



Major Equipment List

CNC Horizontal Machining Centers

5	Makino	A61	True 4 th Axis Milling Center with Automatic Pallet Changer
2	Matsuura	ES450	Milling Center with Automatic Pallet Changer
3	Matsuura	ES450	Milling Center with Automatic Pallet Changer
1	Matsuura	ES450	Milling Center with Automatic Pallet Changer

CNC Vertical Machining Centers

1	Makino	D500	True 5 th Axis Milling Center
2	Makino	PS95	High Speed Milling Center with Auto Pallet Changer
1	Makino	FNC208	81" X 31" X 30" – Large Milling Center
2	Matsuura	MC1000V	High Speed Milling Center
3	Matsuura	MC800V	High Speed Milling Center
1	Matsuura	RA3DC	Twin Spindle Milling Center with Auto Pallet Changer
1	Fanuc	T14A	High Speed Milling Center
2	Fanuc	T14A	High Speed Milling Center
2	Matsuura	RA3G	High Speed Milling Center with Auto Pallet Changer
2	Matsuura	RA3VS	High Speed Milling Center with Auto. Pallet Changer

CNC Turning

1	Nakamura	NTY3	12 Axis 3 Turret – 2 Spindle with Auto Bar Feeder
3	Hardinge	T51	13" Diameter Turning
1	Hardinge	T42	Full Axis Milling – Sub Spindle & Bar Feeder
1	Star	SR32	6 Axis Swiss Turn with Auto Bar Feeder

Manual Milling Capability

6	Bridgeport Mills with Digital Readouts
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Manual Turning

1	Cazeneuve Engine Lathe 52" X 20" with Tracer
1	Hardinge Precision Chucker
1	Webb Engine Lathe 60" X 20" with Tracer
1	Webb Engine Lathe 40" X 15 with Tracer
1	Tsugami Super Chucker
2	Hardinge Second Operation Lathe



Inspection Equipment

- 1 DEA Scirocco High Speed CNC/CMM with Surfacing Capabilities
- 1 Mitutoyo Manual Coordinate Measuring Machine Model B241
- 1 Brown & Sharpe Gage 2000 DCC CMM
- All CMM'S equipped with Brown & Sharpe PC-DMIS software
- 1 Ram Optical Video Measurement Inspection System

Supplemental equipment including Optical Comparators, Microscopes, Hardness Testers and a full range of inspection equipment

Precision Grinding

- 1 Brown & Sharpe Micromaster 8" X 18"
- 1 Harig 612 Surface Grinder 6" X 12"
- 1 Okomoto Surface Grinder 6" X 12"
- 1 Cincinnati Tool & Cutter Grinder

Welding

- 1 Miller 500 AMP Welder AC/DC Tungsten ARC
- 5 Welding Tables 12' X 12'
- 1 Universal Sandblasting Machine
- 1 Sunnen Honing Machine

Special Processes

Certified Welding to MIL STD 2219
Bonding
Silk Screening to MIL STD 130
Marking to MIL STD 130

Programming Capabilities

- 3 PRO E Work Stations, Full 3-D Multi-Surface Capability
 - 5 Master Cam Work Stations, Full 3-D Multi-Surface Capability
- 3-Dimensional IGES, DFX, CAD Transfer Capability
DNC Transfer to all CNC Work Centers