



QTY. Equipment & Capabilities List 1/12/2012

Double Column

1 **Okuma MCR A5C 35x80**
 Working Surface (width x length) 98" x 307"
 X-axis travel 314"
 Y-axis travel 137"
 Z-axis travel (spindle ram) 25"
 Cross rail travel 51"
 Width between Columns 120"
 Maximum loading capacity 77,000 lbs.
 Automatic Tool Changer 50 tools
 Spindle Head Changer 3 heads (Vertical, Horizontal and Universal heads)

5 Axis

1 **Mazak Vari-Axis 500-5x II**
 Pallet Size 15.7" x 15.7" (2)
 X Axis Travel 20.08"
 Y Axis Travel 20.08"
 Z Axis Travel 18.11"
 A Axis Travel (Tilt) -120 thru + degrees
 A and C Axis Positioning .001 Degree
 Distance from Table Top to Spindle Nose 7.48" - 25.59"
 Max. Work piece Dia. x Width 19.7" x 15.95"

1 **Mazak Vari-Axis 630-5x II**
 Pallet Size 15.7" x 15.7" (2)
 X Axis Travel 24.8"
 Y Axis Travel 30.12"
 Z Axis Travel 20.08"
 A Axis Travel (Tilt) -150 thru + degrees
 A and C Axis Positioning .001 Degree

Vertical Machining Centers

1 **HAAS VF-11**
 x-120" y-40" z-30"

1 **MAZAK MTV-655/60 N**
 x-59" y-25" z-25"

1 **HAAS VF-9**
 x-84" y-40" z-30"

1 **MAZAK V550**
 x-68" y-22" z-22"

1 **MAZAK VTC250D/50**
 x-69" y-25" z-26"

1 **MAZAK VCN 410B**
 x-30" y-16" z-20"

1 **MAZAK FJV-20 (Pallet Changer)**
 x-22" y-16" z-16"

2 **MAZAK VCN 510C II (Pallet Changer)**
 x-41" y-20" z-20"

2 **HAAS VF-1**
 HAAS 4th Axis Rotary Table
 x-20" y-16" z-20"

2 **HAAS VF-3**
 x-40" y-20" z-25"

**Horizontal Machining
Centers**

- 1 **Makino A-92 (Pallet Changer)**
x-59" y-49" z-53" (Pallet 31" x 39")
- 1 **Makino A-51 (Pallet Changer)**
x-59" y-49" z-53" (Pallet 15" x 15")
Table is a true 4th axis
- 1 **Mitsubishi M-HT11**
x-63" y-59" z-43"

CNC Turning

- 1 **Mori Seiki NL-2500SY**
Dual Spindle, Live Tooling
LNS Bar Feeder
x-10" y-3.9" z-31.3"
- 1 **Mori Seiki CL-25**
x-10" z-19"
- 1 **HAAS SL-20**
Tailstock
x-8" z-20"
- 1 **HAAS SL-20**
HAAS Bar Feeder
x-8" z-20"
- 1 **HAAS HL-2**
Tailstock
x-8" z-20"
- 1 **HAAS HL-2**
x-8" z-20"

VTL- Turning

- 1 **O-M VT5-12N**
63" Swing 49" chuck 35" height

Saws

- 1 **Cosen Automatic Saw**
- 1 **Chop Saw**
- 1 **Vertical Ban Saw**

Manual Machinery

- 3 **Bridgeport Vertical Mills**
- 1 **K&T Vertical Mill**
- 1 **Browne & Sharpe Horizontal Mill**
- 1 **Grand Rapids Surface Grinder**
- 1 **Iron Worker**
- 1 **Track Torch**

Quality Equipment

- 1 **Zeiss Contura G2 CMM**
x-39" y-63" z-23"
- 1 **Browne & Sharpe Micro Height**