



Equipment List

QMF-94

Revision: 03/04/19

Quest equipment inventory includes modern technology and all machines and equipment necessary to produce high quality and precise prototype parts, molds, and injection molded products.

SHOP FLOOR EQUIPMENT

CNC Mills

- (1) YCM Double Column Vertical Machining Center (2016) 78.74" x 47.24" x 30" Travel, HSK-100 Spindle, 15000 RPM, 1000 PSI through Spindle Coolant, 40 ATC, FCS
- (1) YCM NTV 158B (2018) 60.25" x 30" x 27.5" Travel, HSK-100 Spindle, 15000 RPM, 1000 PSI through Spindle Coolant, 32 ATC, FCS
- (1) Makino A61 Horizontal Machining Center (2015) 28.7" X x 25.6" Y x 28.7" Z Travel, 14000 RPM HSK63A Spindle Taper, 133 ATC, FCS
- (1) HAAS EC-1600 Horizontal CNC Boring Mill (2014) 64" X x 50" Y x 32" Z Travel, 30 HP / 50 Taper, 10,000 RPM, 50 Tool ATC, 1K PSI CTS, FCS
- (2) Tree VMC 750 – 30" X x 20" Y x 20" Z Travel, 25HP / 40 Taper, PC-2100 Control, 4th Axis, FCS
- (1) Tree 4024 – 40" X x 24" Y x 24" Z Travel, 30 HP / 40 Taper, PC-2100, FCS
- (2) HAAS VF6/40 VMC (2005, 2008) 64" X x 32" Y x 30" Z Travel, 4th Axis, 30 HP, FCS
- (1) HAAS VF8/40 VMC (2012) 60" X x 40" Y x 30" Z, 4th Axis, 30HP, FCS
- (2) HAAS VF9/40 VMC (2007, 2013) 84" X x 40" Y x 30" Z Travel, 30HP, Coolant through Spindle, FCS
- (2) Doosan DNM400 VMC (2008) 25" X x 17" Y x 20" Z Travel, 20HP, 12000 RPM Coolant through Spindle, FCS
- (2) Doosan DNM500 VMC (2015) 40" X x 20" Y x 21" Z Travel, 25HP, 12,000 RPM Coolant through Spindle, FCS
- (3) Doosan DNM650 Heavy Duty VMC (2010) 50" X x 26.3" Y x 24.6" Z Travel, 20 HP, 12,000 RPM Coolant through Spindle, FCS
- (2) Doosan 4020L VMC (2008) 40" X x 20" Y x 24.5" Z Travel, 20 HP, 12,000 RPM Coolant through Spindle, FCS
- (1) Makino F5 VMC (2010) 35.6" X x 19.7" Y x 17.7" Z Travel, 20HP/40 Taper, 20K RPM, accuracy: +/- .000060" POS, +/- .000040" repeatability Coolant through Spindle, FCS
- (2) Doosan HP4000 HMC (2016) 23.6" X x 22" Y x 23.6" Z Travel, 14,000 RPM, FCS

CNC Lathes

- (2) Daewoo Puma 240MC 12-Station Turret High Performance Turning Center, 10" Chuck, 25HP, 3" Collet Chuck with 3" MAX DIA Bar Feed, Tooling with Parts Catcher, Tailstock, Rigid Tapping
- (1) Hardinge Conquest GT27SP with Super Precision, Gang Tool 12' Bar Feed, 1.062 MAX DIA



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Revision: 03/04/19

- (1) Hardinge HL-200-E Super Precision, 8" Chuck or 2" Collet Chuck with 2.0" MAX DIA Bar Feed

Engine Lathe

- (1) South Bend G26-T 6" Chuck 13.375 Swing Over Bed, 36-inch distance between centers

EDM

- (1) OPS Ingersoll Eagle 1200 CNC RAM EDM (2016), 50" x 60.7" x 26.8" MAX Workpiece Dimensions, 39.4" x 59.4" x 27.5" Travel, FCS
- (1) OPS Ingersoll Eagle 800 CNC RAM EDM (2018), 31.5" x 43.3" x 18.8 MAX Workpiece Dimensions, 21.7" x 33.4" x 17.7" Travel, FCS
- (1) Ingersoll Gantry style 600 CNC EDM, FCS
- (1) Mitsubishi FX20K Wire EDM, 41.34" x 31.5" x 11.61" MAX Workpiece Dimensions

Graphite Machining

- (1) Roku Roku HC-658-II (2016) Trode Machine, Travel Range 23.62 x 19.68 x 15.74" Table Size 29.52 x 19.68, Spindle 200-32000 RPM, HSK-E40 Taper
- Erowa Mark II Robodoor Robot (ERC80) 88 Position

Injection Molding

- (1) Cincinnati Milacron 85 Ton Injection Molding Machine, 4.4 oz shot
- (1) Cincinnati Milacron 165 Ton Injection Molding Machine, 11oz shot
- (1) Cincinnati Milacron 250 Ton Injection Molding Machine, 48 oz shot
- (1) Cincinnati Milacron 500 Ton Injection Molding Machine, 70oz shot
- (1) TempTek Cooling Tower System
- (1) Zone Controller
- (1) Valve Gate Manifold System
- (1) Motan Bank Dryer System, four 350lb Hoppers with Individual Temperature Controls
- (1) PPE Dryer with 225lb Hopper
- (1) Cincinnati Milacron Dryer with 150lb Hopper
- (3) Fluid Control System Heaters, 230 volts @ 6GPM/30PSI

Spotting Presses

- SXXH HMG90EX 90 Ton Spotting Press, Platen Dimension: 63"x 55" Distance between Pillars: 74" Max/Min Daylight. 71"/8"
- (1) Reis Model TU115 Hydraulic Spotting Press



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QMF-94

Revision: 03/04/19

Surface Grinder

- (1) Acer –618 6" X 18" Table with 18" Fine-Line Chuck
- (1) Okamoto 12 X 24 Accugar 124-N Hydraulic Surface Grinder
- (3) Parker Majestic with Readouts
- (1) Mitsui High/Tech with Readouts

Jig Grinder

- (1) Moore #3 Model G18 Jig Grinder

OD Grinders

- (1) Tschudin Model HTG600, 7" x 24" CC Plain Coolant System, Motor & Controls 2" Risers to make 11" Swing.

Blanchard Grinder

- (1) Blanchard No. 22, 42" Rotary Surface Grinder, 50 HP

Other Grinders

- De Gen Model PPC-2000 Precision Cut-Off & Grinding Machine
- Cutter Master Model HDT-30 End Mill Grinder
- Haimer Model PC2000 Shrink Fit Power Clamp & Speed Cooler
- DME Pin Cut-Off Machine Model PPC750
- Rush Drill Grinder #132

Hone

- (1) Sunnen Model MBC-1802, Capacity: .081"–6.50" Diameter Holes

Saw

- HE&M Saw Model H105A-C 14" Round x 16" Flat Capacity, 1-1/4" Blade
- Roll-In Saw EF Vertical Band Saw

Surface finishing

- Multi-Media Bead Blast
- Vibrator Tumbler
- Sheenus Neo Ultrasonic Polishing System

Welding

TIG

- Miller Dynasty 350 with Micro Welding Capability
- Miller Syncrowave 250



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MIG

- Miller Deltaweld452

Other

- Atlas Welding Positioner (200lb capacity)
- Kemper Fume Collector (14ft articulating arm)
- Pre/Post Heat Table
- Microscope with Articulating Arm
 - Micro Welding on or off Bench
 - Weld Inspection

DESIGN AND ENGINEERING

Design CAD Software

- Cimatron
- Key Creator
- Autodesk Inventor Pro
- Autodesk PowerShape

CAD Analyzing Software

- SpinFire

Programming Software

- Cimatron
- SURFCAM
- AutoDesk PowerMill
- MasterCAM

Moldflow Software

- Autodesk Moldflow Insight

OPERATIONS

Software

- JobBoss ERP
- ShopBoss Scheduling
- Unipoint (Inspection, Calibration, Maintenance, Auditing, Customer Surveys)
- Synergy Reporting
- Shop Floor Computers, Televisions displaying Schedule (Visual Factory)



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Tool Crib

- Caged Crib with Full Time Attendant
- (3) Tool Vending Machines, Fully Stocked and Maintained with Current Inventory

Quality Laboratory:

- Climate Controlled
- Sheffield Cordax Discovery II 5-Axis CMM, Model D28, 30" x 40" x 24"
- Brown & Sharpe Gage 2000 – 3-Axis CMM, with 18" x 20" Travel
- Tesa "Micro Hite" plus 600 (programmable with 24" of travel)
- Fowler
- (2) Optical Comparators, Surface Illumination, Digital Readouts
Repeatability of .0001, Perpendicularity of .0005 and Resolution of .0001"
- (1) 2' x 5' Granite Surface Plate
- (1) 3' x 5' Granite Surface Plate
- (1) 18" x 24" Granite Surface Plate
- Rockwell Hardness Tester
- Profilometer
- Inventory of Hand Tools, including Micrometers, Calipers, Thread Gages, etc.

Material Movement and Transportation

- (1) 2 Ton Overhead Crane
- (1) 5 Ton Overhead Crane
- (1) Propane Hi Lo 4500 LB Capacity
- (1) Electric Hi Lo 5000 LB Capacity
- (1) Electric Hi Lo 8000 LB Capacity
- (1) Chevy 2500 HD Work Truck, 3400 LB Capacity
- (1) Chevy 2500 Work Van, 3000 LB Capacity
- (1) Ford Truck (2016) F550 Super Stake
- (1) Chevy Mailbu (2019)

Security

- Internal and External Security Cameras
- Alarm System