

# Mercury Tool & Machine Inc.

## Equipment List: 2007

### MACHINE SHOP

#### LATHES CNC

- (1) CNC Okuma Cadet short bed w/Okuma OSP5020L Control  
12 station side turret, 9.84" Max Turning Dia., 19.59" Max work length, 3.15" Spindle bore, 15.75" swing over bed, 6" X Axis Travel, 20.47" Z Axis Travel, Kitagawa B10 chuck, Tail stock, SMW SPACE SAVER 2000 Bar Feed
- (2) CNC Okuma Cadet short bed w/Okuma OSP5020L Control  
12 station side turret, 9.84" Max turning Dia.; 19.59" Max work length; 2.20" Spindle bore;  
15.75" swing over bed; 6" X Axis Travel; 20.47" Z Axis Travel; Kitagawa B8 chuck; Tail stock; SMW SPACE SAVER 2000 Bar Feed
- (3) CNC Okuma Cadet short bed w/Okuma OSP700L Control  
12 station side turret; 9.84" Max turning Dia.; 19.59" Max work length; 3.15" Spindle bore; 15.75" swing over bed; 6" X Axis Travel; 20.47" Z Axis Travel; Kitagawa B10 chuck; Tail stock
- (4) CNC Okuma Cadet L1420 short bed w/OSP700L Control 12 station side turret; 3.14" spindle bore; 18.9" swing over saddle; 14.17" Max turning Dia.; 9.05" X Axis Travel; 26.38" Z Axis Travel; Kitagawa B10 chuck
- (5) CNC Okuma LB25 short bed w/Okuma OSP5020L Control  
12 station side turret; 14.17" Max turning Dia.; 25.59" Max work length; 18.9" swing over saddle; 9.05" X Axis Travel; 26.38" Z Axis Travel; Kitagawa B12 chuck; Hydraulic Tail stock w/3.94" quill stroke; 26.38" distance between centers
- (6) CNC Okuma LB25 long bed w/Okuma OSP5020L Control  
12 station side turret; 18.9" swing over saddle; 9.05" X Axis Travel; 50.00" Z Axis Travel; Kitagawa B12 chuck; Hydraulic Tail stock w/4.72" quill stroke; 50" between centers
- (7) CNC Jones & Lamson TNC-A long bed w/GE – Fanuc O – T Control  
8 station side turret; 6 station front turret; 14.3" swing over cross slide; 12.2" X Axis Travel; 36.3" Z Axis Travel; Cleveland 12" Chuck
- (8) CNC Jones & Lamson TNC-A long bed w/GE Fanuc series O – T Control  
17.7" swing over rail; 14.3" swing over cross slides; 12.2" X Axis Travel; 36.3" Z Axis Travel Machine is dedicated to facing electric motor housings
- (9) CNC Jones & Lamson TNC-8 Twin Spin w/Allen Bradley Seri 8200 Control  
8 station turret both spindles; 11" swing over Z Axis slide (both spindles); 7" swing over X Axis Way cover (both spindles); 11" X Axis Travel both spindles 6" Z Axis Travel both spindles; 6 ½" Z Clearance; 12" chuck both spindles

#### LATHES MANUAL

- (1) Monarch Model K 14 ½ x 30" Engine Lathe
- (2) W&S No.3 Turret Lathe
- (3) RBC Model LF-32 Turret Lathe

#### CNC MACHINING CENTERS

- (1) YANG Model MH630 w/GE Fanuc Series O-M Control  
Thru Spindle Coolant; Oil Cooler KO-30PS; 39.4" X Travel; 31.5" Y Travel; 29.5" Z Travel Automatic tool changer w/60 station tool carousel; 2 station pallet changer 25" x 4" Square Pallet; Rotary Table 360 degree indexable , 1 degree incremental; Renishaw MP10 probe

- (2) TOYODA FA 630 horizontal w/ 3 axis Fanuc 15MB control, pallet size 24.8" x 24.8", 2 pallets; Axis travel: X 39.37", Y 33.46", Z 29.52"; (2 machines)
- (3) TOYODA FH45 w/GE Fanuc Series 15M Control  
 Thru Spindle Coolant; 23.5" X Travel; 22.1" Y Travel; 19.7" Z Travel  
 Automatic tool changer w/48 station tool carousel; 2 station pallet changer  
 17 3/4" x 17 3/4" pallet; Rotary Table 360 degree indexable, 1 degree incremental  
 Big Shepherd LC Touch Sensor probe
- (4) Fadal Model 906-1 VMC 4020HT w/Fadal CNC 88HS Control  
 Automatic 21 station tool changer; 40" X Travel; 20" Y Travel; 24" Z Travel  
 Haas HRT9SP Programmable part Indexer
- (5) Fadal Model 906 VMC 4020 w/Fadal CNC 88HS Control  
 Thru Spindle Coolant; Automatic 21 Station tool changer; 40" X Travel; 20" Y Travel;  
 24" Z Travel
- (6) Fadal Model 906 VMC 4020 w/Fadal CNC 88HS Control  
 Thru Spindle Coolant; Automatic 21 Station tool changer; 40" X Travel; 20" Y Travel  
 24" Z Travel
- (7) Fadal Model 906 VMC 3020 w/Fadal CNC 88HS Control  
 Thru Spindle Coolant; Automatic 24 station tool changer; 30" X Travel; 20" Y Travel  
 24" Z Travel; SMW Model RT 226 VN horizontal axis part indexer
- (8) TOYODA FH 55 W/Fanuc 15M, pallet size 19.7" x 19.7"; 2 pallets; Axis travel: X 28",  
 Y 28", Z 22" (2 machines)

## MANUAL MILLS (Vertical)

- (1) Bridgeport w/Anilam Model A102-100 Digital Readout  
 9 x 24 table; X travel = 24; Y travel = 10.5; Z travel = 5; Kool Mist Coolant System  
 Haas HRT9SP Programmable Part Indexer
- (2) Bridgeport w/Anilam Model A102-100 Digital Readout  
 9 x 24 table; X travel = 24; Y travel = 10.5; Z travel = 5
- (3) Bridgeport  
 9 x 24 table; X travel = 24; Y travel = 10.5; Z travel = 5

## MANUAL MILLS (Horizontal)

- (1) Cincinnati  
 Table size 9 x 47
- (2) Milwaukee Model H w/Anilam A102-100 Digital Readout  
 Table size 9 x 42; Haas HRT9SP programmable part indexer
- (3) WH Nichols Class 2601  
 Table size = 6 3/4 x 22 3/4

## BROACH PRESS

- (1) Denison 8 ton Multi Press, (2 ea)  
 12" Stroke; 10" Throat Depth; 6 x 13 x 2 Bolster Plate
- (2) Denison 6 Ton Multi Press  
 12" Stroke; 10" Throat; 6 x 11 x 1" Bolster Plate

## GRINDERS

- (1) Cincinnati #2 Centerless Grinder

## DRILL PRESS

- (1) Wisconsin 3 Spindle  
 (2) Task Master 16 speed Drill press  
 (3) Rockwell/Delta 20" Drill Press (2 ea)  
 (4) Central Mod CH 7F Drill Press w/5/8" Chuck

## **IN PROCESS QUALITY CONTROL**

- (1) 18" x 12" Granite Surface Plate (4 ea)
- (2) 18" Height Gage (4 ea)
- (3) 24" X 18" Granite Surface Plate
- (4) 18" Mitatoyo Height Gage
- (5) 24" Vernier Caliper
- (6) 24" Vernier Caliper
- (7) Micrometers complete set up to 15" (2 ea)
- (8) Micrometers complete set up to 12"
- (9) Go/nogo gages for motor housings

## **DEBURR EQUIPMENT**

- (1) Burr King Mod 760MC 150A 1.5 or 2" Belt Sander (4 ea)
- (2) Delta 1" Belt Sander
- (3) Kalamazoo 1" Belt Sander

## **MATERIAL HANDLING**

- (1) Wesco Pallet Jacks (2 ea)
- (1) Abel-Howe ½ ton Gantry Hoist
- (2) Anchor ½ ton Gantry Hoist
- (3) CM 2 ton over head hoist

## **ENVIRONMENTAL EQUIPMENT**

- (1) Landa Water Maze Water (Coolant) Cleaning System
- (2) Barrett Centrifugals Chip Cleaning System

## **WELD SHOP**

### **TIG HIGH FREQUENCY WELDER**

- (1) Linde Type HDAD-300 Tig Hi Frequency Welder

### **ARC WELDERS**

- (1) Miller Delta Weld 450 (2 ea)
- (2) Miller Delta Weld 302
- (3) Miller Delta Arc 250
- (4) Miller Stick Rod Machine
- (5) Linde Short Arc (2 ea)

### **WIRE FEED WELDERS**

- (1) Miller 60 Series 20 Volt Wire Feeder
- (2) Miller Wire Feed 150 Volt 50/60Hz 3.5 Amp (2 ea)

### **FLAME CUTTING SYSTEMS**

- (1) Permanent mounted Acetylene Metal Cutting System
- (2) Portable Acetylene Metal Cutting System mounted on base w/(2) wheels

### **SAWS**

- (1) Wellsaw Model 1000 Horizontal Band Saw
- (2) Black & Decker Abrasive Saw
- (3) Abrasive Saw

### **MISCELLANEOUS EQUIPMENT**

- (1) Semi Automatic Rotary Seam Welder w/Dual and Single Station Fixture
- (2) Craftsman 15" Drill Press

(3) 6" wide Belt Sander

## **PRESS DEPARTMENT**

### **PUNCH PRESSES**

- (1) E W BLISS 300 Ton Press  
72 x 42" Bolster Plate; 5 7/8 " Stroke; 4 5/8" slide Adjustment; 23" Shut Height  
14-45 SFM
- (2) PACIFIC Mod 250 PF 250 Ton Hydraulic Press  
58" x 34" Bolster Plate; 10" Variable Stroke length; 10" slide Adjustment; 23" Shut Height
- (3) E W BLISS Mod 5045197 113 Ton Press  
37 x 29" Bolster Plate; Air Clutch w/15 Ton Cushion; 5 7/8" Stroke; 3 1/2" Slide Adjustment  
13 1/2" Shut Height
- (4) NIAGARA Mod N/A 90 Ton Press  
38" x 25" Bolster Plate; Air Clutch w/15 Ton Cushion; 4 1/2" Stroke; 3 1/2" Slide Adjustment  
15" Shut Height,
- (5) US INDUSTRIES Mod N/A 75 Ton Press  
36 x 25" Bolster Plate; Air Clutch w/15 Ton Cushion; 4" Stroke; 3" Slide Adjust  
12 3/4" Shut Height
- (6) E W BLISS Mod HP4112 60 Ton Press  
32 x 22" Bolster Plate; Air Clutch w/15 Ton Cushion; 6" Stroke; 3' Slide Adjustment  
12" Shut Height
- (8) E W BLISS Mod 50013731 50 Ton Press  
36 x 21" Bolster Plate; Air Clutch; 3" Stroke; 3" Slide Adjustment; 9 1/2" Shut Height
- (9) E W BLISS Mod HP43886 50 Ton Press  
28 1/2 x 19" Bolster Plate; Mechanical Clutch; 3" Stroke; 2 1/2" Slide Adjustment  
10 1/2" Shut Height
- (10) E W BLISS Mod HP46914 45 Ton Press  
29 1/2 x 18" Bolster Plate[ Air Clutch w/Cushion; 3" Stroke; 3" Slide Adjustment  
10" Shut Height
- (11) NIAGARA Mod 1 - 3 35 Ton Press  
24 x 15" Bolster Plate; Mechanical Clutch; 2 1/2" Stroke; 2 1/4" Slide Adjustment  
9" Shut Height
- (12) ROUSSELL Mod 3F 15 Ton Press  
20 x 14" Bolster Plate; Mechanical Clutch; 2" Stroke; 2" Slide Adjustment; 9" Shut  
Height
- (13) Federal Mod N/A 10 Ton Press  
13 x 10" Bolster Plate; Mechanical Clutch; 3 3/8" Stroke; 2" Slide Adjustment  
6" Shut Height

### **COIL, CRADLES & REELS**

- (1) Feed Lease Coil Cradle w/Automatic Feed Control
- (2) Mercury Tool Fabricated 6,000 # Coil Cradle w/Automatic Feed Control (2 ea)
- (3) Rowe 4,000 # Coil Cradle w/Automatic Feed Control (3 ea)
- (4) Mercury Tool Fabricated 2,000 # Coil Cradle w/Automatic Feed Control (2 ea)
- (5) LITTELL No 60-38 6,000 # Coil Let Off Reel (2 ea)  
ID Range 16-20; Max width 30"

### **PUNCH PRESS FEEDS & STRAIGHTENERS**

- (1) 1/4 x 6 x 24 Air Feed w/Straighteners
- (2) 3/16 x 12 x 24 Air Feed w/Straighteners
- (3) .100 x 8 x 12 COIL MATIC VIP ET Air Feed
- (4) .080 x 2 x 4 Air Feeds Inc AF3 – GR Air Feed
- (5) .100 x 18 AMERICAN STEEL LINE CO. Coil straightener
- (6) .100 x 10 Coil Lease straightener

## **SAWS**

- (1) Hemsaw Mod H1051A Horizontal Band Saw
- (2) Hemsaw Mod 1200 Horizontal Band Saw
- (3) Marathon Rotary Blade Saw (2 ea)
- (4) Bewo Abrasive Saw
- (5) Abrasive Saw

## **BULK DEBURRING**

- (1) Almco Vibratory Deburr
- (2) 1 Large Bucket V9-3-22 Tumbler
- (3) 1 Large Bucket Tumbler

## **SPECIALTY MACHINES**

- (1) Denison Mod FF8 8 Ton Multi-Press Tube Sizer
- (2) Denison Mod R065 8 Ton Multi-Press Broaching
- (3) Premier Sta-Hi Rotary Shaver
- (4) Pines Mod 3T Vertical Tube Bender
- (5) Pines End Finisher
- (6) Collett EZ Cut Mod 17 Tube Cutter
- (7) Fabco Hydraulic Shear ½" x 19 ½" Blade 3/8" x 7" plate capacity
- (8) Milford Mod 310 Rev B Riveter
- (9) Rex Spot Welder
- (10) United Yuasa Hand Press
- (11) Chicago Mod LCN-4 Drill Press
- (12) 2 ½" Horizontal Belt Sander
- (13) Roundo Mod AB Shell Roller

## **MATERIAL HANDLING EQUIPMENT**

- (1) 3000 lb overhead hoist
- (2) Crosby/Laugin 2000 lb overhead hoist
- (3) Lift Rite pallet jack (2 ea)

## **SHEET METAL DEPARTMENT**

### **CNC PUNCH PRESSES**

- (1) Pullmax *Pullmatic* 126 with automatic sheet load/unload 33Ton 500 HPM  
X = 102", Y = 56"; 5000 IPM max table speed; 15 Auto-Indexable Tool Stations (2 ea)
- (2) Strippitt 1000 MXP30 30 Ton Punch Press w/GE FANUC Series O – P Controls  
40 station turret, 3 Auto Index, 48" x 38" Table Travel

### **CNC PRESS BRAKES**

- (1) Cincinnati Mod 90 CB II X 8' Bed 90 Ton CNC Press Brake w/10 ft Bolster Bar
- (2) Cincinnati Mod 90 CB II X 8' Bed 90 Ton CNC Press Brake w/8 ft Bolster Bar

### **MANUAL PRESS BRAKES**

- (1) DONEWELL Type 40-2000 40 Ton Press Brake w/84" Bolster Bar & Dynabend back gage
- (2) DONEWELL Type 17-1300 17 Ton Press Brake w/53" Bolster Bar & Dynabend back gage
- (3) DONEWELL Type 17-1300 17 Ton Press Brake w/51" Bolster Bar & Dynabend back gage
- (4) VERSON 15 Ton Press Brake w/48" Bolster Bar
- (5) VERSON 15 Ton Press Brake w/48" Bolster Bar
- (6) VERSON 15 Ton Press Brake w/48" Bolster Bar
- (7) D'ARCO Mod No 24 Finger Brake

## **SPOT WELDERS**

- (1) TAYLOR WINFIELD Type ENS-12-10 100kva w/Entron Controls - Spot Welder
- (2) III MILLER Mod PSW-2020ATT - Resistance Spot Welder

## **MATERIAL HANDLING EQUIPMENT**

- (1) Crown Pallet Jack (3 ea)

## **TOOL MAINTENANCE EQUIPMENT**

- (1) Hunter Limited Tool Grinder

## **ASSEMBLY DEPARTMENT**

### **UTILITY EQUIPMENT**

- (1) Walco Mod 82-C-1M-30 Labeling Machine
- (2) Rivet Press
- (3) Craftsman 15" Drill Press
- (4) Richards Wire Bender
- (5) Benchmaster 4 Ton Press
- (6) Mercury Tool Customized Assembly Rack
- (7) Pennsylvania Scale Parts Counter

## **TOOL & DIE DEPARTMENT**

### **LATHES**

- (1) Monarch Mod 12" KK Engine Lathe  
14.5" swing; 30" between centers; 3 & 4 jaw chucks
- (2) Graziano Model SAG12 Engine Lathe  
12" Swing; 20" between centers; 3 & 4 jaw chucks

### **MILLS**

- (1) Bridgeport w/Anilam Digital Read Out (4 ea)  
9 x 48 table; table travel X=30; Y=10 ½ w/vise

### **GRINDERS**

- (1) Galmeyer & Livingston No 55 Surface Grinder  
12 X 36" table; 12 X 36" Magnetic Chuck; 14 X 1.5 X .5 (A FACE) wheel
- (2) Galmeyer & Livingston No 35 Surface Grinder  
8 x 24 table; 8 x 20" Magnetic Chuck; 8 x 30" travel; 12 x 1.5 x .5 (A-FACE) wheel
- (3) Landis Type C OD Grinder  
18" Travel; 6" Work Diameter; 1 x 10 x 8" ID wheel size
- (4) K O Lee Tool Grinder (2 ea)
- (5) Hybco Tap Grinders
- (6) Bench Grinder w/Lyle Drill Sharpener
- (7) Rockwell Drita Mod 15-665 Carbide Drill Grinder

### **DRILL PRESSES**

- (1) Heavy Duty Drill Press
- (2) Bux Mod DH 14 Drill Press

## **SAWS**

- (1) Wellsaw Mod 1000 Horizontal Band Saw
- (2) Do All Mod 1612-H Vertical Band Saw

## **HAND OPERATED MACHINES**

- (1) Eagle Mod HN-16 Nibbler
- (2) D Acro Houdaille 16 ga Hand Brake
- (3) Wiedemann Type 4 Turret Hand Punch
- (4) Dake No 1 Hand Press

## **EDM EQUIPMENT**

- (1) Mitsubishi FX-1 Wire EDM 19" x 15' x 8 ½" Self Threading

## **SAND BLAST EQUIPMENT**

- (1) Trinco Dry Blast Mod 24

## **VACUUM CHAMBER**

- (1) Binks Mod 83-5361 Evacuation Chamber

## **HEAT TREAT OVENS**

- (1) K H Huppert Co Furnace 8" x 16" x 15" 2000 Deg Oven
- (2) Knights of Dallas Furnace 2000 deg oven
- (3) Westinghouse three phase Transformer (3 ea)

## **QUALITY ASSURANCE**

- (1) Rotary Table w/Radial & Vertical indicator gages
- (2) Gray Mills DM132 part cleaner

## **MATERIAL HANDLING EQUIPMENT**

- (1) Economy Mod MV-18 750 lb Fixture Hoist (4 ea)
- (2) Hi Test 2 ton 11.5 ft Hoist

## **QUALITY CONTROL**

## **PART MEASURING SYSTEMS**

- (1) Browne & Sharpe CMM 7.10.7
- (2) NIKON (10 x) – (100x) Optical Comparator
- (3) Clark Instruments Mod 33-2 Metal Hardness Tester
- (4) Profilometer
- (5) 6' x 4' Granite Surface Plate

## **CALIPERS, MICROMETERS & GAGES**

- (1) Over 2000 manual measuring gages

## **WAREHOUSE**

## **MATERIAL HANDLING EQUIPMENT**

- (1) Raymond Mod TR026 Electric Cap 2000 Lbs Fork Lift (2 ea)
- (2) Nissan Electric Model0540 Type E, Cap 3650, Lbs Fork Lift
- (3) Hyster LPG Hi Lift Truck Mod S-50-E Cap 8300 Lbs, work height 150" Fork Lift
- (4) Clark Mod C-500-40 Fork Lift

- (5) Datsun LPG Mod G Capacity 8000 lbs, height 130" Fork Lift
- (6) Seco 3 ton Over Head Crane
- (7) Man Saver 750 lb Adjustable Width Sheet Metal Caddy
- (8) Barstock, Pipe & Tubing Caddy

## **SHOP SUPPORT EQUIPMENT**

- (1) WYSON Mod 772 Power Shear  
6' Blade x 7 ga; Power Back Gage; Pin Shear Gage
- (2) 36 x 24" Granite Surface Plate
- (3) 24" Height Gage
- (4) Ingerson Rand RC2 Air Compressor
- (5) Henson Scissor Platform Hoist

## **ENVIRONMENTAL EQUIPMENT**

- (1) Ingersol Rand Aro Fluids Dispensing Station
- (2) Berkeley Haws Decontamination & Eye Wash Station
- (3) Master Chemical Corporation Sump Pump
- (4) Barrett Perma Gard Battery Charger
- (5) Exide Battery Charger

## **SHIPPING**

- (1) US Scales 10,000 lb platform scales
- (2) General Accounting Part Counter
- (3) VGI System Circular Rotary Plastic Wrapping Machine
- (4) IPM System Square Rotary Plastic Wrapping Machine

## **IT Technology**

- (1) Dell OptiPlex workstations running WindowsXP/2000.
- (2) Dell PowerEdge servers running Windows Server 2003/OpenBSD, w/ RAID5 and VXA3 tape backup

## **INFORMATION RETRIEVAL SYSTEMS**

- (1) Made2Manage ERP software
- (2) OpenOffice.org office suite
- (3) Grecco DNC Machine Program Transfer System

## **QUOTATION SYSTEMS**

- (1) Micro Estimate Systems Quote Package
- (2) In-House Developed Quote System

## **N/C PROGRAMMING SYSTEMS**

- (1) SolidEdge 3D CAD system
- (2) ANVIL EXPRESS Cad/Cam
- (3) Metalix sheet metal CAM
- (4) Esprit CAM