



Contract Manufacturing Services Equipment Listing

MACHINE SHOP EQUIPMENT

CNC GANTRY MACHINE CENTERS:

UMB 6	314"x 78"y 23"z
Jobs 243	177"x 106"y 49"z
Seramill*	314"x 98"y 37"z
SNK RB6	246"x 150"y 23"z 62"w

* Automatic Rotary Table 4th Axis

CNC HORIZONTAL MACHINE CENTERS:

Kuraki KBT 13	118"x 78"y 51"z 27"w
Kuraki KBT 1100*	78"x 59"y 57"z 25"w
Okuma MA 500	27"x 35"y 30"z
<i>With Fastems FPC 10 Pallet Changer and full rotational B axis</i>	
Okuma MA400	22"x 24"y 24"z
<i>With 2-APC, Fastems FPC 12 Pallet Changer and full rotational B axis</i>	
Okuma MA800	55"x 49"y 49"z
<i>With 2-APC and full rotational B axis</i>	

* Rotary Table

CNC VERTICAL MACHINE CENTERS:

Monarch 200BX240*	240"x 36"y 44"z
Monarch 200BX160*	160"x 36"y 44"z
Toyoda V80-250	96"x 31"y 30"z
Toyoda V80-160	63"x 31"y 29"z
Takumi 11VA	43"x 21"y 25"z
Takumi 8VA	31"x 20"y 22"z
Monarch PMC V 750*	29"x 17"y 21"z
Okuma 3VA	22"x 14"y 17"z
Kuraki KV 500	20"x 13"y 17"z
(2) Haas VF-2	30"x 16"y 20"z

* Automatic 4th Axis Rotary Table

WATERJET PROFILE MACHINE CENTER:

Flow IFB 6024 DWJ Waterjet	144"x 72"y 8"z
Dual Zone Tables	

LONG HOLE / GUN DRILL:

Dadson DS 2120 CM	1/4" - 2" Dia. x 120" length
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GEAR HOB:

Mitsubishi GA-40/CNC	15.75" Dia. x 9" face
Sigma Tos 071	28" Dia. x 13" face
Fellows Shaper 6A-Type-252	22" Dia. x 3" face

CYLINDRICAL GRINDING:

Sigma Tos BUC63A-3000	25" Dia x 120" length
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BALANCING:

Scheneck H50B-CAB 690	Normalizing Balancer
Stewart Warner A2005	Normalizing Balancer

CNC TURNING CENTERS:

Tacchi HD3-105L	40" (53") Swing* x 315" Lg
Dianichi M-85	19 3/4" Swing x 119" Lg
Okuma ACT-20	21" Swing x 19" Lg
Bridgeport EZ Path	16 1/2" Swing x 34" Lg
Haas TL-2	16" Swing x 48" Lg

* Swing over bed

CNC VERTICAL TURNING CENTER:

Okuma V60R	18" Chuck, 27.5" Swing, 25.5" Lg
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TURN-MILL MACHINING CENTERS:

Okuma LT 300 MY	21" Swing x 36" Lg
<i>With 8 Axis Dual Turret/Twin Spindles</i>	

TURNING LATHES w/LIVE MILL TOOLING:

Mori NL3000Y/2000	39" Swing x 83.5" Lg
<i>MAPPS conversational turn/mill with Y and C axis</i>	
Mori SL603/4000	38" Swing x 157" Lg
<i>MAPPS conversational turn/mill with C axis</i>	

MANUAL LATHES:

Mazak Rex	21 1/2" Swing x 117" Lg
Clausing 17	8" Swing x 77" Lg
Clausing 18	19" Swing x 76" Lg
Clausing 15	8 1/4" Swing x 48" Lg
DoAll 13	8" Swing x 57" Lg

MANUAL MILLS:

WMW FW450X*	51"x 14"y 22"z
Kuraki Horizontal Mill	58"x 47"y 49"z
Bridgeport Series 1 -2J Head	42"x 9"y (5)
Wells Index #837	42"x 9"y
Chevalier FM-3VK	36"x 15"y

*Features Vertical and Horizontal Heads

SURFACE GRINDING:

Okamoto ACC-32-120	32" x 120" (20" Wheel)
Okamoto ACC-12-240X	12" x 24"
Okamoto ACCUGAR 124N	12" x 24"
Boyer Schultz Challenger 2A618	6" x 18"

Contact a Bretting Contract Manufacturing Services representative today to discuss additional CMS services to best meet your company's needs.

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MACHINE SHOP EQUIPMENT (CONTINUED)

KEY SEATER:

Hansford Davis DA15B Stroke - 4.5", Throat 19"
20" x 31" Table - 1/16" - 1.5" Key

INSPECTION EQUIPMENT:

Zeiss Accura CMM 63"x94"x39"
Faro Quantum Arm Portable CMM 8ft volume
Outside Micrometers 1" - 30"
Inside Micrometers 0" - 40"
Digital Height Gage 0" - 24"
Depth Micrometers 0" - 12"
Vernier Calipers 0" - 60"
Dial Calipers 0" - 12"
Dial Bore Gages
Test Indicators
Plug Gages 0" - 1.5"
Thread Gages
Gage Blocks
Granite Plates 48" x 96" Grade AA
Rockwell Hardness Tester
Surface Finish Profilometers
B&K Vibration Analyzer

TOOL PRESETTING:

Parlec TMM P20-2024 Digital Readout Presetter

ARBOR PRESSES:

(2) One - Five Ton
(5) 50 - 300 Ton Hydraulic

DRILL PRESSES:

Cincinnati 21 Inch	2.5" Drill Capacity	(1) Spindle
Clousing 15 Inch	1" Drill Capacity	(1) Spindle
Clousing 15 Inch	1" Drill Capacity	(2) Spindle
Clousing 20 Inch	1" Drill Capacity	(2) Spindle
Craftsman 150	1" Drill Capacity	(1) Spindle
Walton 5816	1" Drill Capacity	(1) Spindle

SAWING:

Horizontal Band Saws (6)	0" - 16" Capacity
Vertical Band Saws (3)	0" - 24" Capacity
Radial Arm Saw	0" - 12" Capacity

PART FINISHING EQUIPMENT:

Almco PRWB 48-48-G Parts Washer	
Empire PF-3696 Sand Blaster Enclosed	20"x20"x90"
JBI 9857 Down Draft Paint Booth	12'x 24' Capacity
JBI 001M-030333 Paint Cure Oven	10'x 24' Capacity

FABRICATION EQUIPMENT

WELDERS:

Miller Syncromatic 250 Tig Welder AC/DC
Miller Invision 456P Mig Alum Push/Pull Gun
Miller Millermatic CP 300 MIG 200 Amp Wire (.035)
Miller Millermatic CP 300 MIG 200 Amp Wire (.035)
Miller Millermatic CP 300 MIG 200 Amp Wire (.035)
Miller Invision 456P D-60 Dual Feed Mig 400 Amp
Thermal Dynamics PAK Master 100 XL Hand Plasma
Lincoln R3R-400 DC Stick Electrode
(2) Miller Axxess 450 MIG 450 AMP Wire (.052)

CNC PUNCH:

Trumpf TruPunch 2020 1/4" thick, 20 ton, 100"x50" sheet

SHEET METAL FORMING:

Fasti 225-32/4 CNC Folder Capacity 9GA-127" wide
Euromac Digibend Horizontal Bender 7" Height, 36 Ton

METAL WORKERS:

Metal Muncher MM70 Ironworker 12" Throat, 70 Ton

METAL SHEAR:

All Steel Shear Up to 1/4" Material x 10' Length

PLASMA:

ESAB Shadow DX3000 2" thick cut, 98"x13' sheet

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