



Alloy Carbide Company

World-Class Quality and Precision

Job Shop Equipment List

Since 1956

Grinding And Micro Finishing

Outside Diameter (OD) Grinding

- Okamoto Grind-X NC (15" OD X 60" LG), FANUC oi Model B Control
- Okamoto Grind-X NC (15" OD X 36" LG), FANUC oi Model B Control
- Okamoto Grind-X OGM1236U III (15" OD X 36" LG, W/ID Attachment), Okamoto Precision Control
- Proma M60/ 40L-C2 (24" OD X 144" LG), FANUC Series oi-TF
- Landis Roll "LFR" (24" OD X 192" LG)
- Landis Universal "2R" (14" OD X 20" LG) with I.D. Attachment
- Cincinnati Plain (10" OD X 72" LG)

CNC Grinding (ID, OD, Radius)

- Danabot IRD 400, 3 spindles, probe, tailstock, Max. grinding length: 7.87"
Grinding diameter: 7.87", Max. workpiece length incl. clamping system: 15.74,
Max. swing diameter: 11.02"

Centerless Grinding

- Cincinnati #2 (Thru Feed – 5.250" OD Maximum)
- Unison Omnigrind Precision (Thru Feed – 4" OD Maximum)

Inside Diameter (ID) Grinding

- Heald Plain #171 (8" DIA Swing X 12" LG)
- (1) Heald Universal #273A (24" DIA Swing X 20" LG)
- Heald Plain #74 (21" DIA Swing X 60" LG)
- (2) Heald Universal #273A (18" DIA Swing X 20" LG)

Surface Grinding

- Blanchard #11 (16" DIA Chuck)
- Blanchard #18 (36" DIA Chuck)
- Okamoto 16" X 32" DX

Tool and Cutter (Profile) Grinding

- 3 – Assorted Universal and Special Purpose Machines, Grand Rapids, Cincinnati, and Uni-Tech.

Micro-Finishing and Honing Equipment

- Sunnen Manual Honing Machine "MBB"
- Sunnen Power-Stroker Honing Machine
- Shaft Honer (4" DIA X 54" LG) (5" DIA X 72")
- Superior Vertical Honing Machine "VB" (36" Stroke)
- American Universal Lapping Machine
- Dyna Brade Superfinisher #81 (24" OD X 144" LG)
- Assorted Flat Lapping Tables (Thru 24" DIA) (1-48" Table)

METAL CUTTING

Note: Utilizing computer-assist programming & direct communications between computer and machine controls. All CNC's on main computer network with disc storage.

CNC Lathes

- Virtual Gibbs Programming System
- (4) Doosan 400LC, FANUC 21i-TB Control, 22.4" Swing, 82.4" Z Axis – 12 Tool
- Daewoo 230, FANUC 21i-T Control, 10" Swing, 20" Z Axis – 10 Tool
- John Ford SL650, FANUC 01-TB Control, 20" Swing, 50" Z Axis – 12 Tool
- Daewoo 700L, FANUC 21i-TB Control, 27" Swing, 120" Z Axis – 12 Tool

EDM Wire

- Mitsubishi Electric with rotary table 75 lbs. cap (X-Axis 24", Y-Axis 16", Z-Axis 16")
- Sodick Small Hole Drill EDM K1c (X-Axis 9", Y-Axis 13", Z-Axis 12")

CNC Vertical Machining Center

- (2) Doosan MYNX 7500/50, Doosan-FANUC I Series Control, (X-Axis 60", Y – Axis 30", Z – Axis 24" and 4th & 5th Axis) – 40 Tool
- John Ford SV-40, FANUC 01-MC Control (X – Axis 40", Y- Axis 20" & Z –Axis 30") – 22 Tool
- Doosan MV-8035, FANUC 18I-MB Control, (X-Axis 78.7", Y – Axis 36.4", Z – Axis 33.5" and 4th & 5th Axis) – 40 Tool
- Doosan MYNX 6500/50, Doosan-FANUC I Series Control, (X-Axis 50", Y – Axis 25", Z – Axis 30" and 4th & 5th Axis) – 30 Tool

Engine Lathes

- Monarch #613 (25" Swing X 192")
- 2 – Standard-Modern (20" X 60") with digital readouts
- 1 – LeBlond (15" X 54"), with digital readouts
- Logan with Turret Attachment (14" X 40")

METAL CUTTING **(Continued)**

Milling

- (2) – Bridgeport II with Digital Read Out

Saw

- Cosen AH-320H, 16" Double Column

STRAIGHTENING

Press

- (2) Press Master 100 ton (15" X 12ft)
- 60 ton (12" X 10ft)

METAL JOINING

- TOCCO 50Kw Induction II, Induction Brazing Heater
- Keith Benchtop Hardening Heat Treat Furnaces/Industrial Control (18x18x24)
- (2) – Acetylene Rigs
- Hypertherm Powermax 1250, Plasma Metal Cutter
- ESAB DIP Pak 250, Mig Wire Welder
- Lincoln Electric, Precision Tig 275

QUALITY ASSURANCE AND INSPECTION

- Faro Quantum-s 3.0m 7-Axis FaroArm V2 CMM
- Faro 8-Axis Rotary Platform CMM
- Faro Gage 1.5m 6-Axis CMM
- Faro Gage Plus 1.2m CMM
- Faro CAM2 Software for all equipment.
 - Mitutoyo Lh 600e 38"
 - Gagemaker Mic Trac Mt-3000 Measuring center
 - Brown & Sharpe Micro-Hite – 24" with printer
 - Clark Micro-Hardness Tester MHT-1
 - Wilson Rockwell/Brinell Hardness Tester – 3 JR & 5M
 - Mitutoyo Profilometer SurfTest 401, (2) Mitutoyo Profilometer SurfTest 201
 - Mitutoyo Laser Scan Micrometer-503S W/ Multifunctional Operation Display Unit LSM-6200
 - S-T Industries, Optical Comparator Quadra-Chek 200, 30" DIA
 - Nikon Optical Comparator 10 X 16" DIA
 - Nippon Binocular Microscope
 - Blanchette #541 Height Gage
 - 0 – 5" OD Electronic Digital Micrometer
 - Mikrotest #3 Thickness Gage
 - 0 – 62" OD Micrometer
 - Wet Fluorescent Magnetic Partical Tester
 - Surface Crack Inspection (Zygo-Dye Check)
 - DoAll Monolight Optical Flatness Comparator
 - Nikon Binocular Microscope-Camera
 - Dino-Lite Camera Microscope
 - Precision Granite Surface Plates, (48" x 72", 36" x 54", 24" x 48" and 12ft x 8ft)
 - ISO 9001:2015 Certified – Perry Johnson Registrars/ANAB Accredited

HVOF “RAM” SPRAY COATINGS

- AT-8000 HVOF Control System
- FANUC S-700 ROBOT
- FANUC RJ-2 ROBOT CONTROLLER
- FANUC M-710iC/50 industrial robot
- FUNAC SYSTEM R-30iB Plus controller
- High-Energy Linear Flow Rocket Guns – 7
- Grit Blasting Cabinet (40” X 120”)
- Grit Blasting Cabinet (120” W x 120” D x 96” H)
- Multiple Lathe Style Beds for Workpiece Positioning & Rotation:
 - 12” Swing x 204” Bed
 - Two 12” Swing x 48” Bed
 - 10” Swing x 24” Bed
 - 12” Swing x 60” Bed
 - 36” Swing x 36” Bed
 - 64” Swing x 62” Bed)
- On Site Capabilities – Portable Unit
- 24” Rotary Table
- 48” Rotary Table

PRESSURE TESTING

- Pressure Test Stand
- Maxpro – Maximator L-500, up to 75,000 psi

FORKLIFT

- Clark S Series 5000 lb. Capacity
- Clark S Series 7,000 lb. Capacity
- Hyster H155XL 15,500 lb. Capacity