

Liberty 3D Technologies, Inc. Equipment List (Updated 2/14/2019)

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"	91"	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	Nomura	One	B100-WP	5"-50 Taper-30 HP	48" x 96"	96"	43"	60"	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
Rotary Tables	Boring Mills	Five							Largest 4' x 5' Servo Positioned

Wire EDM

Machine Type	Brand	Quantity	Model	Spindle	Table Size	X Axis	Y Axis	Z Axis	
Wire EDM	Charmilles	Two	Robofil 240SL			14.5"	22"	8"	

Vertical Mill Machining Centers

Machine Type	Brand	Quantity	Model	Spindle	Table Size	X Axis	Y Axis	Z Axis	
Vertical CNC Mill	Haas	One	VF-9	50 Taper-30 HP-7500 RPM	84" x 36"	84"	40"	30"	32 Position Tool Changer
Vertical CNC Mill	Haas	Two	VF-2	40 Taper-30 HP-8100 RPM	36" x 16"	30"	16"	20"	20 Position Tool Changer
Vertical CNC Mill	Haas	One	VF-5	50 Taper-30 HP-8,000 RPM	52" x 23"	50"	26"	25"	20 Position Tool Changer
Vertical CNC Mill	Haas	One	VF-3	50 Taper-30 HP-7,500 RPM	52" x 23"	50"	26"	25"	20 Position Tool Changer
Vertical CNC Mill	Haas	One	VF-3	50 Taper-30 HP-7,500 RPM	52" x 23"	40"	26"	35"	20 Position Tool Changer
Vertical CNC Mill	Fadal	One	VMC 4020	40 Taper-15 HP-10,000 RPM	48" x 20"	40"	20"	20"	20 Position Tool Changer
Vertical CNC Mill	Fadal	One	VMC 8030	40 Taper-15 HP-10,00 RPM	82" x 30"	80"	32"	30"	20 Position Tool Changer
Vertical CNC Mill	Fadal	Two	VMC 6030	40 Taper-15 HP-10,00 RPM	62" x 30"	60"	32"	30"	20 Position Tool Changer
Vertical Knee Mill	TRAK	One	K3						Proto Trak Programmable Controls
Vertical Knee Mill	Bridgeport	Four							Power Feed & Digital Readout

Horizontal Turning Centers

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-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	Tonnage	Additional
Laser Cutting	Bystronic	One	ByStar 3015	60"	120"	.75"	.63"		4,000 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"	.19"		
Brake Press	Cincinnati	One	225-T	120"				225 Tons	
Brake Press NEW 2019	Bystronic	One	Xpert 320/4100	161.5"				352 Tons	6-axis servo controlled back gauges
Brake Press	Bystronic	One	Beyeler PR 150-PC	120"				150 Tons	6-axis servo controlled back gauges
Conical Roll Former	Reed	One		36"		.19"	.12"		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	Work Stations					Additional
TIG	Laser	.01-.03"	Stainless & Tool Steels	One					Used for fabricating and tool steel repair.
TIG	Micro	.03-.25"	Stainless & Tool Steels	Two					Used for fabricating and tool steel repair.
TIG	Conventional	.06- & up	Stainless & Tool Steels	Four					Used for fabricating and tool steel repair.
MIG	Conventional	As needed		Five					MIG weld heavy fabrications to 20 tons
Weld Positioners	Two Positioners	30,000 Lbs							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			2 flat bed trucks-2 pickups						
Forktrucks		4 fork trucks to 6 tons							
Facility									
Area	Square Footage								
Office/Engineering	2,800								
Manufacturing	65,000								

Liberty was founded in 1998 by owner Andy Gantenbein as Liberty Steel Fabricating, Inc. Due to our expanded capabilities in manufacturing, in 2018 we rebranded to Liberty 3D Technologies, Inc.



Stainless Steel Parts for Food Packaging by Liberty 3D

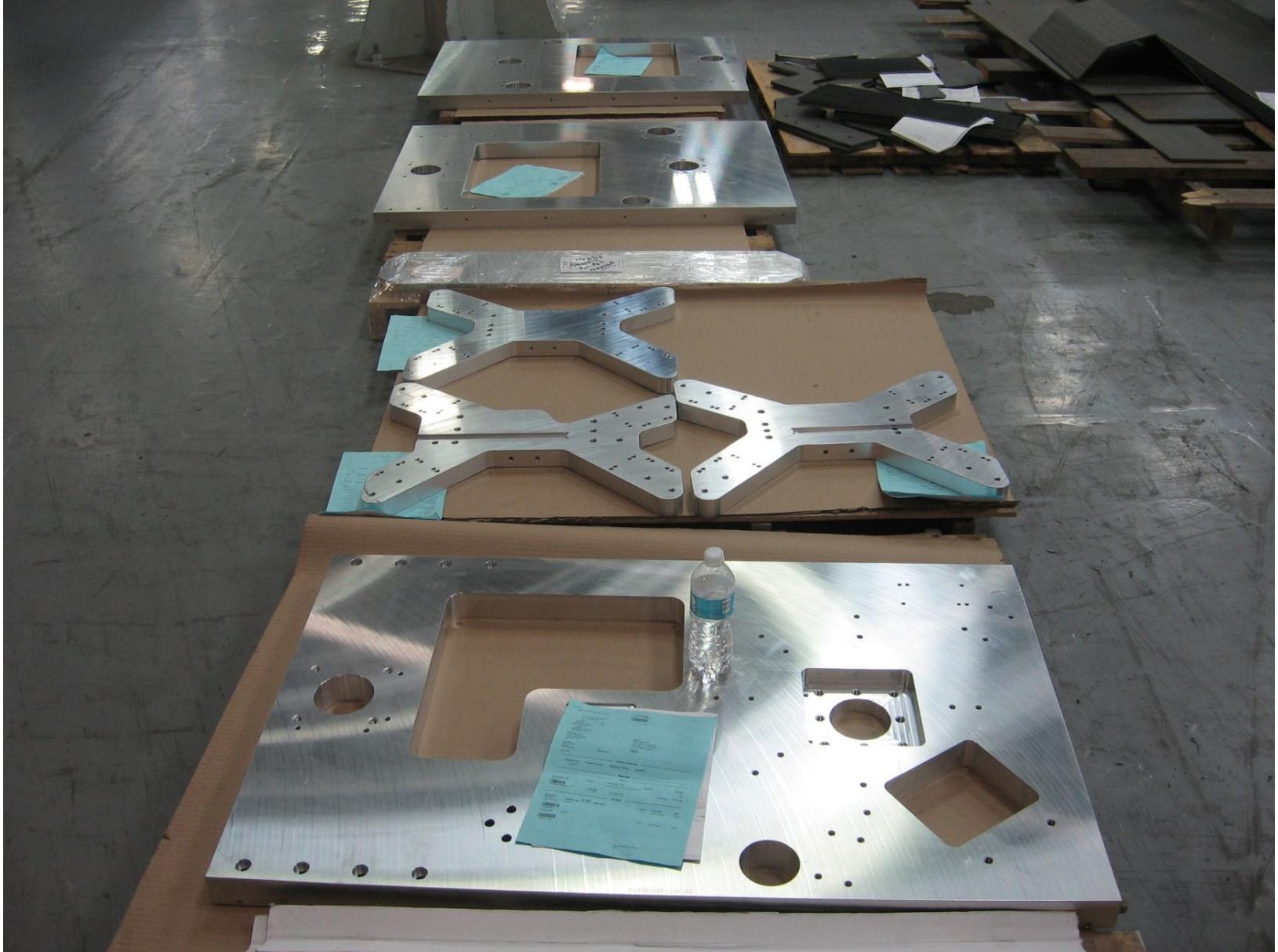


Automation Bases/Frames to 20,000 Lbs by Liberty 3D



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Water-Jet and Machined Plate Work by Liberty 3D



Complex Fabrications by Liberty 3D



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Brake Press Work to 162" by Liberty 3D



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3D Machined Parts By Liberty 3D Technologies



Stainless Parts Fabricated & Machined by Liberty 3D



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Small Parts Precision Machined By Liberty 3D



Stainless Food Processing Parts Finished to 3A Sanitary Finish By Liberty 3D Technologies



Fabricating/Machining to 20,000 Lbs by Liberty 3D



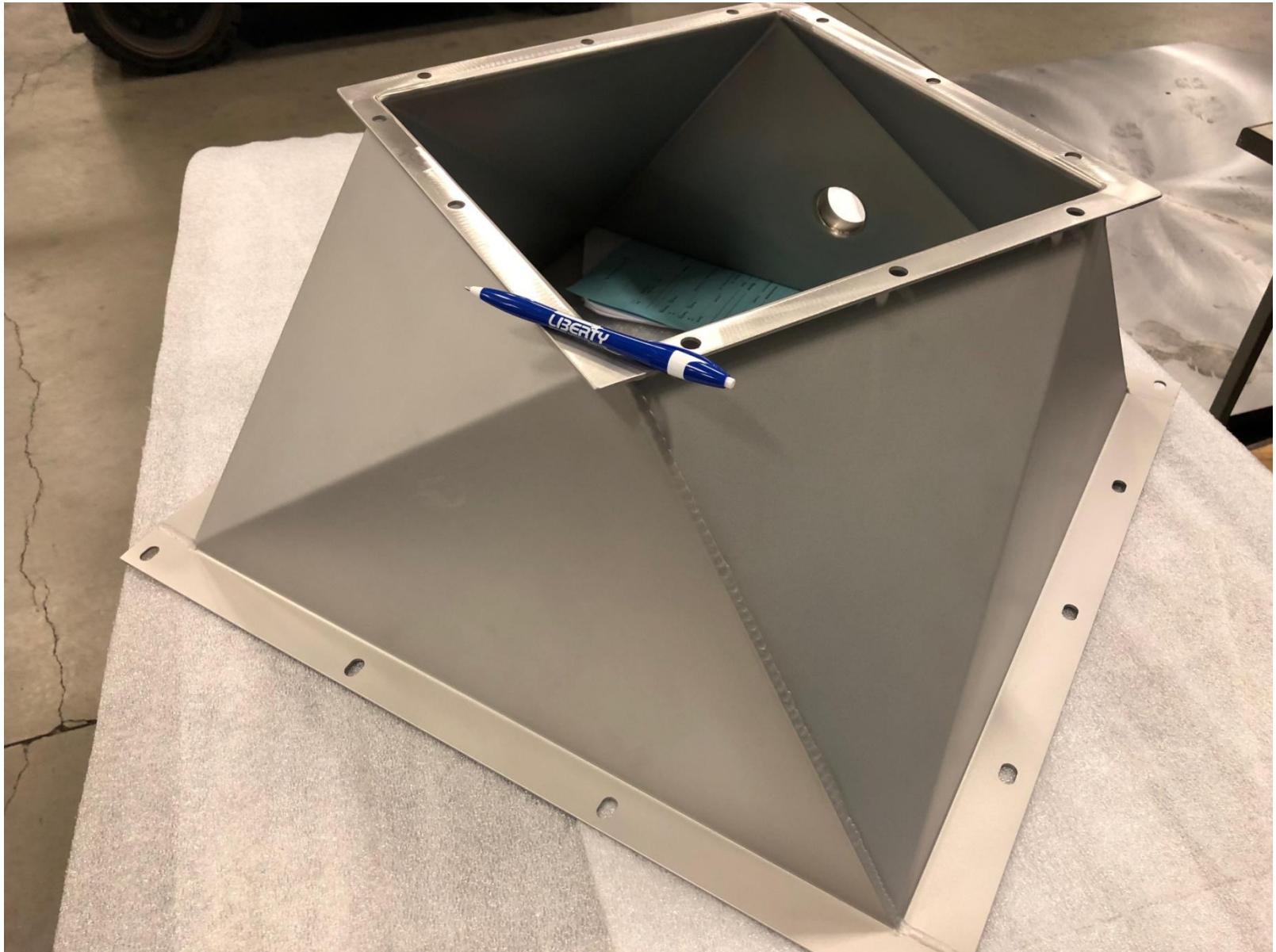
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Powder Coated Food Processing Parts By Liberty 3D

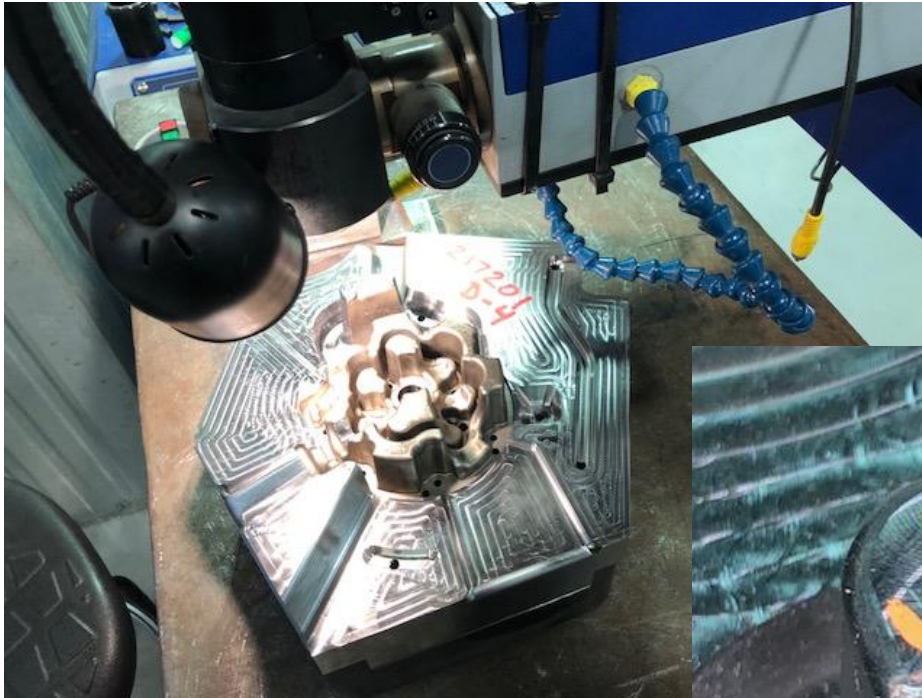


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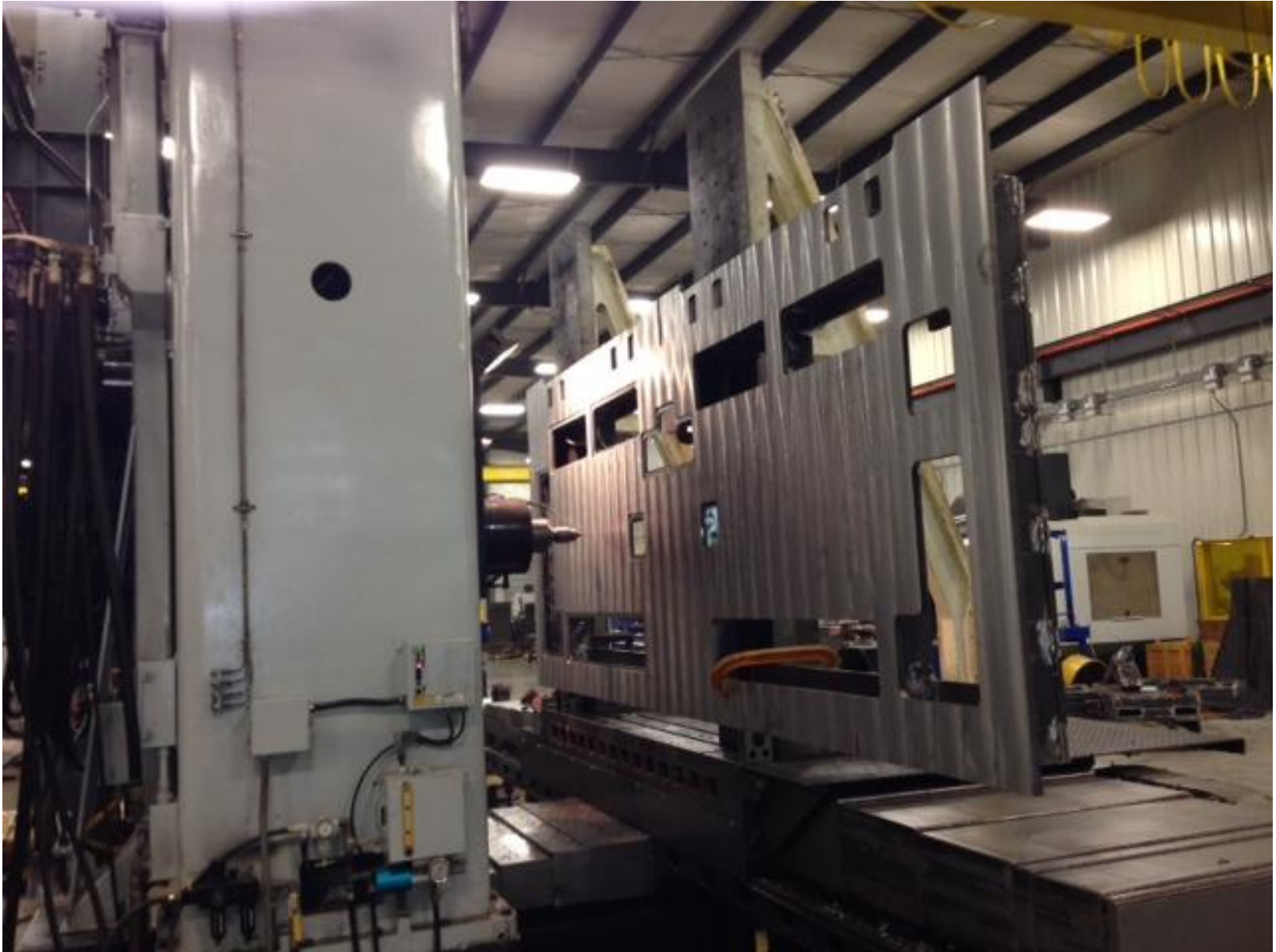
Stainless Food Processing Parts By Liberty 3D



Laser Welding of Most Base Material by Liberty 3D



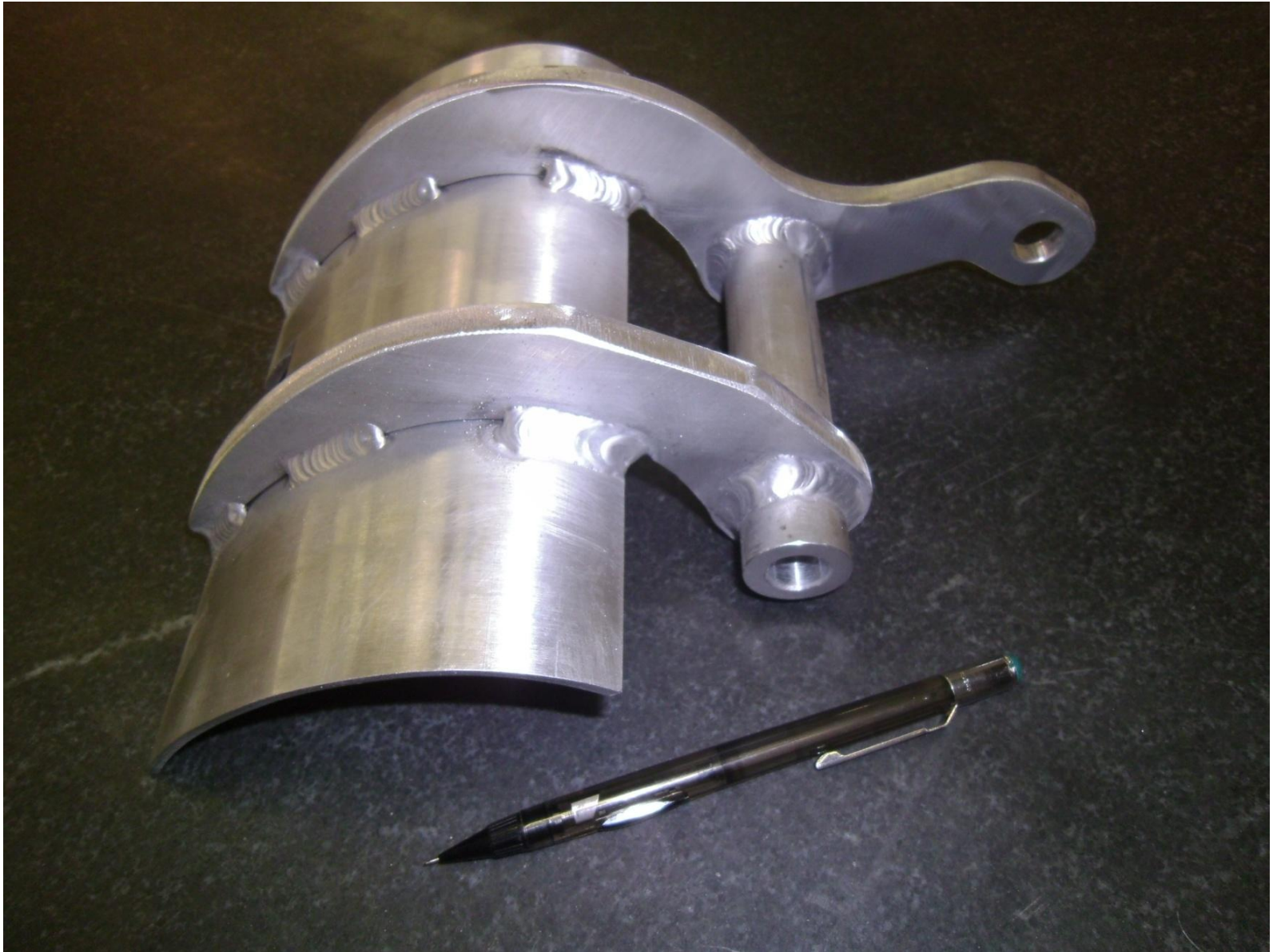
Machine Bases Fabricated and Machined by Liberty 3D



Aluminum TIG Welded Fabrications By Liberty 3D



Aluminum Fabrications by Liberty 3D



Stainless Artwork by Liberty 3D



Small Parts Machined Parts By Liberty 3D



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Stainless Steel Parts Fabricated by Liberty 3D



Powder Coated Food Processing Parts By Liberty 3D



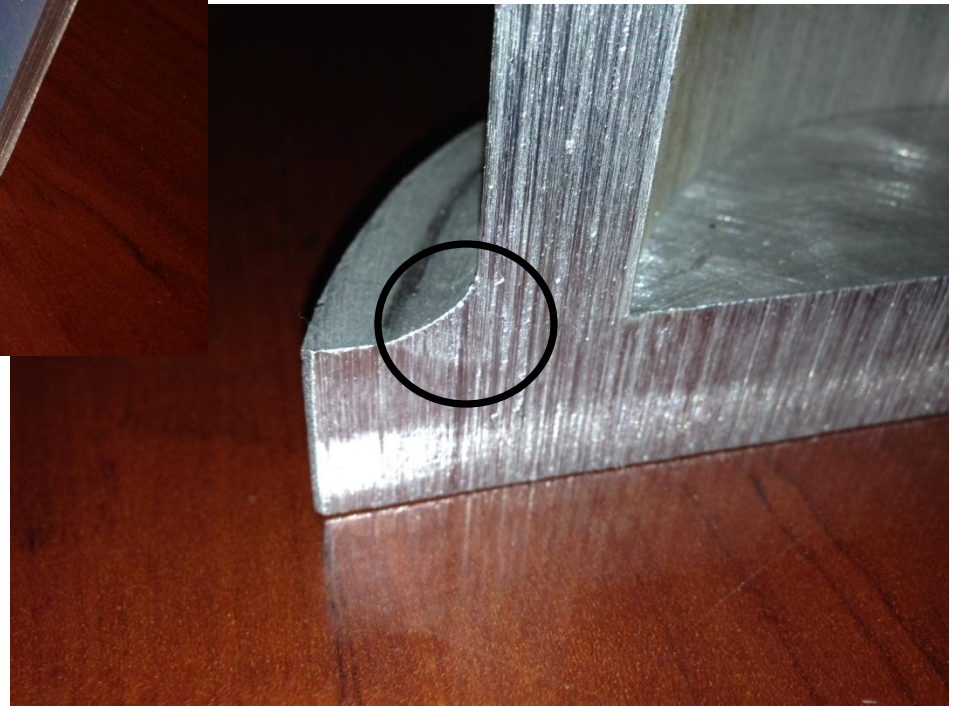
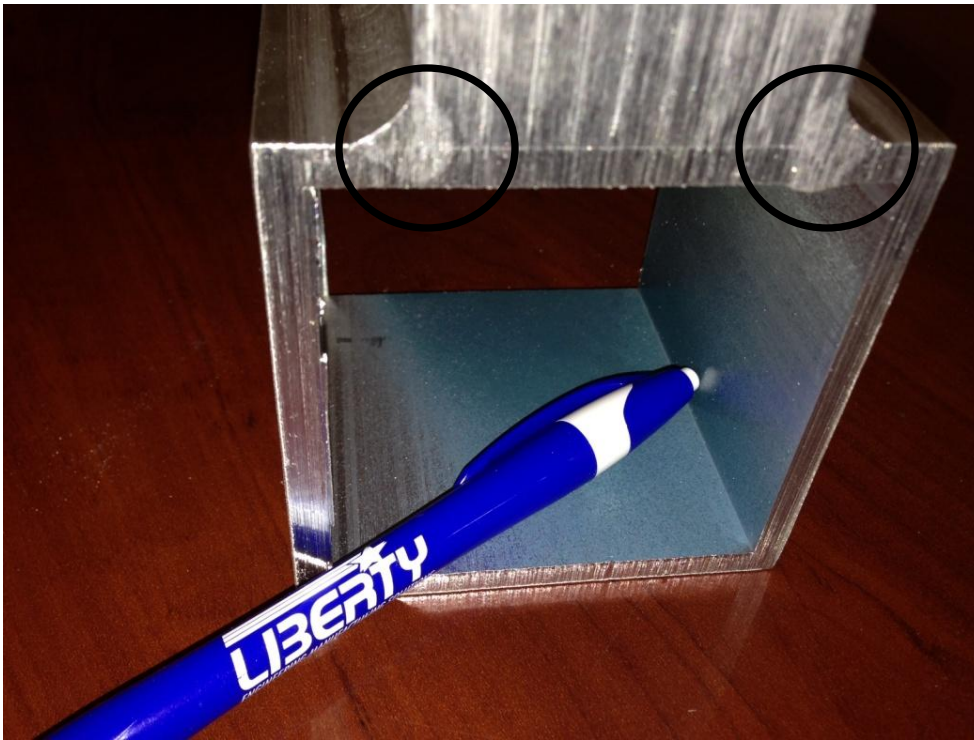
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6000 Pound Precision Gearbox Built by Liberty 3D



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Aluminum Fabrications Welded With DC TIG Provide Superior Penetration by Liberty 3D



Fabricated Assemblies for Food Industry by Liberty 3D



Stainless Steel Fabrications by Liberty 3D



Aluminum Fabrications by Liberty 3D



Small Parts Machined Parts By Liberty 3D



Aluminum Fabricating & Machining by Liberty 3D



CNC Boring Mill Machining by Liberty 3D



Fabricated & Machined Hoppers By Liberty 3D



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Stainless Steel for Food Processing By Liberty 3D



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Aluminum Fabricating & Machining by Liberty 3D



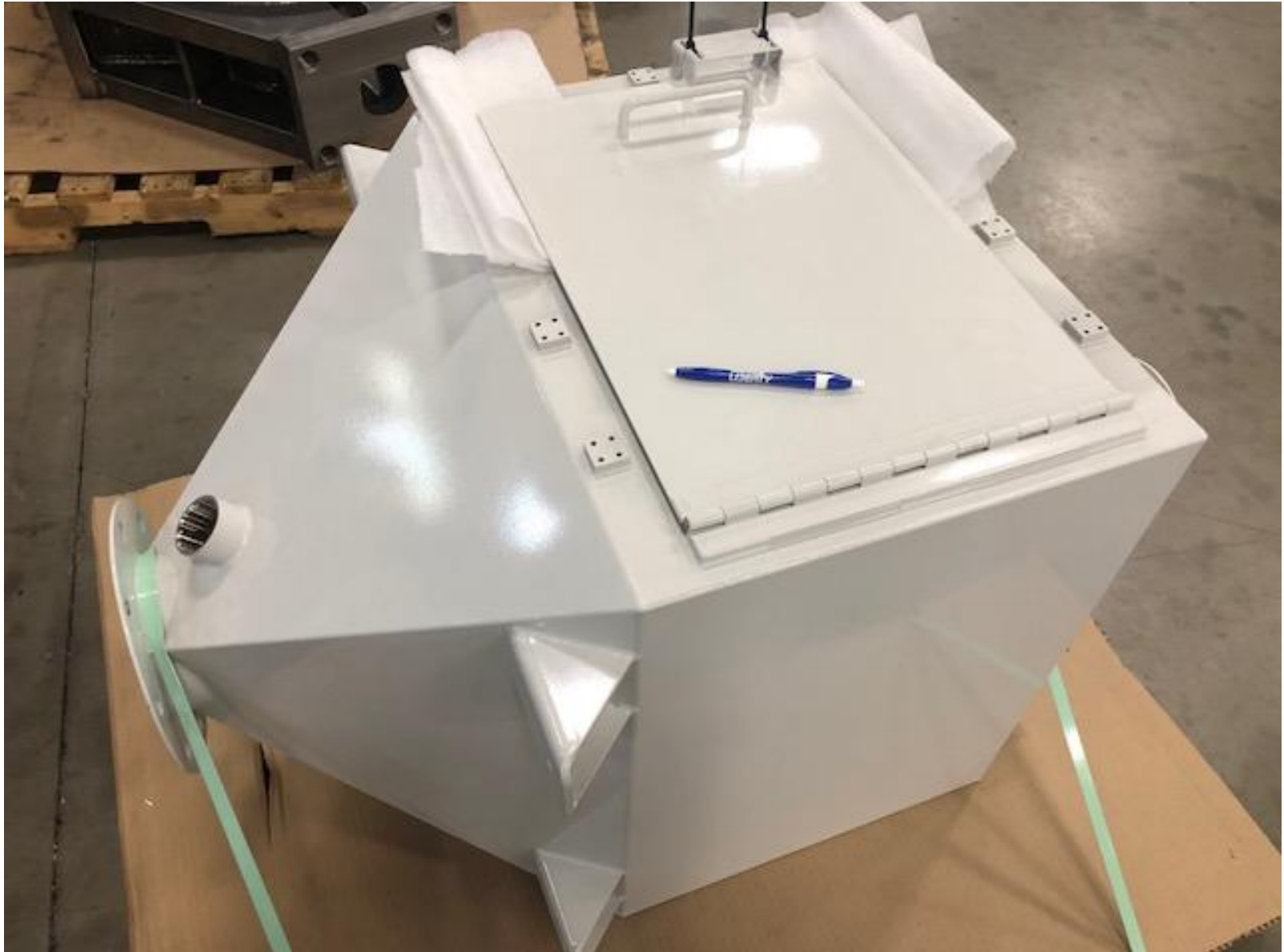
Gearbox Fabricating & Machining by Liberty 3D



Fabricated & Machined Parts By Liberty 3D



Fabricated & Machined Hoppers By Liberty 3D



Fabricated & Machined Parts By Liberty 3D



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Stainless Funnels for Food Packaging by Liberty 3D



Fabricated & Machined Parts By Liberty 3D



Large Frames Machined By Liberty 3D

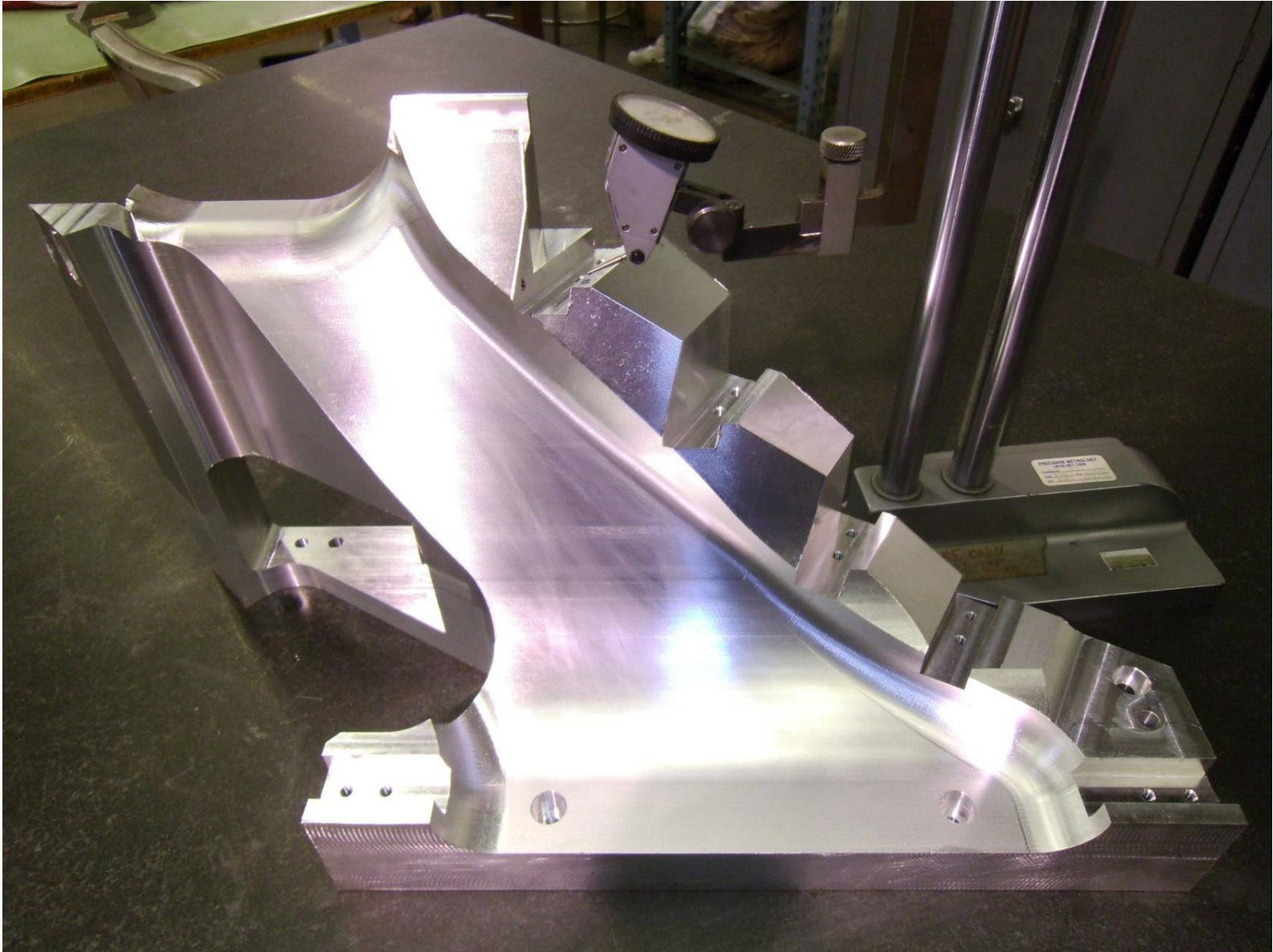


Fabricated & Machined Coolant Tanks By Liberty



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3D Machined Parts By Liberty 3D



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Stainless Funnels for Food Packaging by Liberty 3D



Fabricated & Machined Parts By Liberty 3D



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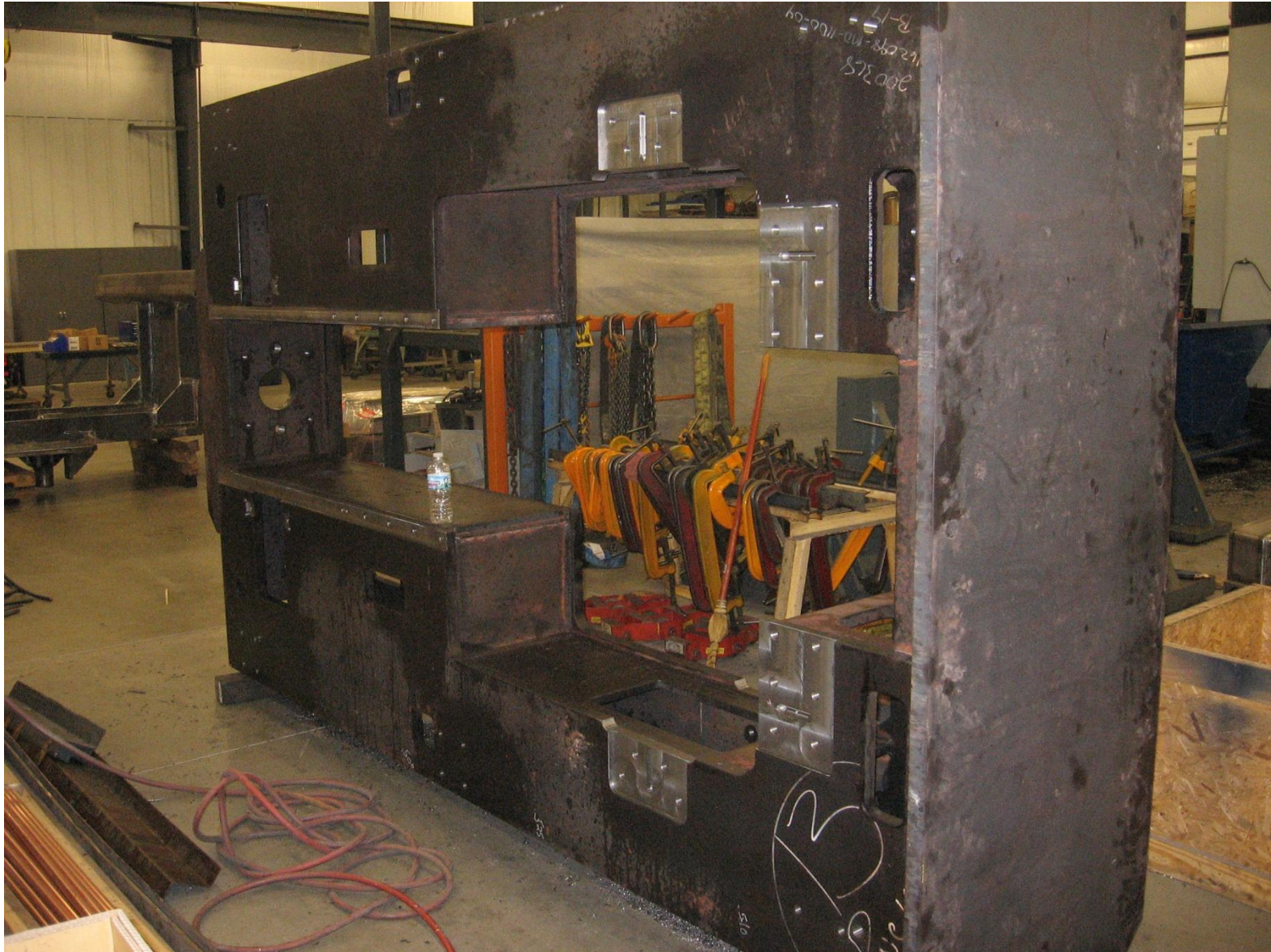
Stainless Funnels for Food Packaging by Liberty 3D



Fabricated & Machined Parts By Liberty 3D



Heavy Machinery Parts By Liberty 3D



Stainless Funnels for Food Packaging by Liberty 3D



Heavy Machinery Parts By Liberty 3D



Small Parts Machined Parts By Liberty 3D



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Stainless Funnels for Food Packaging by Liberty 3D



Mining Machinery Parts By Liberty 3D



Small Parts Machined Parts By Liberty 3D



Fabricated & Machined Parts By Liberty 3D



Stainless Steel Cabinets for Food Packaging by Liberty 3D



Small Parts Machined Parts By Liberty 3D



Stainless Funnels for Food Packaging by Liberty 3D

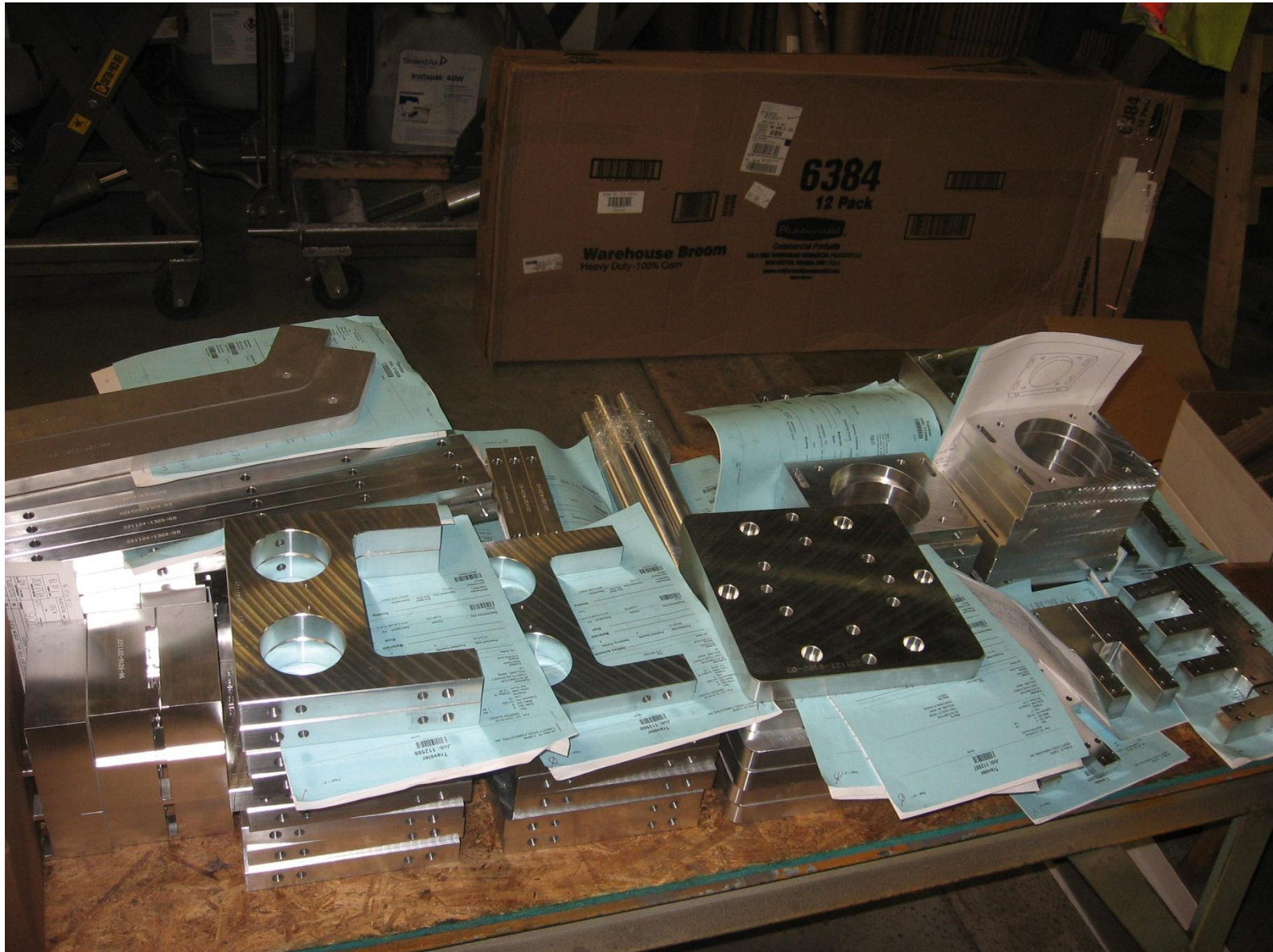


CNC Boring Mill Machined Parts By Liberty 3D



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Small Precision Machined Parts By Liberty 3D



Stainless Steel Parts for Food Packaging by Liberty 3D



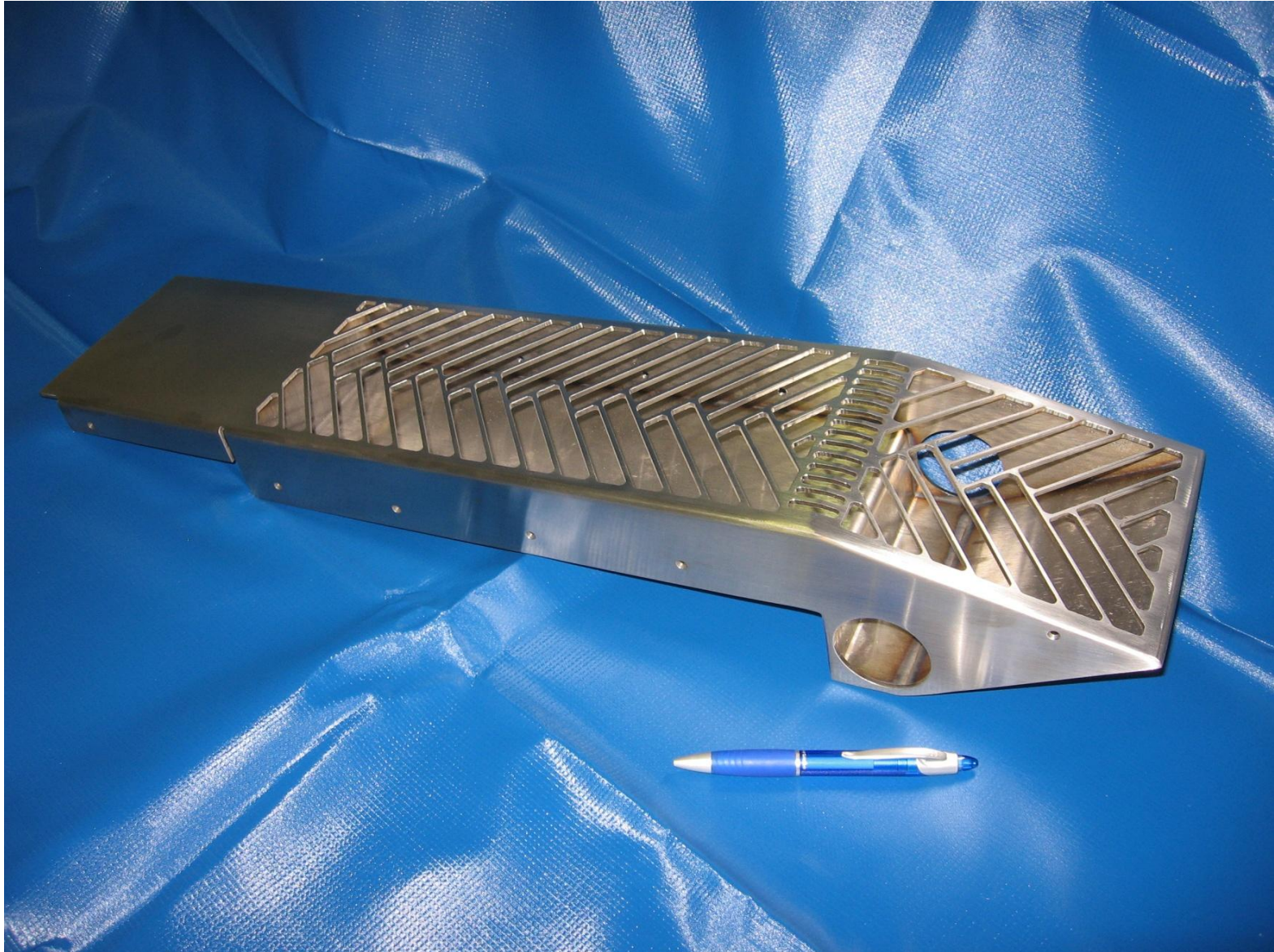
Fabricated & Machined Parts By Liberty 3D



Fabricated & Machined Parts By Liberty 3D



Stainless Steel Parts for Food Packaging by Liberty 3D



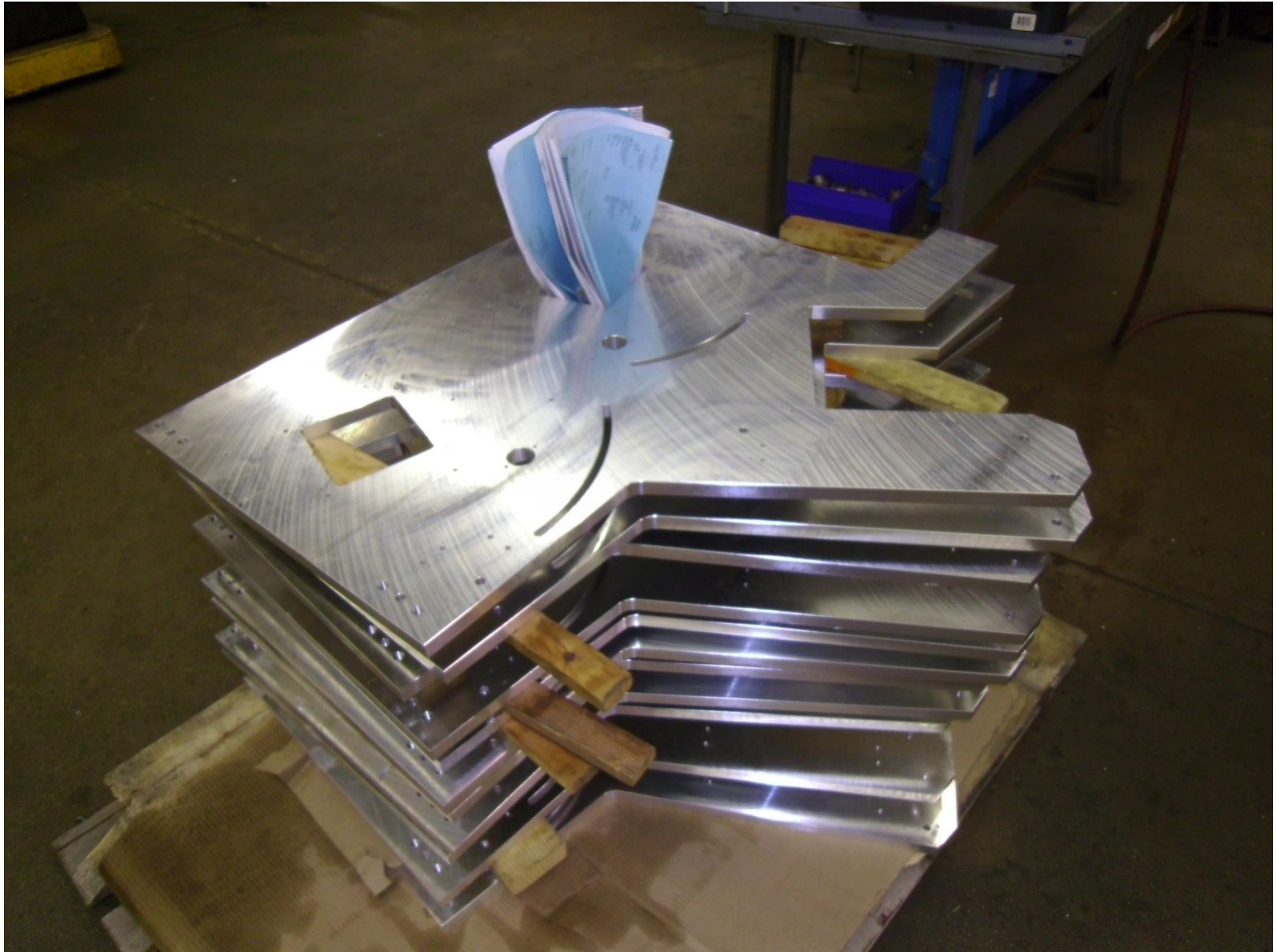
Construction Machinery Parts By Liberty 3D



Aluminum Fabricated & Machined By Liberty 3D



Plates Water-Jet and Machined By Liberty 3D



Custom Complex Sheet Metal Parts by Liberty 3D



Mold Parts Machined Parts By Liberty 3D



Stainless Steel Parts for Food Packaging by Liberty 3D



Large Plate Work By Liberty 3D



Fabricated & Machined Parts By Liberty 3D



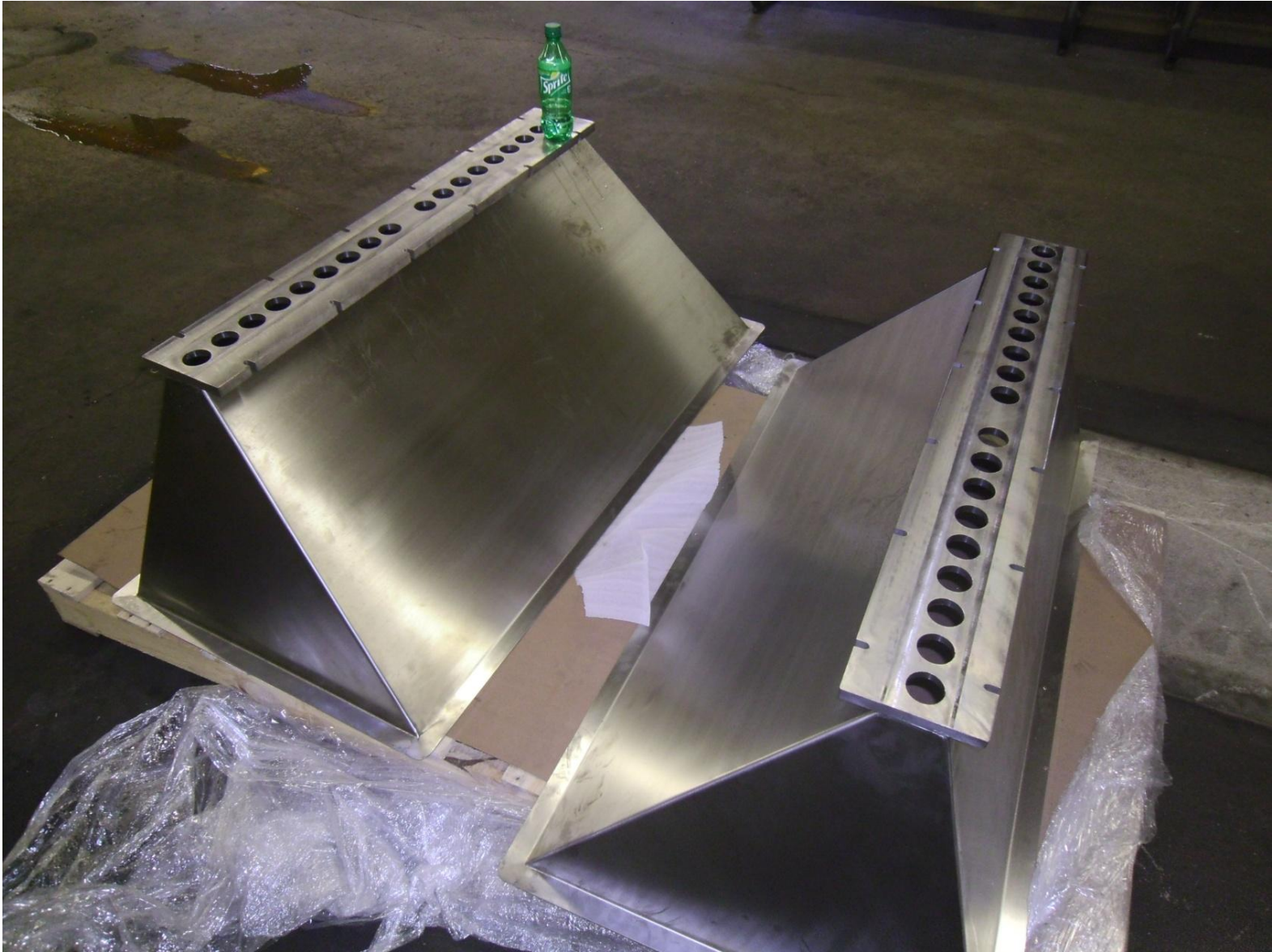
Automation Tables By Liberty 3D



Small Parts Machined Parts By Liberty 3D



Stainless Steel Parts for Food Packaging by Liberty 3D



Fabricated & Machined Gear Boxes By Liberty 3D



Fabricated & Machined Parts By Liberty 3D



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Small Parts Machined Parts By Liberty 3D

