

AUCTION

Live Onsite & Webcast | 6 June 2018 10 am ET | Brecksville, Ohio 44141

Ultra-High Precision Manufacturing & Injection Molding Facility

To 2012
2 Available

Complete
Catalog
Available
Online

Preview/Inspection: 5 June 2018, 8:00 am – 4:00 pm ET or earlier by appointment



www.hilcoind.com

Sale in partnership with:



Rambus

6611 W. Snowville Road
Brecksville, OH 44141

Secondary Asset Location:

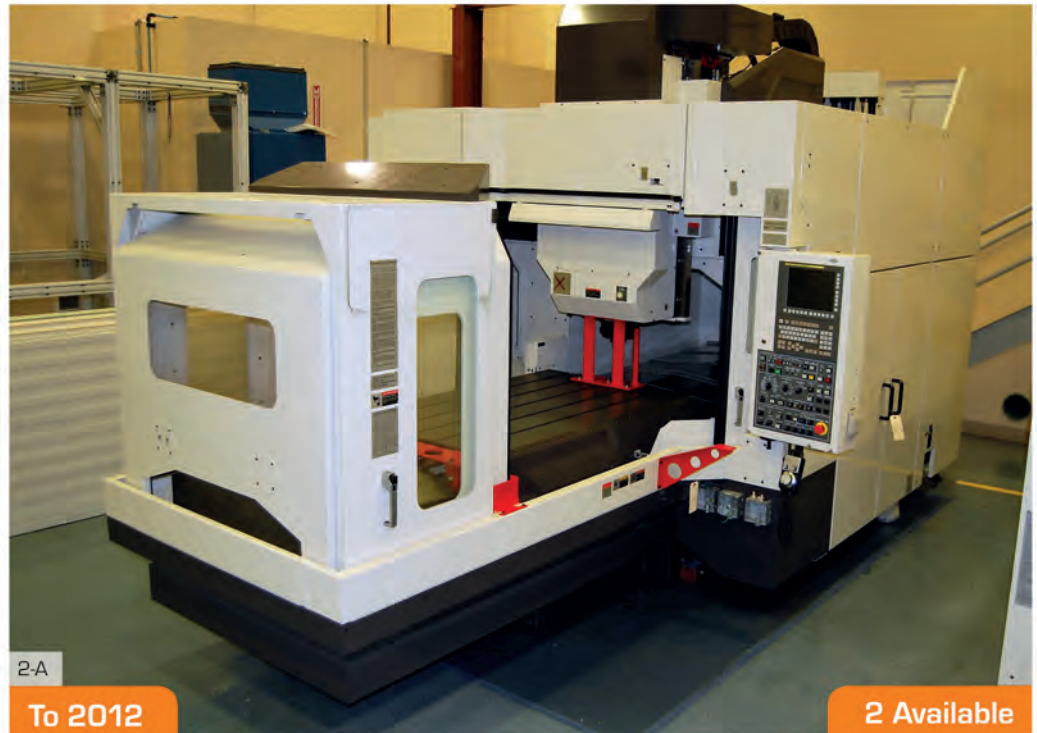
6400 W. Snowville Road
Brecksville, OH 44141

CNC Machining

2 - Yasda YBM 9150V 3-Axis Bridge-Type CNC Vertical Machining Center / Jig Borers, S/Ns 12-VP2230 (New 2012) & 11-VP2072 (New 2011), Table: 35.4" x 59.1", X-59.1"; Y-35.4"; Z-17.7", up to 24,000-RPM, BBT 40 Taper, with Fanuc 31i-A5 CNC Control, 60-Position ATC, Through Spindle Coolant, Upgraded with Spindle Positioning, Renishaw Tool Setter, 3D Technology, Auto Measuring System (Original cost: \$800,000) Photo: 2-A

1 - Haas VF-9/40 4-Axis CNC Vertical Machining Center, S/N 1086436 (New 2011), 36" x 84" Table, X-84"; Y-40"; Z-30", up to 15,000-RPM, with Rigid Tapping, 24-Position ATC, 34-Position Coolant Spigot, Coord, Macro, M19 Spindle Orientation, IPS & WIPS Modes, Renishaw Tool Setter, 20-HP Drive Photo: 2-B

1 - Haas VF-6/40 4-Axis CNC Vertical Machining Center, S/N 1079408 (New 2010), 28" x 64" Table, X-64"; Y-32"; Z-30", up to 15,000-RPM, with High Speed Machining, Expanded Memory, Rigid Tapping, 24-Position ATC, 34-Position Coolant Spigot, Coord, Macro, IPS & WIPS Modes, Renishaw Tool Setter, 20-HP Drive Photo: 2-C



2-A

To 2012

2 Available

1 - Haas Mini Mill CNC Vertical Milling Machine, S/N 1090464 (New 2011), 12" x 28.75" Table, X-16"; Y-12"; Z-10", up to 6,000-RPM, with 10-Position ATC, Renishaw Tool Setter Photo: 3-A

1 - Haas Super Mini Mill 2 CNC Vertical Milling Machine, S/N 1077831 (New 2010), 14" x 40" Table, X-20"; Y-16"; Z-14", up to 15,000-RPM, with High Speed Machining, Rigid Tapping, Coordinate Rotation & Scaling, 20-Position ATC, Renishaw Tool Setter, 20-HP Vector Drive Photo: 3-A

**MOST MACHINES
PREPPED FOR SHIPMENT**



2-B

4-Axis

2011



2-C

4-Axis



3-A
To 2011



3-B
2011



3-C
2010

CNC Machining (cont.)

1 - Haas TL-1 16" x 30" CNC Toolroom Lathe, S/N 3087041 (New 2010), Max Swing: 20", X-8"; Z-30", up to 1,800-RPM Photo: 3-C

1 - Sodick AQ750L CNC Electrical Discharge Machine, S/N 0700/0094 (New 2011), Travels: X-29.52"; Y-19.60"; Z-15.7"; U-30.31"; V-20.47"; Max Workpiece Height: 15.7", Max Workpiece Weight: 3,330-Lbs., Dielectric Cooling Unit Photo: 3-B

1 - Makino UPV-3 CNC Wire-Type Electrical Discharge Machine (New 2014), Travels: X-14.56"; Y-10.63"; Z-8.66"; U & V: 1.96", 24.8" x 17.7" Table, with Makino MGW-SV 5-Axis CNC Control, 3.9" Hirschmann Precision Rotary Table, Twin Jet Automatic Wire Threading, Submerged Machining, Turn & Burn Option for Fine Corner Machining, Micron Scale Feedback, Thermal Guard (Located in Los Angeles) Photo: 3-D



3-D
Off-Site Location 2014

Bid onsite or online with

Hilcobid or **BidSpotter.com**

Terms and Conditions

- An 18% buyer's premium will be charged on all assets. The buyer's premium will be reduced to 16% for all onsite buyers if payment is made by means of cash, cashier's check, company check (with bank letter of guarantee) or wire transfer within 48 hours of sale close. An 18% buyer's premium will be charged for all BidSpotter purchases with no discount for prompt payment.
- Applicable sales tax will be applied. Sales tax rate, rules and exemption information is provided on our website.

- All items will be sold "as is, where-is" without any warranties, expressed or implied. Although obtained from sources deemed reliable, the Auctioneer makes no warranty or guarantee to the accuracy of the information herein contained.
- Removal deadline: 22 June 2018.
- Standard Removal Terms apply: hilcoind.com/buyers/removal
- Subject to additions, deletions and prior sale.

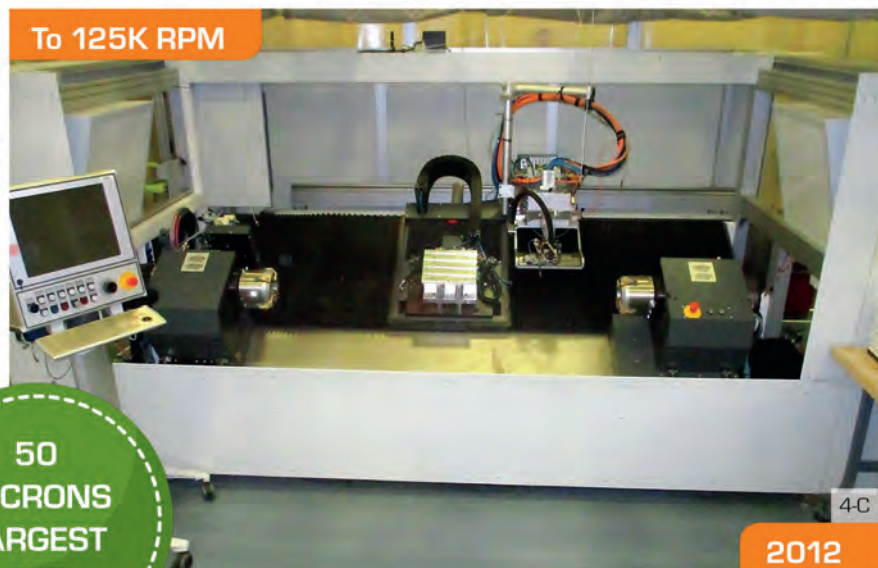
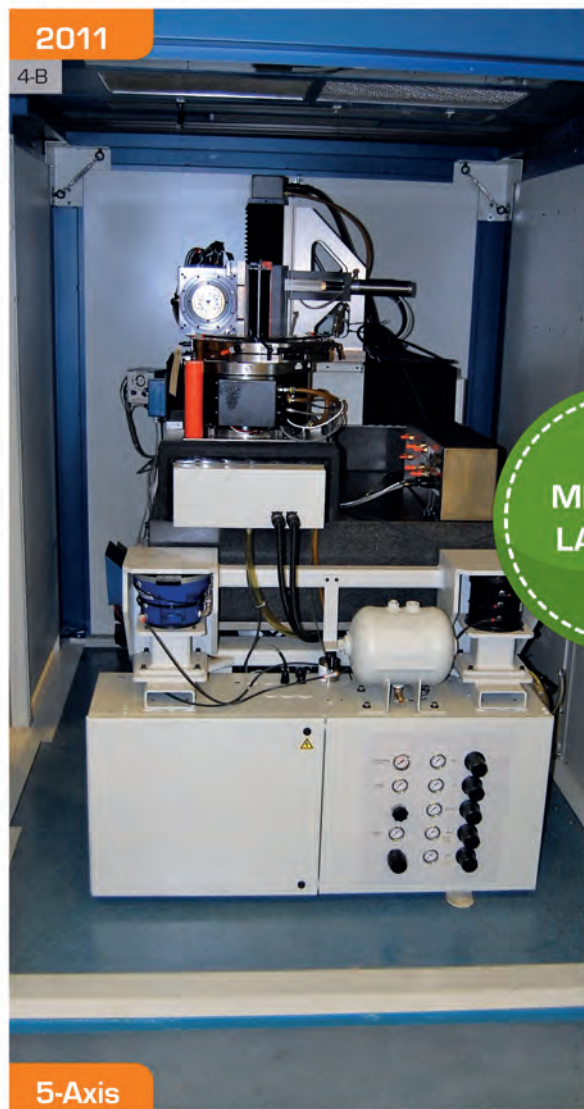
Information contained herein deemed to be accurate at time of printing and subject to change. For updated information, please visit hilcoind.com/sale/rambus

Ultra-High Precision Machining

1 - Moore Nanotechnology Systems 350 UFG FreeForm Generator Diamond Turning CNC Lathe, S/N 2002-04-UFG (Rebuilt & Retrofit 2010), T-Slotted Work Area: 9-3/4" x 19", Chuck Diameter: 7-7/8", MCS AX Series PWM Servo Control Amplifier, Digiflex Servo Drive, Renishaw Signum Interface, Nonacam 3D CAM Software (Original cost: \$590,000) Photo: 4-A

1 - Precitech FreeForm 700A 5-Axis CNC Machining Center, S/N 2011-037 (New 2011), UPx Control, Travels: X-13.8"; Z-11.8"; Y-5.9", B & C-Axes, Mounted on Granite Plate, (4) Vibration & Shock Control Mounts, Optical Camera, Enclosure, 8" Flat Vacuum Chuck (Original cost: \$581,600) Photo: 4-B

MACHINES HELD +/- 5 MICRONS TOLERANCES



50 MICRONS LARGEST CUT

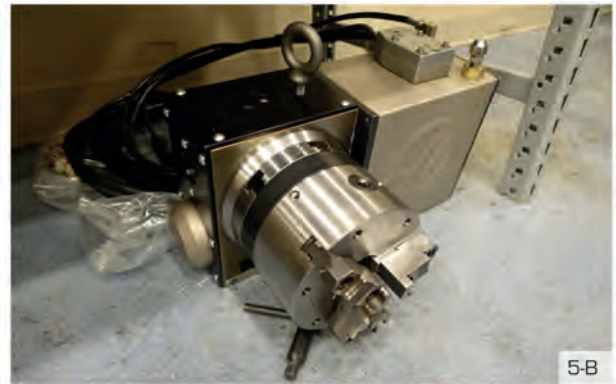




1 - Kugler TDM-1600 Drum Turning CNC Lathe, S/N 11310055 (New 2012), Drum Diameter: 160 - 500mm, Machining Width: 750 - 1850mm, Optical (Cutting) Zone: 1600mm, Z-1700mm; Y-250mm, up to 125,000-RPM, Max Load: 500-KG, Headstock & Tailstock w/Hydrostatic Bearings, Automatic Tool Changer, C-Axis Positioning, W-Axis, High-Speed Air Bearing Main Spindle, Dual Plane Drum Balancer (Original cost: \$1.45 Million) Photo: 4-C

1 - Kugler Micromaster 5X-L 5-Axis Gantry-Type CNC Machining Center, S/N 10310028 (New 2011), Rotary Tilt & Swivel (A & C-Axes) for Simultaneous 5-Axis Machining, Air Bearing Rotary Table, Air Bearing Spindle (15,000 to 125,000-RPM), Automatic Self-Centering Clamping, Rolling Diaphragm Damper, Digital Servo Amplifiers, Renishaw Probe Interface, 5th Axis Drive (Original cost: \$788,000) Photo: 4-D

1 - Kugler F2000-2X 2-Axis CNC Diamond Tool Flycutter; S/N 10310019 (New 2010), KNC2 Software, Air Bearing Main Spindle, Flycutter Heads, Vacuum Pumps (Original cost: \$514,000) Photo: 5-A



Machining Tooling & Accessories

1 - Moore Nanotechnology Systems FTS-6000 Fast Tool Servo, S/N 2011-22-NFTS (New 2011)

2 - Professional ISO 50K 50,000-RPM Spindles, S/Ns 0137 & 0291

1 - Kugler DKS100 Micromaster Flycut Spindle Tooling, S/N 10310028/19771 (New 2010), Renishaw Signum Interface

90 - Idema Diamond Tipped Tooling, Nickel & Aluminum, 0.75mm to 10mm Radius

8 - Copper Coated Steel TDM Rollers, 71" Wide x 12" to 18" Diameter x 20" to 57" Face

1 - Haas 4th Axis Servo Rotary Table, S/N 166086, 6.3" Diameter Photo: 5-B

Miscellaneous Tooling & Accessories, Including: Big Daishowa BBT40-MEGA Tool Holders, CAT 40 Tool Holders, Perishable Tooling, Renishaw Probes, Chucks, Sine Plates, Vises, Etc. Photo: 5-C



Injection Molding Machines

1 - Engel DUO 5550/1650 US 1650-Ton x 125.8-Oz. Injection Molding Machine, S/N 206256 (New 2016), Stroke: 92.5", Mold Height: 27.6" to 55.1", Daylight: 120", Platen: 86.6" x 78.4", Max Mold Weight: 66,000-Lbs, Ejector Stroke: 11.8", Screw Diameter: 4.1", 16-Heater Zones, with Kuka 6-Axis CNC Robot (Original cost: \$1 Million) Photo: 5-D

Injection Molding Machines (cont.)

1 - Sodick TR650EH2 715-Ton x 67.2-Oz. Electric Hybrid Injection Molding Machine, S/N C012 (New 2010), Platen: 52.8" x 52.8", Daylight: 61", Mold Height: 25.69" to 47.6", Screw Diameter: 3.2" (Original cost: \$835,000) Photo: 6-A

1 - Sodick HSP450EH2W 495-Ton x 20.8-Oz. Injection Molding Machine, S/N C120 (New 2012), Platen: 44.9" x 44.9", Daylight: 51.28", Mold Height: 15.7" to 37.3", Servo Ejector Stroke: 5.9", Screw Diameter: 1.97", Direct Pressure Locking Type Clamping System, High-Speed/Pressure Injection (Original cost: \$486,000) Photo: 6-B

1 - Sodick LA150HSP 165-Ton x 2.79-Oz. Injection Molding Machine S/N K024 (New 2010), Platen Size: 28.4" x 26.8", Daylight: 35.4", Servo Ejector Stroke: 4.7", Screw Diameter: 1.1"

Extruder

1 - Davis-Standard Super Blue 200 2" Diameter Extruder, S/N 0013099-1-1 (New 2010), L/D Ratio: 24:1, 20-HP, DS Hopper, (3) Barrel, (3) Die, Forming Die, 10" Nip Puller Roll Unit, Air Knife Photo: 6-C

Plastics Machining

1 - Ginwave G250-F LCD Saw, S/N GE153 (New 2013), Nominal Cutting Length: 2500mm, Nominal Feed Depth: 2100mm Photo: 6-D

1 - Ginwave NC1400-BA CNC Trim Polisher & Machining Center, S/N NC088 (New 2013), Max Capacity: 1400mm x 850mm (Flats); 1500mm (Rounds) Photo: 6-E



MOST MACHINES HAVE BEEN PREPPED FOR SHIPMENT

Plastics Support Equipment

3 - Wah Hong 3-Axis AC Servo Pick-and-Place Robots, Models STW-1500A, STW-1000A & STW-800A (New to 2013), w/ Pro-Face Pendant Control Photo: 7-A

4 - Matsui Dehumidifier Hopper/Loaders, Models MJ5-i-1500U, MJ3-150U & (2) DMD4 Plas-Aid (New to 2014) Photo: 7-B

1 - Conair W150 Hopper/Dryer; S/N 239050 Photo: 7-C

3 - AEC Packaged Chillers, Models GPAC40 (S/N 4011179), GPAC20 (S/N 4060487) & PCA100 (S/N 40H1546)

7 - AEC Temperature Controllers, Models TCU300, TCOC-072 & TCO-1 (to 2016)

17 - Matsui Temperature Controllers, Models (7) MCH 88-U, (5) MCH 55-U & (5) MCH 25-U (New to 2013)

1 - Plastic Process Equipment 35200-JPP Type J Thermocouple Thermometer; S/N 121109018-35200-JPP, -100°F to 1382°F

1 - Wah Hong STC6-120 Chiller; S/N AMSTC61200001 (New 2012), Touch Screen Control, (10) 52" x 28" Transfer Trays, 2-Axis Transfer System

3 - Wah Hong LGP-C1V Plastic Cutting Systems, (New to 2013), Servo Driven, Hydraulic Shear, Heated Platens

1 - Wah Hong STC4-70 Tray Stacker; S/N AMSTC4J700001 (New 2012), 24" Max Tray Width, Delta Touch Screen Control

1 - Master 63" Wide Cold Laminator

1 - Professional PL227HP 22 Laminating Line, S/N 0602

1 - Professional PR12 12" Mobile Laminator; S/N 0805

2 - Custom Fabricated 12" Roll Embossers



Machine Tools & Fab Equipment

1 - Wuhan Golden GF 1530 8-kW Optical Fiber CNC Laser; S/N 00317 (New 2017), Work Area: 59.1" x 118.1", BCS 100 V30 Control Photo: 7-D

1 - Kern KER 52100-UJR50 HSE 100-Watt CNC Laser; S/N KEROEM32,932C (New 2010), 52" x 100" Table, Newall SA100 DRO, PC Control (Kern 50-Watt Laser Power Source Available)

1 - Okamoto ACC32-80EX Grind X 32" x 80" Automatic Surface Grinder; S/N 2819 (New 2011), 32" x 80", 20-HP, Coolant Filtration Unit Photo: 7-E

1 - Okamoto ACC 12.24DX 12" x 24" Automatic Surface Grinder; S/N 65526 (New 2012), Electro-Magnetic Chuck Coolant Filtration Unit Photo: 7-F



Machine Tools & Fab Equipment (cont.)

- 1 - Chevalier FSG-618M 6" x 18" Surface Grinder, S/N A3869043
- 1 - Bridgeport 2-HP Vertical Milling Machine, S/N HDNG4257, 9" x 48" Power Feed Table, Power Draw Bar, Acu-Rite DRO
- 1 - Carver Auto Series NE 4533-2NE1X 30-Ton Heated Platen Hydraulic Lab Press, S/N 1533-035 (New 2010), Upacting, 12" Daylight, 6" Stroke, 15" x 15" Platens, to 650°F Photo: 8-A
- 1 - DoAll DC-280NC 11.75" x 11" Automatic Horizontal Band Saw, S/N 0300242 (New 2012) Photo: 8-B
- 1 - PTS 9" x 16" Horizontal Band Saw, S/N 08083592
- 1 - BK&M Bendito 1840 36" Box & Pan Brake, S/N 2168
- 1 - Tennsmith S4822 48" x 22-Gauge Hand Brake, S/N 08910
- 1 - Tennsmith A52 52" x 16-Gauge Pneumatic Shear, S/N 11811, w/Back Gauge
- 1 - Tennsmith T3616 36" x 16-Gauge Foot Shear, S/N 08809
- 1 - Tennsmith SR48P 48" x 16-Gauge Powered Slip Roll, S/N 12011 Photo: 8-C



8-B

2012



8-C



8-A

2010

OVER 170 LOTS OF
QUALITY ASSURANCE
EQUIPMENT

Plating Equipment

- 1 - Digital Matrix E-Coat Nickel & Cobalt Plating System, S/N 2012003-001, (4) 71"W x 52"H and 34.5"W x 52"H Tanks, (1) 19" x 19" x 72"H Rotary Drum Tank, (1) Control Process Technology DRO, DI Water Fill Photo: 8-D
- 5 - Process Technology Nickel Sulfamate Plating Tanks, (3) 27" x 50" x 32"H; (2) 21" x 80" x 36"H; (1) 24" x 24" x 72" H, Each w/ Temperature Control, Pump Motor
- 13 - Custom Fabricated Dip Tank Parts Racks, (7) 70" x 52"; (6) 34.5" x 52"

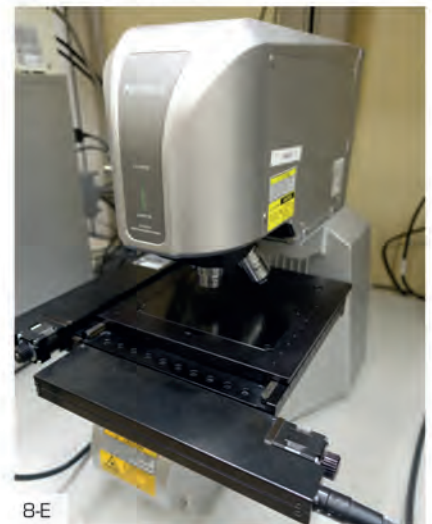


8-D

2012

Test & Measurement

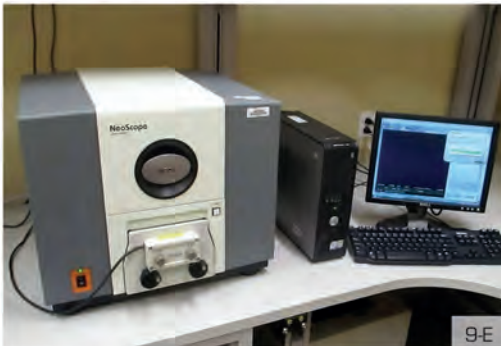
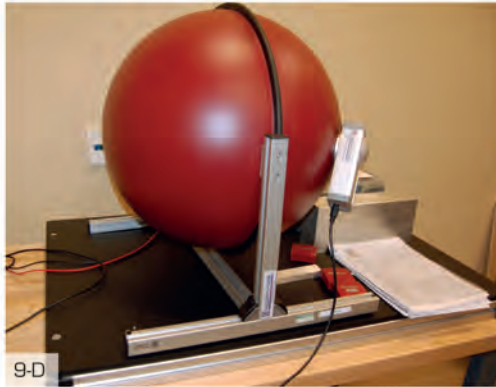
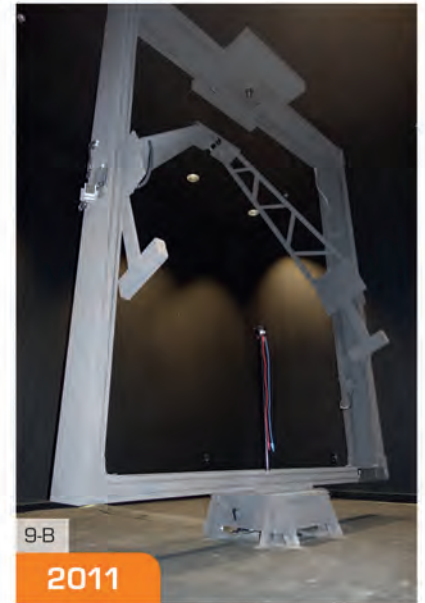
- 1 - Keyence VK-8710 Color 3D Laser Scanning Microscope, S/N 1701011 (New 2010), (4) Lenses Photo: 8-E
- 1 - Keyence VHX-2000 Digital Microscope, S/N Z5321070065, w/Communication & 3D Shape Measurement Software, Wide Range & Ultra Small Compact High-Performance Lenses



8-E

Test & Measurement (cont.)

- 1 - Keyence VHX-600 Digital Microscope, S/N OC14504S
- 1 - Keyence VHX-1000 Digital Microscope, S/N Z121109000
- 1 - Nikon MM-800/LM Measuring Microscope, S/N 1822112, (5) Lenses, Digital Counter; Digital Sight Light Unit, Digital Sight Control Photo: 9-A
- 1 - Zygo New View 200 3D Imaging Surface Structure Analyzer; S/N 98-11-60682 (New 1998)
- 1 - Techno Team RiGO801-2000 2m x 2m x 2m Near Field Goniophotometer, S/N 801-49 (New 2011) Photo: 9-B
- 1 - Labsphere CSTM-CSLMS-760-ROT 2m Spherical Light Measurement System, S/N 0523121111 (New 2012) Photo: 9-C
- 1 - Gigahertz-Optik BTS256-LED Spherical Light Measurement System, Chamber Size: 500mm Photo: 9-D
- 1 - Mentor TeraLED 500mm Spherical Light Measurement System, -30°C to 200°C
- 1 - Eldim EZ Contrast XL88W Viewing Cone Series Optical Measurement System, S/N 1006-0026 (New 2010), Incident Angle: 0° - 88°, Azimuth Angle: 0° - 360°, Measuring Area: 500um to 6mm
- 1 - Jeol JCM-5000 NeoScope Benchtop SEM Photoelectronic Spectrometer, S/N MP12000023 Photo: 9-E
- 1 - Agilent 4100 MP-AES/G8000A Microwave Plasma Atomic Emission Spectrometer, S/N AU12490331 Photo: 9-F
- 1 - Hunter Lab Ultra Scan Pro Spectrophotometer, S/N USP1545
- 1 - Spectra PR670 SpectraScan Radiometer, S/N 67101304, Range: 380-780nm
- 1 - Mentor Model T3Ster Thermal Measurement System, (New 2011)
- 1 - TA Instruments 2000ex Rheometer, S/N 11E4680 (New 2011)
- 4 - Tektronix DPO 3034 Digital Phosphor Oscilloscopes Photo: 9-G
- 1 - Agilent DSO3202A 200-MHz Digital Storage Oscilloscope



Test & Measurement (cont.)

1 - Acu-Gage Systems AG36-3-LT53 Coordinate Measuring Machine, S/N 2617 (New 2012), Camera, QC5200 Vision Edge Detection Software, Quadra-Chek Computer, Joystick Control
Photo: 10-A

1 - Wilson 402MVD Knoop/Vickers Hardness Tester, S/N V2D505 (New 2011)

1 - Instron/Wilson RB2000 Hardness Tester, S/N RB2000R8098 (New 2011) Photo: 10-B

1 - Renishaw ML10 Laser Measurement System, S/N H42884 (New 2006) Photo: 10-C

1 - Newport RS2000 Tuned Damping 900 mm x 3000 mm Optical Layout Table Photo: 10-D

1 - Taber 5135 Rotary Platform Abraser, S/N 2011 12 72 (New 2011)

1 - Jelight 576 Atomic Oxygen UVO Cleaner, S/N 57B002

1 - AST Products VCA Optima Video Angle Contact System, S/N 1020046034,
Range: 0°-180°

1 - UV Ozone Chamber, S/N 140445, IN-2000 LoCon Ozone Analyzer, 78" x 42" x 60"
Chamber

1 - Yamato DX302 Lab Oven, -5° to 300°C

1 - Sibe Drying Oven, 48" x 48" x 60" Chamber

1 - Grieve 343 Electric Bench Oven, S/N 105379A0212, 400°F Max, 36" x 48" x 36"

1 - Magnat Fairview 55964 UV Curing Lab Calendar, Product Width Range: 0.5 - 1.45 meter,
to 10-FPM

1 - Eppendorf 5424R/5404 Centrifuge, S/N 5404AR707439, to 15,000-RPM

Miscellaneous Lab Equipment, Including: Power Meters & Analyzers, Power Supplies, Data Acquisition/Switch Unit, Light Sources, Light Curing Systems, Multimeters, Colorimeters, Refractometers, Conductivity Testers, Anemometer, Wireless Sensor Systems, Vibration Analyzer, Corona Treaters, Foot Candle/Lux Meters, Temp Meters, Analyzers, Digital Height Gauges, Calipers, Micrometers, Balances, Scales, Granite Surface Plates, Thermometers, Lab Hoods and More



Bid onsite or online with

Hilcobid or **BidSpotter.com**

Raw Material

52 - Containers of Evonik Acrylite, EXP-323 000 Acrylic Polymer, 1500-Lb. Each
Photo: 11-B

22 - Boxes of H12-003 000 Clear Acrylic Co-Polymer, 1500-Lb. Each Photo: 11-A

1275 - Rolls of Laminate, 8.25" to 24.5"W x 1000'L (New 2017), Clear, MD or LD



Plant & Production Support

1 - Kaeser SFC 30S 40-HP Air Compressor, S/N 1028 (New 2016), 125-PSIG, 171-CFM, Sigma Control 2 Photo: 11-D

5 - Kaeser AS20T 20-HP Integrated Air Compressor & Air Dryer, S/Ns 1084, 1046 & 1050 (New 2012); 1610 & 1608, 125-PSIG, 92-CFM, Sigma Control Basic Photo: 11-E

1 - Kaeser TD51 Refrigerated Air Dryer, S/N 1654 (New 2015), 230-PSIG, R134a, Secotec Control

1 - Kaeser KAD-115 Desiccant Air Dryer, S/N 1000002832941 (New 2012), 115-SCFM

1 - Kaeser Sequencer 4/4 Sigma Air Manager Control, S/N 1311 (New 2012)

1 - Generac 300-kW Natural Gas Generator, S/N 2116390 (New 2012)
Photo: 11-C

1 - Thermal Care NQR10D Chiller, S/N I5878011103, 11-Ton, Microprocessor Control R-410A, 20°F to 80°F

1 - Thermal Care TSR 50A Chiller, S/N 18132011209 (New 2011), R-407C, 20°F to 80°F

2 - VideoJet 1520 Inkjet Printers, S/Ns 1325636C22ZH & 1325627Z22C

1 - Highlight Industries Predator SS Stretch Wrapper, S/N P1203E348

1 - Digital Matrix SB 1.5M-2R Paint Booth, S/N 201012-001, Table Diameter: Horizontal- 1-Meter; Vertical - 1.5-Meter

2 - Clean Air CAP303-830-30H Air Filtration Systems, S/N 10955-16345, 98" x 63" x 22"

1 - Air Filtration System, 7.5-HP, Approx. 118.5" x 35.5" x 53.5"H, 36-Bags

1 - Lunaire CE215 15-Cu.Ft. Forced Air Oven, S/N 27904-02, Interior Dimensions: 26"D x 20-3/4"W x 48"H

1 - QC Industries J2404 24" Sheet Corona Treater, S/N 0170821

5 - Vac-U-Lok SHDP-7 7-DFM Vacuum Pumps, Each Mounted on 20-Gallon Tank

1 - Komatsu FB20M 3,450-Lb Forklift Truck, S/N 23682A, 188" Max Lift, 3-Stage Mast, Side Shift

1 - Crown RC5545-40TT190 4,000-Lb Stand-Up Type Forklift Truck, S/N 1A325791, 190" Max Lift

1 - Genie GS-2632 26' Electric Scissor Lift, S/N 90544

Miscellaneous Plant & Production Support Equipment, Including: Soldering Stations, Hand & Power Tools, Tool Boxes, Shop Fans, Ladders, Pallet Jacks, Pallet Racking, Storage Cabinets, Tooling Cabinets, Tables & Benches, Work Stations, Material Handling/Lifting Accessories, Air Handling, Carts, Furniture and More

AUCTION

Ultra-High Precision Manufacturing & Injection Molding Facility

Live Onsite & Webcast | 6 June 2018 10 am ET | Brecksville, Ohio 44141

Complete
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Available
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2011
4-Axis

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