



Equipment and Capabilities List

Note: Liberty is constantly working to increase our capabilities and capacity. This equipment list is constantly changing as we acquire additional or different equipment. While we do try to keep our customers apprised of these changes this list may not be absolutely current. Liberty has much supporting equipment and tools not listed here. Additionally, we work closely with partner companies whom we compliment and they in turn compliment us. Some of these partners service us with painting, powder coating, plating and machining. If we do not appear to have all the internal capabilities required for your need please contact us anyway as we often work together with our partners to provide your complete solution. Liberty maintains a professional staff of degreed and certified engineers, fabricators, machinists and machine/tool builders to support your needs. Please contact us at any time to discuss how we may support you. Thank you.

Metal Cutting Machining Centers

Horizontal Mill Machining Centers

Machine Type	Machine Brand	Quantity	Model	Spindle	Table Size	Table Travel	Cross Travel	Vertical Travel	Additional
Boring Mill	Giddings & Lewis	One	70-D5-T	5"-50 Taper-30 HP	60" x 144"	132"	84"	96"	Quick change tooling system-Outriggers-Digital Readout-Pendant Control
Boring Mill	Giddings & Lewis	Two	G60-TX	6"-50 Taper-40 HP	48" x 100"	108"	78"	96"	Full CNC Fanuc Control
Boring Mill	Giddings & Lewis	One	340 -T	5"-50 Taper-30 HP	60" x 122"	84"	72"	72"	Quick change tooling system-Outriggers-Digital Readout-Pendant Control
Boring Mill	Lucas	One	542B-84	5"-50 Taper-30 HP	48" x 84"	72"	84"	72"	Outriggers-Digital Readout-Pendant Control
Machining Center	LeBlond Makino	One	A55	40 Taper-12,000 RPM	Duel Tables 16"x16"	22"	Spindle Travel 24"	22"	Duel Table High Speed Machining Center

Vertical Mill Machining Centers

Machine Type	Brand	Quantity	Model	Spindle	Table Size	X Axis	Y Axis	Additional
Vertical CNC Mill	Haas	One	VF-9	50 Taper-30 HP- 7500 RPM	84" x 36"	84"	40"	32 Position Tool Changer
Vertical CNC Mill	Haas	Two	VF-2	40 Taper-30 HP- 8100 RPM	36" x 16"	30"	16"	20 Position Tool Changer
Vertical CNC Mill	Fadal	One	VMC 4020	40 Taper-15 HP- 10,000 RPM	48" x 20"	40"	20"	20 Position Tool Changer
Vertical CNC Mill	Fadal	Two	VMC 8030	40 Taper-15 HP- 10,00 RPM	82" x 30"	80"	30"	20 Position Tool Changer
Vertical CNC Mill	Fadal	One	VMC 6030	40 Taper-15 HP- 10,00 RPM	62" x 30"	60"	30"	20 Position Tool Changer
Vertical Knee Mill	TRAK	One	K3					Bridgeport Type Mill with Proto Trak Programmable Controls
Vertical Knee Mill	Bridgeport	Four						Power Feed & Digital Readout
Machine Type	Brand	Quantity	Model	Swing	Bed Length			
CNC Lathe	ROMI	One	M-17	17"	35"			Full CNC Control
Manual Lathe	Leblond	One	RUG-40	14"	72"			3 Jaw Chuck-4 Jaw Chuck-Live Centers-Steady Rest-Dial Readout
Manual Lathe	Sharp	One	1640	16"	40"			

Sheet Metal Fabricating Machinery

Machine Type	Brand	Quantity	Model	Sheet Width	Sheet Length	Max Material Thickness Mild Steel	Max Material Thickness Stainless Steel	Additional
Laser Cutting	Bystronic	One	ByStar 3015	50"	120"	.75"	.63"	4 Mega Watt -Shuttle Table
Water Jet Cutter	Bystronic	One	ByJet 4020	96"	157"	7.8"	7.8"	Dual 55K PSI Cutting Heads-Shuttle Table
Flame Cutting		One		96"	240"	12"		
Metal Sheer	Niagara	One		120"		.25"	.16"	
Brake Press	Cincinnati	One	225-T	120"				225 Tons
Brake Press	Bystronic	One	150-T	120"				150 Tons-6 Axis Servo Control
Conical Roll Former	Reed	One		36"		.14"	.75"	Used for rolling cone shapes.
Roll Former	Various	Three		72"		.25"		Diameters to 48"

Metal Welding and Joining									
Weld	Type	Bead Width Range	Material Types						Additional
TIG	Laser	.01-.03"	Stainless and Most Tool Steels						Used for fabricating and tool steel repair.
TIG	Micro	.03-.25"	Stainless and Most Tool Steels						Used for fabricating and tool steel repair.
TIG	Conventional	.06-as needed	Stainless and Most Tool Steels						Used for fabricating and tool steel repair.
MIG	Conventional	As needed							MIG weld heavy fabrications to 20 tons
Weld Positioners									Various weld positioners
Stress Relieving and Heat Treating									
Function	Type	Fabrication Size	Material Types						Additional
Stress Relieving	Two Ovens	48" x 48" x 132"	Carbon Steel Fabrications						Larger thermal stress relieving is available locally.
Stress Relieving	MetalLax Vibratory	Large Fabrications	Large carbon steel and any size stainless or aluminum fabrications.						
Heat Treating	Thermal		Most tool steel heat treating and annealing for weld repair.						
Metal Finishing & Polishing Capabilities									
Note: Metal tools and polishing area is segregated and used for stainless steel polishing only.									
Machine Type	Brand	Quantity	Model	Sheet Width	Sheet Length				Additional
Polishing Belt	Time Saver	One		48"					Polishing to #4 finish
Buffing Lathe	Hammond	Two	Duel Head						Polishing to #4 finish or better
Stroke Sander	Peerless	One		72"	96"				Polishing to #4 finish
Manual Polishers		Many Various							Polishing to #2 finish
Steel Shot Blasting		One Booth							
Glass Bead Blast		One Booth							
Surface Grinders		Two							
CAD/CAM Engineering and Machining Tools									
Area	Quantity	Software							
Engineering	Six	Solidworks CAD							
Machining	Six	MasterCAM-SurfCAM							
Fabricating	Six	Bystronic Nesting & Forming							
Shop ERP	Eight	Job Boss							
Material Handling									
Area	Crane Ways	Fork Trucks	Delivery Trucks						
Heavy Fabricating	Two 5 Ton and One 10 Ton Gantry								
Light Fab & Polishing	3 Jib Cranes-Half ton								
Machining	One 5 Ton and One 10 Ton Gantry								
Assembly	One 10 Ton Gantry								
Laser & Water Jet Area	One 10 Ton Gantry								
Shipping			3 flat bed trucks						
Forktrucks		4 fork trucks to 6 tons							
Facility									
Area	Square Footage								
Office/Engineering	2,800								
Manufacturing	71,000								