>All supported by Herman Schmidt and System 3R workholding</i>	

ELECTRICAL DISCHARGE MACHINES

MACHINE	FEATURES	X, inches	Y, inches	Z, inches
Mitsubishi MV122-R Advance Plus Wire EDM	5 Axis Machining Capabilities, Automatic Wire Threading (.004" Minimum Wire Diameter), Glass Scales, Chiller System, 3R Accessories	15.7	11.8	8.7
Makino Edge 2 Sink EDM	16 Station Tool Changer, 3R Tool Holders, C Axis Rotary, Oilmatic Chiller	11.81	9.84	9.84

AUTOMATED COOLANT MANAGEMENT

MACHINE	FEATURES
168 Mfg FullShop Automated Coolant Monitoring and Delivery System	Unattended Optimal Coolant Delivery

EQUIPMENT

INJECTION MOLDING PRESSES & AUTOMATED PARTS HANDLING

UNATTENDED MANUFACTURING CAPABILITIES

MACHINE	DISTANCE BETWEEN TIE BARS, <i>inches</i>	SHOT SIZE, <i>oz.</i>
310 Ton Toshiba Electric EC310V30	28.74 x 28.74	37
200 Ton Toshiba Electric EC200SXIIIV50	22.0 x 20.1	15.41
110 Ton Toshiba Electric ECN110V21	16.1 x 16.1	4.2
85 Ton Toshiba Electric E85V30	14.0 x 14.0	3.3
Sepro Success 22 Three Axis Robot	-	-
Sepro S5-25 Three Axis Robot	-	-
(3) HY Robotics Sprue/Part Picking Robot / Yushin Programmable Sprue/Part Removal Robots <i>Model #HOPIII-M750XC</i>	-	-

INJECTION MOLDING AUXILIARY EQUIPMENT

MACHINE	MODEL
IMS Hopper Dryer	#130017-DRYER
Foremost Granulator	#302
Rapid Granulator	#150-35
Cumberland Granulator	#302
Plastic Process Equipment Tumbler Mixer	-
(2) ConAir Color Feeder	-
(2) ConAir Carousal Dryers	-
(3) ConAir Drying Hoppers	-
(4) ConAir TW Plus Thermolaters	-
Advantage Sentra LE Temperature Controller	-
Advantage Central Chiller System	-
Geiger Handling Conveyor and Vibratory Bowl	-
Novatec Gravimetric Color System	-
Novatec Blender System	-
(2) NovaDrier Systems	#ND-25 & ND-75
IMS Hopper Dryer	#MD-750-50

PART MARKING

MACHINE
Electrox FLeXZY 20W Laser Engraving Machine
Hermes IS 400 CNC Engraving Machine
Telesis TMP 6100 CNC Pin Stamp Marking System
CN-B100 90MM Automatic Pad Printer

WELDING

MACHINE	CAPACITY
Brightstar Laser Welder 1900 Series	80 Watt - 100 Joule
Miller Syncrowave 250 TIG Welder	250 Amps
Miller Millermatic Wire Feed Welder	200 Amps
Silver Soldering Capabilities	-

SAWING

MACHINE
Amada PCSAW330 Pulse Saw
2017 J.F. Berns Servo Auto Champ 2 Bar Chamfering Machine

EQUIPMENT

OFFICE EQUIPMENT

SOFTWARE & SYSTEMS
Gibbs Computer Aided Manufacturing
Solid Works Solid Modeling System
Solid Works Enterprise PDM Engineering Data Management
Esprit SolidWire CAD/CAM
Predator DNC
Predator Touch HMI
PolyWorks V12
EVO - ERP Process Control System
M-Files Dynamic Content Management Software
Scytec DataXchange Machine Monitoring

OPTICAL GENERATING

MACHINE	FEATURES
Loh V-75 Lens Generators	True rotational 3rd axis Siemens control with Heidenhahn scales Spherical and toric concave and convex geometries

TOOLING MANAGEMENT

MACHINE
Haimer TD2009 Balancing Machine
Haimer Microset Tool Presetter
Haimer Heatshrink System
Automated Toolcrib

RAPID PROTOTYPING

MACHINE	BUILD AREA, inches	MATERIALS AVAILABLE
2020 Stratasys F370 3D FDM Printer	14 x 10 x 14	ABS, ASA, PCABS, ABS ESD7, Flexible TPU, and Diran (Nylon 6)

QUALITY CONTROL

MACHINE	TYPES/SPECS
Zeiss Accura Coordinate Measuring Machine <i>Probing Head, Laser Line Scan Head</i>	X: 35.4" (900mm) Y: 70.9" (1800mm) Z: 27.6" (700mm)
Keyence IM-6225T Image Dimension Measurement System	-
Granite Plates	Starrett Pink - 36" x 72" x 12" - Grade AA Laboratory
	Tru-Stone Gray - 24" x 24" x 6" - Grade AA
	Tru-Stone Gray - 36" x 36" - Grade A
	Tru-Stone Gray - 24" x 36" - Grade B
	Starrett Gray - 8" x 12" - Grade A
Precision Gage Manufacturer for the Ophthalmic Industry	-
Complete Set Meyer, Deltronic Pin Gages and Mitutoyo Ceramic Gage Blocks	-
Full Set of Precision Optical Sagitta Gages	-
GSX Optical Digital Comparator	-
\$1,000,000+ additional investments for quality control instruments	

