



**CNC & Conventional Turning Equipment**

(1) Okuma LB-9 H Max. Turning Diameter $\phi 4.7''$ Between Centers                    9.8" Turret Tools                            12	(1) Cincinnati Milacron Cinturn 15U Max. Turning Diameter $\phi 15''$ Between Centers                    100" Turret Tools                            12	(1) Daewoo Puma 6G Max. Turning Diameter $\phi 6''$ Gang Style Automatic Bar Loader                1.5"
(1) Okuma Cadet Max. Turning Diameter $\phi 9''$ Between Centers                    15" Turret Tools                            12	(1) Ikegai TU30 P Max. Turning Diameter $\phi 16.5''$ Between Centers                    40.3" Turret Tools                            12	(1) Daewoo Puma 400 Max. Turning Diameter $\phi 15''$ Between Centers                    44.1" Gang Style
(2) Okuma LB15 Max. Turning Diameter $\phi 11''$ Between Centers                    19.5" Turret Tools                            12	(1) HAAS SL-10 Max. Turning Diameter $\phi 11''$ Between Centers                    16.5" Turret Tools                            12 Automatic Bar Loader	(1) Doosan Lynx 220L Max. Turning Diameter $\phi 12''$ Between Centers                    14" Automatic Bar Loader
(3) Omni Turn GT-75 Series II Max. Turning Diameter $\phi 1''$ Gang Style 12' Bar Feed	(2) Omni Turn Series I Max. Turning Diameter $\phi 1''$ Gang Style	(1) Doosan Puma VT 900 Vertical Lathe Max. Turning Diameter $\phi 35.4''$ Max. Turning Length                33.5" Turret Tools                            12
(2) Mori Seiki NL2500MC/Y-1250 4-Axis CNC Turning Center with Live Tooling Max. Turning Diameter $\phi 14.4''$ Between Centers                    51.1" Turret Tools                            20 Tool Stations                          12	(3) Emco Maier ET-425TCM 4 Spindle, 2 Turret Turning Center with Live Tooling Max. Turning Diameter $\phi 1''$ Continuous Bar Feed $\phi 1''$ Turret Tools                            10	(1) Doosan Puma TT 1800 SY 2 Spindle, 2 Turret Turning Center with Live Tooling Max. Turning Diameter $\phi 9''$ Between Centers                    9" Turret Tools                            12 Automatic Bar Loader
(1) Star SV-32 Swiss Type Automatic Lathe 9-Axis Max. Turning Diameter $\phi 1.25''$ Turret Tools                            10 Gang Style Automatic Bar Loader	(2) Star SR-25 Swiss Type Automatic Lathe 5-Axis Max. Turning Diameter $\phi 0.98''$ Dual Turret                            8x8 Automatic Bar Loader	(1) Star SR-20 Swiss Type Automatic Lathe 5-Axis Max. Turning Diameter $\phi 0.79''$ Gang Style
(1) Star SR-16 Swiss Type Automatic Lathe 5-Axis Max. Turning Diameter $\phi 0.63''$ Dual Turret                            6x6	(2) Euro Turn 42 Screw Machine Max. Diameter $\phi 1.63''$ 6 Spindle - High Speed Drilling Adjustable Cross Slides Slotting - Pick Off - Back Working	(9) Acme-Gridley Screw Machines Max. Diameter $\phi 3.50''$ Up to 8 Spindles
(3) Brown & Sharpe Ultramatic CNC Automatic Screw Machine Max. Turning Diameter $\phi 1.63''$	(1) Hankook VTB-100 Vertical Lathe Max. Turning Diameter $\phi 49''$ Turret Tools                            12	(1) Warner & Swasey No. 5 Lathe Max. Turning Diameter $\phi 11''$ Between Centers                    19.5"
(1) Lodge and Shippy Engine Lathe 20"	(1) Monarch Engine Lathe 16" X 54"	(1) Delta Engine Lathe 14"
(1) G&L Vertical Turret Lathe 42"	(2) Bardons & Oliver No. 2 Turret Lathe	(1) Bardons & Oliver No. 3 Turret Lathe
(2) Bickford Radial Drill Press	(1) Warner & Swasey No. 3 Turret Lathe	(1) South Bend 183c 14 1/2" Lathe
(1) Clausing Colchester Engine Lathe	(2) LeBlond Engine Lathe 18"	(1) Hardinge DSM 59 Lathe
(1) Omni Turn Retro on Hardinge Lathe		



**Milling Equipment (2, 3 & 4 Axis CNC & Conventional)**

(1) Okuma 4VA 3-Axis CNC Vertical Machining Center Work Envelope 39.4" X 20.1" X 20" Positioning Repeatability +0.00015" Automatic Tool Changer 20	(1) Okuma 3VA 3-Axis CNC Vertical Machining Center Work Envelope 29.9" X 13" X 12.5" Positioning Repeatability +0.00015" Automatic Tool Changer 16
(1) Okuma 60 VAE 3-Axis CNC Vertical Machining Center Work Envelope 59.2" X 24.8" X 24.1" Positioning Repeatability +0.00015" Automatic Tool Changer 20	(1) Okuma 50 VA 3-Axis CNC Vertical Machining Center Work Envelope 41.3" X 20.18" X 22.1" Positioning Repeatability +0.00025" Automatic Tool Changer 20
(1) Cincinnati Milacron 10VC1250 4-Axis CNC Mill Work Envelope 50" X 26" X 25" Positioning Repeatability +0.0005" Automatic Tool Changer 30	(1) Daewoo DMV 3016L 3-Axis CNC Vertical Machining Center Work Envelope 30" X 16.1" X 20.1" Automatic Tool Changer 24
(1) Daewoo Diamond / Ace DMV400 3-Axis CNC Mill Dual Pallet with Chick Indexable Workholding Work Envelope 22" X 15.7" X 22.4" Positioning Repeatability +0.00012" Automatic Tool Changer 30	(1) Mori Seiki SH-400 3-Axis Horizontal CNC Mill Dual Pallet Work Envelope 22" X 20" X 20" Positioning Repeatability +0.00012" Automatic Tool Changer 40
(1) HAAS VF-5 3-Axis Vertical CNC Mill Work Envelope 50" X 26" X 25" Automatic Tool Changer 30+1 Wireless Intuitive Probing System	(2) HAAS Mini-Mill +Z Clearance 3-Axis Vertical CNC Mill Work Envelope 16" X 12" X 10" Positioning Repeatability +0.00012" Automatic Tool Changer 40
(1) Mighty Viper VMC-210 3-Axis CNC Vertical Machining Center Work Envelope 81" X 40" X 32.2" Automatic Tool Changer 20	(1) Doosan Mynx 7500/50 3-Axis Vertical CNC Mill Work Envelope 60" X 30" X 24.6" Automatic Tool Changer 24
(1) Cincinnati No. 5 Horizontal Plain Mill Digital Readout	(1) Cincinnati No. 5 Vertical Plain Mill Digital Readout
(2) Bridgeport J-Head Vertical Mill Digital Readout	(1) Tree J-200R 2-Axis CNC Mill - +0.0003" Repeatability Work Envelope 36" X 10"
(1) Bridgeport Series I Vertical Mill Digital Readout	(1) South Bend 2VS Vertical Turret Mill Power Feed
(1) Gilbert Horizontal Mill - Table & Rail Type Spindle 3 1/2" Floor 35'	(1) Defiance Horizontal Mill Spindle 2 7/8" Table Type 5'
(1) Milwaukee Simplex Horizontal Mill	(1) Bridgeport J-Head Vertical Mill
<b>Wire EDM</b>	
(1) Sodick A530D AWT with EX21 Controls Work Envelope 29.5" X 18.5" X 7"	(1) Sodick A280L with EXedw Controls Work Envelope 15.7" X 11.8" X 6.5"



**Fabrication Equipment**

(1) Cosen C-42 CNC Horizontal Band Saw Automatic Stock Feed	16" X 16"	(2) Marvel Series 8 Vertical Band Saw Power Vice	12" X 12"	(1) Kasto sba A2 Horizontal Band Saw Automatic Stock Feed	10"
(1) Lian Feng Horizontal Band Saw	12"	(1) Kasto Type SBA 260 AU Horizontal Band Saw Automatic Stock Feed	10"	(1) Do All Model DBW-15 Vertical Band Saw	
(1) Buffalo #1-1/2 Iron Worker		(1) Well Model 1000		(1) Mossner - Vertical Band Saw	
(1) Niagra Shear 5/16" x 8'		(1) Williams / White Press Brake -75 Ton		(1) Denisen Vertical Press - 25 Ton	
(1) Victraulic Pipe Groover 16" Capacity		(1) Almi Pipe Coping Machine 3" Capacity		(1) Fein Pipe Coping Machine 6" Capacity	
(2) Roto Broach Hole Machine		(2) Walsh Punch Press No. 3		(2) OTC Press, 50 Ton	
(1) Burney 3 CNC Oxy-fuel Burning Table Water Cooled Table - 10' x 20'		(1) Robotic Weld Cell Moto Man 1900N Full CNC Water Cooled Miller Access 450A 100% Duty Cycle Programmable Power Source Twin Rotary Head Twin Table Work Station with Tail Stock on 10' Centers			
(6) Miller CC/CV Inverter Welder With Wire Feed	250A	(3) Miller Sycrowave CC AC/DC Water Cooled	250A	(2) Miller CC with Wire Feeds	650A
(2) Thermal Arc CV DC With Wire Feed	400A	(1) Stud Welder Solid State Timers	1,800A	(1) Stud Welder Solid State Timers	650A
(1) Lincoln IdealARC TIG AC/DC	300A	(2) Hobart CC DC Stick Welder	500A	(2) Miller CV with Wire Feeds	200A
(1) Miller CV-DC Wire Feed 250A		(1) Lincoln WeldPAD 3200 HD AC/DC 20/90		(1) Westinghouse CC DC SMAW	1,000A
(1) Hobart Plasma Burner Shop Air Supplied	60A	(1) BPR CP 40H Universal Bending Roll Machine 2" Pipe Capacity			

**Miscellaneous Machines & Equipment**

(1) Grey Planer Work Area	44" X 20'	(1) Thompson Surface Grinder Work Area	20" X 10'	(1) Parker Majestic Surface Grinder No. 2	
(2) Cincinnati No. 2 Tool & Cutter Grinder		(1) Harig G18w Surface Grinder	6" x 18"	(1) Cincinnati No. 4 Cylindrical Grinder - 40" Centers	
(1) D C Morrison Vertical Keyseater		(1) LaPointe Horizontal Broach - 60 Ton Stroke	60"	(1) Rotec Vibratory Polisher	
(1) Bowden CRB-4-SM-160 Parts Washing System		(1) Rotec Vibratory Polisher		(2) Trinco 36/PP2 Bead Blaster	

**Technology & Software**

(4) Solidworks 2012 3D CAD	(10) AutoCAD LT 2010 2D CAD	(2) GibbsCAM Software
(2) Autodesk Inventor 2010 3D CAD	(1) PRO/E Wildfire 5 3D CAD	(1) ALGOR V19 FEA Software
PRO CAD / CAM Software	Okuma IGF Interactive Graphics CAM	Okuma TM-APT-GII
GlobalShop ERP (Workflow management) software		Office Computers with DNC Links