



Equipment List

CNC Milling Centers

Mfg.	Type	Size	Tools	Notes
1-Mazak	Variaxis 630 Full 5-Axis	630mm pallet	120 – HSK63A	Full 5-axis Machining
2-Makino	A-81a Horizontal	630mm pallet	300 each HSK-a100	Full 4-axis with 14 station Computerized Pallet Changer
1-Makino	A-88e Horizontal	630mm pallet	90 – HSK100	Full 4-axis Machining
1-Makino	A-55e Horizontal	400mm pallet	90 – HSK63A	Full 4-axis Machining
1-Makino	V77 Vertical	47x27x25"	40 - HSK 100	Full 4-axis Machining
1-OKK	HM-50S Horizontal	500mm pallet	40 – CAT40	Full 4-axis Machining
1-Mori Seiki	MV-80 Vertical	60x30" travel	40 – CAT50	W/16" Nikken Rotary
4-Mazak	Variaxis 730 Full 5-Axis	500mm pallet	80 – HSK100	2 Pallet System

CNC Turning Centers

Mfg.	Type	Size	Stations	Notes
1 - Mazak	QT-28N Lathe	9.5"dia. x 28"	12	With Tailstock
1 - Mazak	Multiplex 4300	12" (16.9 dia.)	12 x 2	Dual Spindle

EDMs

Mfg.	Type	Size	Notes
1 - Charmilles	Robofil-2000 Wire EDM	12x8x4"	Table size: 35x20x6"
1 - Mitsubishi	FX20 Wire EDM	20x14x10"	Table size: 25x31"

Grinders & Hone

Mfg.	Type	Size	Notes
1 - Mitsui	MSG-205 MH Surface	18x6x12"	Magnet: 2.5x12"
1 - Okamoto	ACC-12-24DX Surface	29.5x13.4x12.7"	Magnet: 12x24" - Wet Grinder
1- Lap Master	International Automated Lap Table	24"	

Manual Machines & Shop Equipment

Type	Type
1 – Devlieg 3B-48 Boring Mill w/Allen-Bradly CNC Controls	Sand Blast Booth
2 – Pratt & Whitney 2E Jig Bores w/glass scales	Glass Blast Booth
1 – Leblond Engine Lathe w/26" swing	Vibratory Finisher 36 x 18" drum
1 – 50 Ton Press with full signature pressure recording	40x40" Cast Iron Lapping Table
1 – Parlac Parsetter 220 Tool Setter	



Equipment List

Inspection Machines

Mfg.	Type	Size	Notes
1 - Zeiss	<u>Contura 7010 CMM</u>	28x38x18"	Continuous Scanning Head with Probe Changer
1 - Zeiss	Eclipse 1010 CMM	38x38x18"	Programmable with Probe Changer
1 - Mitutoyo	PH350 Comparator	10-50X	
1 - Zeiss	Contura G2	700x1000x1000mm	Continuous Scanning Articulating Head with Probe Changer

CNC Support

MasterCam	CG Tech Vericut & Optimization	Wide Format Copiers
Teksoft Procam	Power Mill/Shape	Wide Format Plotter

CAD Translator

Preferred Formats:	Parasolid (.x_t)	IGES (.iges)	MasterCam
Other Translators Available	May experience some issues translating from these formats		
Unigraphics (.prt) STEP (.stp)	Autocad (.dxf & .dwg) VDAFS (.vda)	ACIS (.sat) Catia V (.CATprt)	Catia (.exp & model) ProEngineer (.prt & .asm)