



J. KITTREDGE & SONS, INC.

Facility Listing

MACHINE SHOP

q Milling Machines

- 1 Matsuura MC1000VS CNC Machining Center
- 1 Matsuura MC800CNC Machining Center
- 1 Matsuura MC760VX CNC Machining Center
- 2 Matsuura MC760V CNC Machining Centers
- 1 Matsuura MC600V CNC Machining Center
- 1 Matsuura MC560V CNC Machining Center
- 4 Matsuura 510 VG CNC Machining Centers
- 1 Matsuura MC510 CNC Machining Center
- 1 Matsuura 500 V CNC Machining Center
- 1 Matsuura RA-1 , Twin Pallet
- 1 Fadal 6030V CNC Machining Center
- 2 Fadal 4020V CNC Machining Centers
- 1 Fanuc RoboDrill w/pallet CNC Machining Center
- 2 Haas 50 x 20 Machining Centers
- 2 Haas 40x20V CNC Machining Centers
- 1 Haas VFO CNC Machining Center
- 2 Hamill Machining Centers
- 6 Proto Track DPM CNC Machining Centers
- 14 Bridgeport Milling Machines, w/ProtoTrack MX2

q Lathes

- 2 Methods Slant-50 CNC Turning Centers
- 2 Nakamura TMC-15 Turning Centers
- 1 Nakamura SC-300L Turning Center
- 1 Takamatsu Turning Center
- 2 17 Machine Lathes
- 1 14 Machine Lathe
- 2 Hardinge Tool Room Lathes

q Assembly/Testing

- 2 Haeger Inserting Press
- 1 Pneumatic Hand Press, 1 PEM Inserter
- 1 Arbor Press
- Assorted Installation tools (Pneumatic/Electronic/Hand)
- Pressure, Flow, and Leak Testing Equipment

BRAZING & WELDING

q Brazing

- PV/T Vacuum Brazing Furnace, 24" W x 36" H x 48" L (offsite)
- 1 Dip Brazing-Cap. 36 x39 x42 (MIL-B-7883 & AWS C3.7)
- 4 Preheat Furnaces
- 1 Pre/Post Braze Cleaning Process Center
- 1 Ultrasonic Cleaning System
- 1 Chemical Film Line (Mil-C-5541)
- 1 Torch Brazing (All Specifications)

q Sheet Metal

- 3 Amada Punch Press Fanuc Control (255, 345, 0CTO)
- 3 Amada Press Brakes (RG 35, RG 80, RG 100)
- 1 37 Time Saver
- 1 Amada DYNA Bend
- 1 Amada Tab Notcher
- 1 Amada Shear Press
- 1 Di Acro Shear
- 1 Di Acro Finger Brake
- 1 Tenn Smith 2 Hand Roller
- 1 Miller Heliarc Welder
- 1 Roper Whitney Tubing Bender

S/M Capacities:

Aluminum	.003 to .250
C.R.S.	.003 to .250
Cres.	.003 to .125
Brass	.003 to .250
Copper	.003 to .250

q Miscellaneous

- 2 Multiple Spindle Drilling/Tapping Center
- 3 Surface Grinders
- 1 Precision Cut-Off Saw
- 1 Kalamazoo Cut-Off Saw
- 1 Band Saw

q Finishing

- 1 Sweco Finishing Mill
- 1 Automatic Finishing Mill
- 1 Timesaver 37 Finisher
- 1 Glass Bead Blaster
- Assorted Grinders and Sanders (Bench and Hand)

q Welding

- 3 Miller Synchronwave 300/351 Welding Machines
- 1 Unitek 500HV Spot Welder
- 1 Ltec-306 Heliarc Welding Machine
- 1 Delta Weld 450 Mig Welding Machine
- Assorted Oxy/Acetylene Weld Torches
- 1 10 Ton Hydraulic Press



QUALITY CONTROL

q **Equipment**

- 2 Mitutoyo Coordinate Measuring Machine
 - Measurement Volume 18 x16 x10 H
 - Measurement Volume 40.5 x28.5 x16 H
- 1 Brown & Sharpe CMM
- 1 Deltronic MPC-1 DH14 Comparitor
- 1 Mitutoyo Superficial Hardness Tester
- 1 Mitutoyo Surface Roughness Tester
- 1 Electrical Conductivity Tester
- 7 Electronic Programmable Height Gages

q **Systems**

- Mil-I-45208A Approved
- 2 IBM Computer Systems (CMM Controllers)
 - Geopak Software
- 2 IBM Computer System - LAN Networked
 - S.P.C. Software
 - Calibration Control Software (Proprietary)
 - B.O.M. Software (Proprietary)
 - Job Boss Manufacturing Software

q **Gauges & Tools**

Gauge blocks, thread gauges, micrometers, and other related tools/gauges necessary to perform inspections to Mil-I-45208A.

ENGINEERING

q **Networks (LAN)**

- Engineering-35 user (100base-t)
 - Dell Servers
 - All Switches & Hubs 100 Base-TX

- Manufacturing/Office-100 user (100base-t)
 - Dell Servers
 - All Switches 100 Base-TX & Hubs 100 Base-TX

q **Design Engineering**

- Design Work Stations
 - HP Professional Series
 - 21 Video with Nvidia Graphics
 - 56 kps Internal Modem
 - 100mb Ethernet Card
- Software**
 - Pro/ENGINEER/INVENTOR/MDT
 - Myriad Drawing Viewer
 - HummingBird Exceed
 - Job Boss Manufacturing
 - BOM & ECN (Proprietary)
 - Windows XPP
- Hewlett Packard DesignJet 500 Plotter (networked)

q **Manufacturing Engineering**

- Manufacturing Work Stations
 - HP Professional Series
 - 21 Video with ATI Graphics
 - 56 kps Internal Modem
 - 100mb Ethernet Card
- Software**
 - GibbsCam/MasterCAM
 - Myriad Drawing Viewer
 - HummingBird Exceed
 - Job Boss Manufacturing
 - BOM & ECN (Proprietary)
 - Windows XPP
- Direct DNC to all CNC Equipment

q **Communications**

- LAN Based router attached to an T1 dedicated line.
- Workstation Based 56kps modems attached to dedicated telephone lines.
- IGES, DXF, ACIS, & STEP format capable in 3D Wireframe and Solids on all media types or direct transfer.

Internet Website: jkittredge.com

E-Mail: sales@jkittredge.com