Purchasing's Gateway to New Sources

ROUTING







East Hartford, CT

Address changes?
Please send changes
bill@buyersgateway.com

The GateWay 336 Governors Road Milton, NH 03851



Precision Sheet Metal Fabrication & Forming for Over 60 Years

- Deep Draw Hydroforming
 MIG, TIG & Spotwelding
- 5 Axis Laser Cutting, Welding & Machining
- Sheet Metal Fabrication
- Metal Spinning
- On-Site Hydrogen Heat Treating
- Multi Axis Machining
- . Tool Design & Manufacturing
- . Consulting, Engineering & DFM
- CMM Inspection
- · R & D Work & Production Orders

ISO 9001:2008 & ITAR registered -

www.mushield.com www.hydroformingmanufacturing.com

The Mushield Company • 9 Ricker Ave. Londonderry, NH 03053 603-666-4433 · info@mushield.com

Ask our engineers a question or request a Design Guide or Sample Kits at 888-669-3539 or www.hydroformingmanufacturing.com or www.MuShield.com.

Ventilation Solutions for HOT FACILITIES

COOLER SHOPS ARE HEALTHIER AND MORE PRODUCTIVE

Quietaire fabric ducted fresh air make up



High Velocity fresh air intake systems





800-622-8078 www.ventusa.com





HYDE Blades and Knives

Do you have an industrial knife or blade challenge? Hyde has solutions!



- ☑ Made To Order Solutions
- ☑ Short Lead-Time Solutions





Machine Knives • Industrial Blades • Specials cutting Rubber • Paper • Food • Cloth & Textiles Hydraulic Hose • Packaging • Coated Abrasives

Our in-house capabilities include Laser Cutting, Blanking, Grinding, Vacuum Heat Treating, Honing and much more.

ISO9001 Registered Quality System

Hyde Industrial Blade Solutions • 54 Eastford Road, Southbridge, MA 01550 Ph: (800) 872-4933 or (508) 764-4344 • Fx: (508) 764-8172 • www.hydeblades.com

Serving Industry's Machine Knife and Industrial Blade Needs Since 1875

Hyde Industrial Blade Solutions . . . Solutions You Can Count On!™

LASER BUTTING

Vortex IIc introduces laser cutting technology in 2014!



- Rapid prototyping
- > 1/2" Clean Cut Stainless
- > 1/2" Steel
- > 1/4" Aluminum
- > ISO 9001-2008 Certified
- ITAR Registered

We now accept all major credit cards!





Fax your prints to us today 978-535-5255

www.vortexmetal.com email: jmcnulty@vortexmetal.com







Improve part performance with unique properties of Teflon® coatings!

Coatings can be applied to:

- · metals
- elastomers
- ceramics
- composites
- rubber
- · glass



As a licensed industrial applicator, Donwell...

- · provides custom coating services to your specifications.
- · coats both small and large parts to close tolerances in quantities from 1 to 1.000.000.
- has over 50 years of high-performance coating application expertise.



1-800-864-2702 www.donwell.com

For FREE Coating Sample





NERASION

RESISTANT









Anodizing, Black, Clear,

- Red, Blue, Gold, Green Anodize, Hard
- **Black Ebonal Black Oxide**
- **Black Passivate**
- Brass
- **Bright & Matte Tin**
- **Bright Dip Bright Nickel**
- Cadmium
- Caustic Etching
- Chemical Film
- Copper
- **Electroless Nickel**
 - Electropolish
- Gold
- **Passivate**
- Phosphate
- Pickling
- Rhodium Silver
- Zinc

Clean Room Finishing

Sandblasting

Baking-High Temperature Salt Spray Corrosion Testing X-ray Florescence Thickness

Vapor Blasting

Buffing

ROHS COMPLIANT CHEMICAL

FILM

ROHS COMPLIANT ZINC

Environmentally Responsible High Tech Waste Management

Quick Turnaround Sample Pieces

ISO 9001:2008, 8251QM8001, 11 May 2013

Tel: 978-223-4292

Fax: 978-223-4297

Web: www.tdfmetalfinishing.com Email: info@tdfmetalfinishing.com





UNITED METALS SOLUTIONS

East Hartford, CT

Story creation and submission by United Steel Solutions

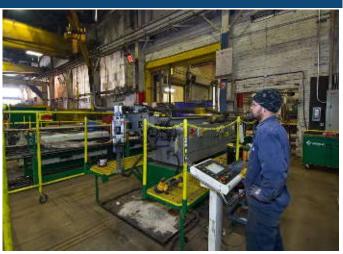
Inited Metals Solution (UMS) was created in January 2014 as a specialized division of United Steel, Inc., New England's largest fabricator and erector of structural steel and miscellaneous metals. At its inception, UMS was created to maximize available capacity on United Steel's large fabrication machines located in its 160,000 square-foot automated facility. UMS's highly skilled machinists quickly began creating quality aluminum, stainless steel and carbon steel parts and products for manufacturers in the aerospace, transportation and other industries throughout the Northeast. Today it specializes in the processing and fabrication of simple parts, component parts, subassemblies and completed OEM products.



UMS tradesman operates a high-speed plasma/oxy machine, which is capable of drilling, milling, tapping and doing countersunk holes from 1/4"-3" material.

UMS is a very hands-on company that focuses on quality outputs and exceptional customer service. The company thrives on solving customer problems and meeting challenges, and has the capabilities to meet delivery timelines and provide competitive pricing. More than once, its impressively fast turnaround times have kept customers on their own production schedules.

Kyle Corneau heads up UMS, building on his background as an estimator, project manager, purchasing manager, CNC programmer, equipment



UMS technician uses a computerized bending machine to complete a customized pipe project.

manager, lean leader and machining department scheduler. Working in the steel industry as well as heavy highway construction and curtain wall industries, Kyle has recommended and implemented lean improvements and integrated low-cost, high-end steel processing systems designed to maximize workload (decreasing costs while reducing lead times and rejected parts).

In order to deliver the best quality product, UMS installed a new 7,000 square-foot clean room to be able to create an optimal work environment free of carbon steel – helping preserve the integrity of its aluminum and stainless steel products.



Welding stair handrails is a specialty at UMS.

Continued on page 7



Machining Solution,

We Can Make The Difference When Time & Speed-To-Market Are Critical

We Offer:

- ► Fast Response
- ▶ Engineering
- ▶ Design
- ▶ Consulting
- **▶** Prototypes
- Kitting
- ► Solidworks
- ► MasterCam 3D
- ▶ Assembly
- ▶ Value-added Service



75 Oxford Ave. Dudley, MA 01571 www.kokosmachine.com

We Can Do:

- ▶ Laser Cutting
- ► EDM
- ► CNC Milling
- ► Laser Engraving
- ▶ Grinding
- ► Turning
- Welding



Tel: 508-943-2700 Fax: 508-949-0372 info@kokosmachine.com

With an Eye on Quality

ACCREDITED

HEAT TREATING



- VACUUM
- INTEGRAL OUENCH • CONTINUOUS BELT
- NITRIDING
- STRESS RELIEVING
- ANNEALING

Pick-up and Delivery Available

Certified By General Dynamics for AMS 2759

Aluminum Heat Treating Sandblasting **Brazing**

Long Vertical Capability Parts Cleaning Straightening

COUNTY HEAT TREAT

32 Howe Avenue Millbury, MA 01527 Tel: 508-865-5885 Fax: 508-865-4033 Website: www.countyheattreat.com

ISO 9001: 2008 CERTIFIED

Centrally Located in New England. 2 miles from MA Pike, Exit 10A 24 Hour Service and weekends if Needed.

MATERIAL TESTING

Full Service Metallurgical Testing Lab

Services Including:

- Root Cause Failure Analysis
- Taber Abrasion Testing
- · Bond Slug Testing
- Chemistry Analysis
- · Coating / Porosity Measurement
- · Hardness Testing (Micro, Shore & Rockwell)
- Grain Size Evaluation
- SEM / EDS
- X-Ray Fluorescence (XRF)
- · On Site Alloy Sorting (PMI)
- · Field Metallography
- Tensile Testing
- General Metallography
- ASTM B117 Salt Fog / Salt Spray Testing
- And more...



Sturbridge Metallurgical Services, Inc.



adcap

info@smslabs.com | www.smslabs.com | 866.340.5288

8 Picker Rd, Sturbridge MA 01566

HEAT TREATING

Vacuum High Pressure Quench

Non-Ferrous Heat Treat Austempering

Marquenching

Carburizing Nitrogen Tempering

High Speed Steels

Alloy Steels Tool Steels

MATERIALS

Stainless Steel Aluminum

Plastics

Solution Heat Treating Water Quenching



VISA

OTHER SERVICES

- Bright Hardening Cryogenics to –300°F
- Glass Bead Blast
- Grit Blast Clean
- Plastics Thermal Treatment
- Precipitation Hardening
- Anneal & Normalization
- Metallography
- Stress Relieving



Consistent On-Time Delivery Pick-up & Delivery Available Member MTI / ASM

134 Ashland Ave. Southbridge, MA 01550 www.hardlineheattreating.com

Tel: 508-764-6669 Fax: 508-764-6654







Kyle Corneau, vice president of business development at UMS, stands above the fabrication area.

The company's high-tech machinery and skilled machinists allows it to offer cutting, milling, drilling, tapping, countersinking and welding of different metals. The company is able to assemble a wide variety of parts, products and prototypes, taking on nearly all jobs ranging from long-run fabrications to low-volume projects to "one-ofs."

UMS views its relationship with customers as its most important asset – and works to be a partner on every project. This is why the company often consults directly with customers upfront to discuss product specs, review plans and solve possible production challenges. UMS is also able to purchase materials at competitive prices, and/or offer installation of final pieces if needed. UMS maintains open lines of communications with customers throughout this process to be sure delivery (which UMS offers throughout New England and New York) is on time and on budget. No surprises!



Another UMS tradesman runs the 3 axis, high-speed drill.

Through the unique relationship UMS has with United Steel, UMS has access to skilled workers, experienced estimators and project managers, and high-end equipment – which gives it the capability to meet an impressive variety of metal jobs (including specialty and rush jobs, when necessary). UMS has the scheduling and estimating experience to create realistic production timelines for every job; however, more importantly, it has direct, daily communication with schedulers at United Steel so it can ensure even the tightest deadline is met ("jumping the line" when necessary). UMS also enjoys the benefits of United Steel's large buying power and relationships with other manufacturing and specialty painting companies - giving it the advantage of passing along cost savings to customers.



UMS fits up many hand rail system, as pictured here.

UMS proved its turn-around capabilities when one major client, Permasteelisa Group, needed more than 40 steel plates machined with counter-sunk, tapped holes for an immediate production job. After receiving the completed order in under six hours, the company's production planning manager, Tim Shea, said "UMS's exceptional turnaround time, reliability and door-to-door service is top notch and second to none in the Greater Hartford area."

The company has a broad range of in-house capabilities for manufacturing carbon steel, stainless steel and aluminum parts and products. These include:

- ◆ Tube / Pipe Coper for tubes up to 4" in dia. and pipes up to 6" in dia.
- Plate Duplicator that can mill, drill, tap and countersink holes in material from ¹/₄" to 3"

Continued on page 9



Fabricating & Machining Specialist

- ► CNC Turning to 48" dia.
- ► CNC Milling (40" x 120")
- **▶** 250" Milling Travel
- ➤ 206" Turning Capacity
- ► Repair Specialist
- ▶ 100% Quality Control
- Certified Welding ASME Sec 8
- ► AWS Certified Aluminum, SST
- ► ISO 9000 Compliant
- Pickup & Delivery





Innovative MACHINE INC.

40 Snow Road • Winchester, NH 03470

Tel: 603-239-8082

Fax:603-239-6380

Contact: Terry Haskins

www.innovative-machine.com tmhaskins@innovative-machine.com

NEW ENGLAND'S FAVORITE PLASTIC SUPPLIER

Sheet • Tube • Rod • Custom Shapes

AcrylicDelrin

Nylon

- Teflon
- Peek
- Lexan
- MechanicalsPolyethylene
- ♦ CNC Routing
- ♦ Precision Saw Cutting
- ♦ Plastic Welding
- ♦ Fabrication
- ♦ Machining



 $\begin{array}{cc} \text{8 Liberty Drive} & \text{Londonderry, NH} \\ & & \textbf{800-752-7759} \end{array}$

sales@plasticsupply.com Visa or MC accepted Quick Turnaround

PLASTIC SUPPLY INC.

Metal Stampings

Double Action

Deep Drawing

Washers • Discs • Rings
UP TO 80" Diameter
500 TON CAPACITY

Stampings to 3/4" thick Short or long runs Wire EDM



Tool & Die Makers Quick Turn Around CAD/CAM Design

Peter Forg Mfg. Co.

130 YEARS OLD AND GROWING

888-625-4577 Fax 617-625-0331 50 PARK ST. PO Box 433 SOMERVILLE, MA 02143 www.peterforg.com

Contract Cutting



A customer service driven company since 1967.

Large work areas Pallet changer Superior nesting software for optimum yield Prototypes and production









Learn more... **1-800-969-3437**

W. R. Sharples Company, Inc. 211 John Dietsch Sq., N. Attleboro, MA 02763

Visit us at www.sharplesdie.com



- Pipe Bender for tubes and pipes up to 2" in dia.
- ◆ Plate Duplicator with 3/16" to 1-1/4" thick plates, punches and plasma
- ♦ Miter Saws for cutting up to 50" wide
- Drill Lines for wide flange, tube steel, channel and angle
- Angle Lines which punches, scribes and cuts angles, plates and channels
- Fully automated layout marking machine for wide flag, tube, channel and angle
- Metal processing and fabrication services
- ♦ In-house shop primer finishing
- Clean room for aluminum and stainless steel production



UMS has full access to all machinery and capabilities available on the shop floor at its parent company,
United Steel Inc.

Additionally, UMS enjoys strong relationships with metal finishing companies who are able to offer specialized services such as galvanization, Epoxy and CARC coatings, high-temp aluminum coatings, along with blast and painting.

As a relatively new company, UMS bases its experience on the vast credentials of its parent company, United Steel (which is AISC certified, the equivalent to ISO9000 in the steel fabrication industry). Founded in 1974, United Steel has 183 employees working in a 160,000 square-foot manufacturing facility in East Hartford, Conn. United Steel has built massive structures for Lego, Mohegan Sun, University of Connecticut, and countless other private and public organizations, and has earned many

awards and accolades along the way (including the Hartford Courant's "Top Place to Work" award in 2014 and 2015, and the Hartford Business Journal's 2015 Family Business of the Year award).

UMS lives up to United Steel's core values and mission statement (outlined below) and successful management style – with an intense focus on quality. Delivering superior products with exceptional service is the reason United Steel has been so successful, and UMS follows that formula carefully.

The Mission Statement of UMS is to focus on:

- Customer relationships
- Building value through professional communication, teamwork, and dedication
- Continuous improvement
- Investing in process improvements and innovative technology to grow our competitive advantage
- People development
- Investing in a safe, creative and enjoyable culture which encourages our people to grow in a rewarding environment

This all places UMS in a great position to be agile, creative and independent, but with immediate access to resources, machinery, and skilled technicians to quickly and efficiently meet the needs of customers. Through these strengths, UMS sets itself apart from other regular metal processing and fabrication shops.

###



United Metal Solutions 164 School Street East Hartford, CT 06108 1-860-610-4026 sales@unitedmetalsolutions.com www.unitedmetalsolutions.com





PRECISION METAL FABRICATION SPECIALISTS

LASER SHEARING STAMPING BENDING FORMING **ASSEMBLY** MACHINING DRILLING TAPPING GRINDING DEBURRING ROBOTIC WELDING



1 West Main Street South Hadley, MA 01075 Tel: 413-532-9022 Fax: 413-536-4647 Email: tech.fab@verizon.net www.techfabinc.com

- **ENGINEERING ASSISTANCE**
- JIT DELIVERIES
- ZERO DEFECT QUALITY
- PROTOTYPE TO PRODUCTION
- **FINISHING SERVICES**
- ♦ DEPENDABLE ON-TIME DELIVERY
- **ACCOUNTABILITY**

Odycote

WELDING (MIG, ARC, TIG AND SPOT)

- Specialists in the thermal processing of components used in aerospace & defense industries.
- Maintains major accreditations (ISO 9001:2000, AS 9100, Nadcap) and approvals from prime aerospace manufacturers and their supply chains



Call 860.225.7691 or visit www.bodycote.com for more information

sales@aalloys.com

Connecticut

BERLIN SOUTH WINDSOR

Connecticut

IPSWICH Massachusetts WORCESTER

LACONIA

CINCINNATI New Hampshire

Processes

- Carburizing
- Electron beam welding
- Ferritic nitro carburizing
- Honeycomb brazing
- Induction treating
- Lindure®
- Nitriding
- Pit nitriding
- Vacuum heat treating & brazing

Materials

- Aluminum
- High temp alloys
- lool steels



COBALT STAINLESS STEEL ALUMINUM ALLOY ALUMINUM EXTRUSIONS

EDM CUTTING **MILLING & TURNING** SAWING SHEARING

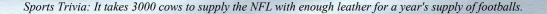
- **Near Net Shape Cutting**
- **Laser Quality Inspection**
- **Finish Machining**

11 Britton Drive Bloomfield, CT 06002 Tel: 860-882-0019 or 800-214-0475 Fax: 860-882-0967



ISO 9001:2000 **AS 9100B Certified** &W LCS APPROV





www.aalloys.com



AFFORDABLE CONTRACT MARKING SERVICES

Specializing in marking and verification per DoD UID and Aerospace specifications

For more than 25 years, DAPRA has been a leader in direct part marking and traceability solutions for major manufacturers and organizations in the aerospace, automotive, oil and gas, medical and defense industries.

You can now leverage our extensive experience for your unique requirements as we offer contract dot peen and laser marking services at

our Connecticut headquarters. We can mark to specifications for many organizations and major manufacturers, including General Electric, Pratt & Whitney, SAE Aerospace, Rolls Royce and the Department of Defense.



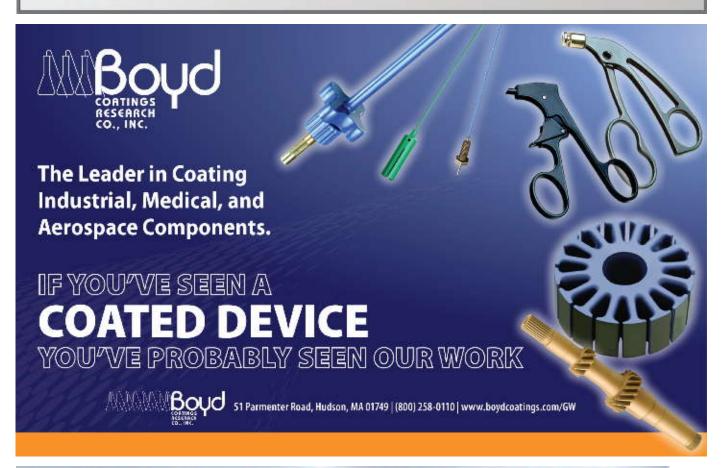
Contact us today to find out if contract marking is a good fit for your production processes!





DAPRA contract marking solutions can provide permanent serialization, date codes, lot codes, text, logos, graphics and Data Matrix codes – per your requirements!

www.DapraMarking.com • (800) 442-6275











WIRE CUT PROTOTYPE PARTS Millions of holes to date.

Bengtson Tool & Die Co. Inc.

765 US Route 3 Phone 603-922-3444 E-mail: dick.btd@gmail.com Columbia, NH 03590

High Efficiency Tri-Mist Coolant Mist Collectors Mist & Smoke Removal Assured

Efficient Oil/Coolant Mist & Smoke Removal

Effective with Both Oil and Water Soluble Metal Working Fluids

No Disposable Filters to Replace

Low Operating Cost **Energy Efficient**

Virtually Vibration Free



Made in the U.S.A.

Industrial Air Filtration

Ketcham & Company, Inc. www.ketchaminc.com 203-322-6667



PRECISION FINISHING





BATCH DEBURRING

T:603-335-2132 F:603-822-2407

www.rpabrasives.com ISO 9001:2008 Certified



METAL FABRICATION SOFTWARE METAL FINISHING SOFTWARE

Affordable Shop Management Software for Job Shops, Metal Fabricators and Metal Finishers

- ♦ Job Process Control
- ♦ Barcode Tracking
- ♦ Labor Tracking
- Job Costing
- Quotation and Estimating
- ♦ Certificate of Compliance
- NADCAP ISO Compliance
- ♦ Accounting with optional Quickbooks/Peachtree/Dynamics link

learn more at: www.compexsoftware.com
30 day free trial packages. New England based with local support.
With over 15 years of Proven Results



39 Stafford Street Worcester, MA 01603

Tel: 508-754-4085

CNC MACHINING

We are your ONE-STOP, ONE ORDER, CUSTOMER SATISFACTION experience.



ISO 9001:2008 Compliant

Integrating our years of manufacturing know-how with the latest technologies, into your designs with QUALITY.

Machined Integrations, LLC

-integrating our expertise into your designs PO Box 396 3 Brookfield Rd Merrimack, NH 03054 Tel: 603-420-8871 Fax: 603-420-8879

www.machinedintegrations.com



Machine tool and service provider in the New England region since 2005

- Vertical & Horizontal Machining Centers
- CNC Grinding Machines
- Bridge Machining Centers
- Millturn Technology
- · Boring Mills & VTL's
- Production & Automation Machines
- Teach Mills & Lathes
- · Fabrication Equipment
- Used Machines Buy & Sell





CNC Service

(207)604-0585

- Experienced Technicians
- CNC & Manual
- Mechanical & Electrical
- Machine Calibration
- · Ballbar Testing
- Way Scraping
- Machine Install & Startup
- Spindle & Gearbox Repair
- Applications & Training
- Reasonable Rates





Ouality Turned Machined Parts New Hampshire Machine Products, Inc.

- QUICK TURNAROUND ON QUOTES
- JOBS PRICED COMPETITIVELY
- BROAD RANGE OF MATERIALS





QUALITY TO CLOSE TOLERANCES: Utilizing single spindle automatic screw machines from 1/32" through 2" capacity, as well as CNE equipment. SUPPORTED BY: A broad-range-of-secondary capabilities to include drilling, threading tapping, milling and slotting.

AUDIT INTENSIVE: Complete internal tracking of all orders start to finish. PROCESS CONTROLLED: Includes rate material fraceability. QUALITY: Quality assurance programs performed to MIL-STD-105D. PRODUCTION RUNS: From 50 to 100,000 pieces.

> CALL OR FAX US REGARDING YOUR SCREW MACHINE REQUIREMENTS AND WE **GUARANTEE YOU A QUICK, COURTEOUS** AND INTELLIGENT RESPONSE.

NEW HAMPSHIRE MACHINE PRODUCTS, INC.



CUST. TEL. 1-800-639-9404 Reg. Tel: 603-772-4404 Fax: (603) 772-6043 10 KINGSTON RD.— P.O. BOX 975 Exeter, NH 03833

www.newhampshiremachineproducts.com

E-Mail: barbara@newhampshiremachineproducts.com

Dimensional DESIGN WORKS, LLC

711 Shore Drive, Laconia, NH

Call (603) 527-8608 sales@dimensionaldesignworks.com www.dimensionaldesignworks.com



Call now for all your Laser Engraving, Laser Etching and Direct Part Marking needs.



- Co2 and Fiber Lasers
- Serialization available
- Verification to MIL-STD-130

Gear & Spline Specialty for Over 60 Years!

AS9100 REV C & IS09001:2008 CERTIFIED



1087 EAST STREET SOUTH SUFFIELD, CT 06078 860.623.6618 FAX: 860.654.1521 SALES@UNITEDGEARCT.COM

WWW.UNITEDGEARCT.COM

TOO SMALL

SPUR GEARS • HELICAL GEARS • WORM GEARS • INTERNAL GEARS • KEYWAYS • BROACHING • GEAR GRINDING • FACE GEARS • BEVEL GEARS • SPROCKETS/TIMING BELT PULLEYS

The Process Isn't Complete Until It's Been to



Support Processes for Today's Technologies

Your parts get expert multi-process service at PTI Industries. We complete the processes you need in 1 stop on 1 purchase order, reducing your manufacturing lead times and helping you improve performance.

Complete your one-stop processes with:

- Precision Cleaning
- Adhesive Bonding
- Non-Destructive Testing
 - Dry Film Lubrication
- Magnesium Coatings
- · Shot Peen
- Passivation
- Pressure Test
- Repair Service

Your industry is covered by our hundreds of specialized process approvals from more than 40 contractors, as well as FAA, EASA, and Nadcap certifications. As the experts in multi-process solutions for more than 30 years, we complete your job on time with accuracy, reliability, and conformance.

PTI Industries, Inc.

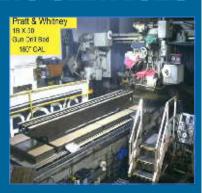
2 Peerless Way, Enfield, CT 06082

Tel: (860) 698-9266 Fax: (860) 698-6762 Email: jcartelli@ptiindustries.com http://ptiindustries.com



PRECISION GRINDING AND MILLING SERVICES

- **♦** Surface Grinding
- ♦ OD/ID Grinding
- **♦** Milling
- ♦ Machining
- ♦ Fabrication
- **♦** Welding
- **♦** Work Rest Blades
- **♦ Lapping Plates**
- **♦** Remanufacturing and Upgrades
- ◆ New and Used Equipment Sales



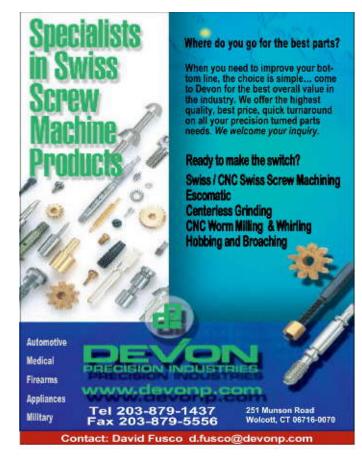
Marena Industries has the largest Way and Angle Surface Grinder in the East! Specializing in Surface Grinding aluminum, stainless steel and other materials up to 84" wide X 240" long.

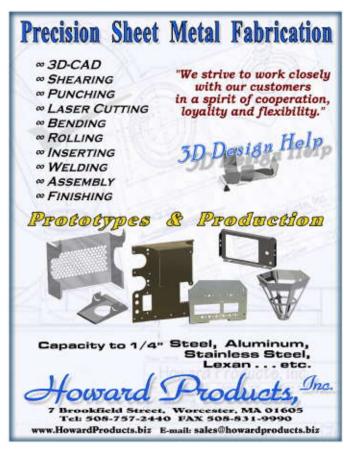
Marena Industries 433 School Street East Hartford, CT 06108 800-862-7362

www.marenaind.com marenaind@aol.com



IN BUSINESS SINCE 1960









VACUUM AND ATMOSPHERE HEAT TREATING BLACK OXIDING

PROCESSES

- **Hardening**
- **Tempering**
- **Annealing**
- Carburizing
- **Carbo-nitriding**
- **Normalizing**
- **Stress Relieving**
- **Precipitation HT Commercial Black** Oxide ISO 9001 and AS 9100



Nadcap Certified

MATERIALS

- **Tool Steels**
- **Stainless Steels**
- **High Speed Steels**
- **Alloy Steels**
- **Carbon Steels**
- Super alloys
- **Non-Ferrous**
- **PH Steels**



Tel: 860-523-9090 Fax: 860-236-8052 565 Cedar Street Newington, CT 06111 Andy@sousacorp.com www.sousacorp.com

Complete Cutter Regrinding Service

High Precision Custom Cutting Tools & Complex Wire EDM Service



Wire & Sinker

5 Axis Wire EDM Orbiting Sinker EDM

> Tel: 207-743-7273 Fax: 207-743-7269

RTHEAS TOOL & DIE CO., Inc.

PO Box 28

16 Aldrich Ave.



- Metal Stampings
- Precision Machining
- TP Prototypes
- ☐ Fixture Tooling
- Compound Dies
- Progressive Dies
- Secondary Dies
- Trijection Molds

Quality Tooling Solutions since 1992

Norway, ME 04268

www.northeasttool.com



Marko Duffy is a 35 year finishing industry veteran. With expertise & experience unmatched in the industry. Let Marathon Mfg. Solutions bring your company plating, anodizing, coating, parts washing solutions!

We offer you the best!

- Parts Washers Safe and effective parts washing solutions - All alloys and materials
- Acetone/Alcohol Replacement Chemistry that is safer, cheaper & healthier
- · Plating/Anodizing Lines large and small designed and built to your requirements

Follow us on Linked in



- · Metal Finishing Chemistry
- Metal Finishing Equipment
- Paint and Powder Coating Equipment and supplies
- Blasting equipment for every application

Masking Specialists! If you need Plating/Anodizing/Coating Masking Materials & Custom Solutions, we have it!

125 Glenn St. Lawrence, MA 01843 • 508, 904, 8899 • Markod@marathon-sales.com













GRINDING SPECIALIST

- **ID GRINDING**
- OD GRINDING
 SURFACE GRINDING
- D HONING
 D CNC CYLINDRICAL
- Quality
- Any Quantity
- Price
- Pick up & Delivery
- Same Day Quotes

Bay State Machine, LLC

21 Center Parkway Plainfield, CT 06374 rel: 860-230-0054 Fax: 860-230-0027

baystatemachine@hotmail.com



Spur & Helical Gears Internal / External Splines Internal/External Acme Threads **Involute & SAE Splines** Reverse Engineering

LAB THREADS GEAR WORKS, INC.

515 Main Street Yalesville, CT 06492 203-949-9097 203-949-9697 Fax www.labthreads.com mike@labthreads.com

- Precision Machining -Toolmaking -
- Jig Grinding Service -

CLASSIC JIG GRINDING

jiggrind@snet.net classicjiggrinding.com Ph (860) 870-4900 Fax (860)870-1900



PRECISION MACHINING - SINCE 1963 -

Complete Bearing & Industrial Supply Solutions



- **BEARINGS**
- MOTOR REPAIR
- BALL SCREW REPAIR
- ENGINEERED PROJECTS
- POWER TRANSMISSION PRODUCTS AND MUCH MORE











www.qpgllc.com 1-866-868-9574

Mini-Broach Machine Co., Inc.

Contract Broaching Services, Broaches, Tooling, Broach Sharpening, & Broaching Machines, with over 45 years experience.

info@Minibroach.com Tel: (978) 386-7959





Automatic screw machine and CNC Machined products for your industry

Merrimack Manufacturing Company Inc.

- 217 Harrison Road Bridgton, Maine 04009 TELEPHONE 207.647.3566 • FAX 207.647.3588 mmc6@myfairpoint.net
- * Also available: Inserts for rubber / plastic moldings

(860) 928-7965

(860) 928-7965 Fax (860) 928-1408

10 Senexet Road • Putnam, Connecticut • 06260

Plating of Hard Chrome, Electroless Nickel, Mass Finishing Media, Equipment and Supplies Mass Finishing, Tumbling & Deburring Web Page: www.nationalchromium.com



Email: info@easternbroach.com

Web: www.easternbroach.com Quality Broaching Service in the New England Area Since 1972

Meaningful Quotes

"Today government touches everything in America and harms almost everything it touches. Federal, state, and local governments together spend 42 out of every 100 dollars we earn. Those who do the taxing and spending have long since ceased to work for the people as a whole. Rather, they work for themselves and for their clients -- the education industry, the welfare culture, public-employee unions, etc.."

-- Malcolm Wallop (1933-) Founder of Frontiers of Freedom, rancher, businessman, former U.S. Army Officer, former US Senator from Wyoming. Source: February 21, 1995 at Hillsdale College's Shavano Institute for National Leadership seminar "Taking on Big Government: Agenda for the 1990s," in Dallas, Texas.





Connecticut Tooling & Machining Association

CTMA

P.O. Box 593 Windsor, CT 06095 Tel: 860-604-8963 Fax: 413-599-1323

If you have a question, or need more info, contact: **Cindy Scoville** at: director@ct-ntma.org

Membership Doesn't Cost....It Pays! NTMA - Business Solutions for Metalworking Manufacturers

PRECISION FORM GRINDING AND THREAD ROLLING SPECIALIST



(860) 289-2987

25 Rosenthal Street East Hartford, CT 06108

UNITED THREAD ROLLING, LLC Unitedeenterlessgrinding.com Unitedthreadrolling.com (860) 290-9349

fax: (860) 289-3142



P860.289.8209 F860.289.2961

Aerospace • Medical • Industrial • Motorsport East Hartford, CT

TURNING . SWISS SCREW MACHINING MILLING . ASSEMBLY

www.horstengineering.com



ROLL THREADING • ROLL KNURLING CENTERLESS GRINDING

www.threadrolling.com



METAL STAMPINGS **PRECISION COINING PROGRESSIVE DIES** LASER WELDING **ASSEMBLY FINISHING**

A 'Can Do' Attitude Since 1912





PRECISION STAMPING & ASSEMBLY

PO Box 427 Durham, CT 06422

Tel: 860-349-1756 Fax: 860-349-3602

info@hobsonmotzer.com www.hobsonmotzer.com ISO 9000:2000

PRESS RELEASE

Maine based machine tool and CNC control builder celebrates 1st year anniversary.

Lebanon, ME. March 4, 2016: Element Machine Tools, with locations in Lebanon and Livermore Falls, Maine, is celebrating their first full year of operation with completion of a line of Vertical Machining Centers capable of up to 6 axes. They are currently offering six variations of machining centers directed at the educational, general machining and high production manufacturing facilities. The machines are powered by the CARBON CNC control developed by Element Machine Tools. It is based on the MACH4 Industrial software produced by Newfangled Solutions, another Maine based company.



Continued on page 19





Connecticut Tooling & Machining Association

Qualified Tool and Gage Makers are Critical to Your Success!



Your manufacturing environment demands skilled tool and gage makers ready to take on every day challenges without delay.

- Does the need for precision tooling fixtures and gages have you scrambling to meet your customers requirements?
- Do you need a reliable, qualified tool room to manufacture your fixtures, tooling, and custom gages?

We have the TEAM to help you!

MADE IN AMERICA AT AN



COMPANY



Website: www.siroistool.com Phone: (860) 828-5327 Email: info@siroistool.com



Website: www.dowgage.com Phone: (860) 828-2450 Email: sales@dowgage.com



Website: www.naspringtool.com Phone: (860) 583-1693 Email: info@naspringtool.com

The Sirois Tool Companies are located at 169 White Oak Drive • Berlin, CT 06037

PRESS RELEASE

"We are currently in development of several more machine models and other machine technologies that will arrive in year two," said Tom Lamontagne. Founder of Element Machine Tools. "We have dedicated the first year to developing and prototyping affordable, yet high quality products that span a wide range of industries. Next year our new products will continue to expand on the same philosophy and we will

also begin R&D on a machine completely designed and built in Maine."

Ben Brown, VP Sales and Marketing, says "Initial sales activity has been strong with many potential customers anxiously awaiting completion of our first production machines. Our first two machines will be



shipped and installed with our customer in early April and others will be coming right behind them. We are currently developing a distribution network and looking forward to a very strong second year."

Element Machine Tools is a full service provider of specialized CNC manufacturing equipment for niche markets. Our goal is to break the

mold of what is expected from typical machine tool builders and distributors by providing solutions as unique as our customers.

Contact Element Machine Tools, LLC at ben@element-cnc.com or call (207) 860-7226. www.element-cnc.com





PRESS RELEASE

Precision Coating Acquires Boyd Coatings Research

Precision Coating Co., Inc. (PCCI), of Boston, MA, has acquired Boyd Coatings Research Co., Inc. (BCR), a provider of coating application services based in Hudson, MA.

Together they will provide extensive and complementary fluoropolymer (Teflon®/PTFE) application services to the medical device and highly engineered components markets. Having developed proven coating processes for thousands of unique parts for over 50 years, each company has earned the trust of customers by providing expertise and exceptional service. Combining the companies creates a platform to deliver quality, service, and coating application capabilities that exceed any vendor in the fluoropolymer coating space, with the strength to meet the increasingly demanding requirements of the global medical device market.

The company will be headquartered in Hudson, MA, and customer contacts will remain the same. The combined capabilities will deliver a range of benefits and enhancements to a broad customer base with emphasis on customer service, superior product quality, and engineering services to support customers with their device design, control, and manufacturing. Further development of their leading automation capabilities will extend benefits across the application spectrum. For the present time, the companies will continue to operate under their respective trade names.

Bob DeAngelis, President of PCCI, explains the benefits of the acquisition, "We will combine and leverage the best practices from each organization to deliver an unmatched level of service and customer focus for current and future customers. Key initiatives include expanded automated coating capacity, enhanced organizational capabilities with an increased focus on engineering and quality, including PTFE formulation, and opening a coating facility in Costa Rica for our international customers."

BCR's President, Dick Downey, who will act as Chief Integration Officer, says, "We think our customers will share our excitement as we strengthen our product offerings. The combined company will establish a global R&D center in the Hudson facility to accelerate advances in coating deposition control and related capabilities."

For more information on the capabilities of PCCI and BCR, visit www.precisioncoating.com and www.boydcoatings.com.

For questions regarding the acquisition, contact PCCI at (781) 329-1420.

About Boyd Coatings Research

For over 50 years, customers have relied on Boyd Coatings Research to provide engineering support, quality, and ontime delivery of high-performance coating systems, along with the development and manufacture of specialty coatings.

About Precision Coating

Precision Coating Co., Inc., a Katahdin company, serves global health care and medical device companies, coating medical devices such as guide wires, core wires, hypotubes, and forming mandrels. PCCI works with customers from concept to commercialization, providing flexible prototype work as well as high-volume coating application services.

About Katahdin Industries

Katahdin Industries (www.katahdin-inc.com) provides hightolerance coating applications and specialized metalfinishing technology and services to the medical device and industrial markets through platform-focused subsidiaries including DCHN, Sanford Process, Precision Coating, Boyd Coatings Research, and Medi-Solve Coatings.



Donald Garcia, Chairman of the Board, Boyd Coatings Research Company (Left)
Robert DeAngelis, President, Precision Coatings Company, Inc. (Right)



DYNAMIC BALANCING



Pump Impellers - Fan Wheels - Prototype Development Gears - Motor Armatures - Sheaves and Pulleys -Flywheels Couplings - Much More

8 Donnelly Road, PO Box 303 Spencer, MA 01562 $www.ne ext{-}spintech.com$

Tel: 508-885-5300 Fax: 508-635-6831

Lab Technician Wanted

Sturbridge MA company seeking Mid-Level Lab Technician. Job Entails Precision Cutting, Sample Mounting, Sample Grinding/ Polishing and Some Microscope Analysis. Must be able to stand for 6-8 hours per day. Lab Experience Preferred. Email Resume to resumes@smslabs.com – no calls please agencies need not email.

Gateway **Mini Ads**

THE FEBRUAR

East Coast Thread Rolling

Threading **SEMS**

Assembly



Knurling Forming

Phone 800-875-4019 Fax 203-879-1902

Over 35 years' experience



Old Forklifts for Parts. Gas or Electric, Large or Small Running or Not, Price Must Be Reasonable Call Walt (860) 508-9164 Will Pick Up and Pay Cash.

Your own maintenance department, with no cost until you need it! Large turning, boring, milling, welding, fabricating. We also have a large variety of CNC machines available.

Large or small, we can do it all!

Check out our website

www.sandbergmachine.com

"We now offer turning & threading on our 60" CNC VTL!"

MACHINE SHOP

Niche Product. National customer base and growing. Repeat orders. \$1,000,000.+ 2015 sales with great potential for growth. Business has potential to double in sales Great Western Ma. location.

Email bill@buyersgateway.com and owner will contact you.

Uncle Willy's Funny Bone Gateway Humor

BRICKS

Visiting a college in the fall when a fresh bunch of freshmen arrive you will find a large number of them on their hands and knees counting the bricks in the courtyard close up with a calculator in their hand.

I asked a professor observing the occasion and asked him, "Sir, what are they doing?"

He replied with a casual professor look, "The freshmen are asked by upper class men, how many bricks it took to finish paving this courtyard."

"Well professor, what is the answer?"

With a smirk on his face, he whispered, "Just one."

Brass & Bronze Investment Castings Foundry

Owner wishes to retire. Established customers. **Profitable.** Producing custom hardware, classic auto / boat parts and more.

With buildings or without in beautiful part of N.E. Lots of options. Email: bill@buyersgateway.com. Owner will contact you.

The Gateway Magazine Bill Bryson, President The Gateway 336 Governors Road, Milton, NH 03851

All rights reserved. Duplication of this magazine or parts thereof without written permission is prohibited.

This magazine is distributed at no charge to engineers, purchasing decision makers, business owners, advertisers and qualified personnel in manufacturing companies. The cost of a subscription is FREE.

Spotlight feature articles, New Products and Literature announcements are published free of charge at the discretion of the publisher and with the availability of space. Contact us for details

The Gateway reaches: 7500+ NE Companies 2500+ Job Shops, 25,000+ Readership

Tel or Fax: 603-755-9232 E-mail: bill@buyersgateway.com

MINI AD RATES:

Single Column is 2.4"/Double Column is 4.8"/Triple Column is 7.3" \$35.00 PER COLUMN INCH.

You only pay for what you use, to closest 1/16". (Ads running only 1 mo. priced at \$45.00 per in.) HEADERS ARE SUPPLIED FREE

(Yellow bg, Red Subway Font) Email your info to The Gateway at bill@buyersgateway.com

Questions? call 603-755-9232 We lay out, quote price and email a draft copy to you approval before we will publish.

No extra charge for photos, graphics or ad layout. 5% discount on all prepaid ads.







Serving New England 17 Park Ave, Hudson, NH 03051 Since 1986



AIR COMPRESSOR REBUILDERS. LLC DIVISION OF D.R. GUILBEAULT **488 MAIN STREET** LEOMINSTER, MA 01453 TEL: (978) 537-6064

Serving New England since 1973

Manufacturer's Distributor for:



Rotary Screw

- Single & Two Stage
- Variable Speed VSD
- Oil Free
- High & Low Pressure
- Vacuum
- Portables

Air Dryers

- Refrigerated
- Twin Tower Desiccant

Filtration

- Oil Removing
- Oil/Water Separator
- Drains

Full Stock of Genuine Sullair Parts and Lubricants



Reciprocating

- Pressure & Splash
- Climate Control Units
- Oil Free

EMIGIO COMPRESSORS

Contractor Compressors Sprinkler Compressors



High Pressure Systems



Hudson, NH - Northfield, NH Leominster, MA Toll-Free (800) 856-4046 Tel. (603) 598-0891 Fax: (603) 598-0894 24-HOUR EMERGENCY SERVICE YOUR RELIABLE SOURCE FOR COMPRESSED AIR EQUIPMENT AND SERVICE



Safety Air Tool Accessories Air-Line Controls

HITACHI Inspire the Next

Oll Free Rotary & Scroll

- Single & Two Stage
- Variable Speed VSD
- Air Cooled/Water Cooled Pressure Vessels & Air Receivers



Hose Reels



CRP Oil / Water Separators



Refrigerated Air Dryers Filters Desiccant Dryers



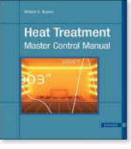
Air & Gas Filtration to 6000 psig Desiccant Dryers Oil/Water Separators

Services: Any Type of Compressor • Installation, System Piping Low Pressure and High Pressure Air Systems . Medical Air & Vacuum Maintenance Programs . Rental Units Available (Delivered & Installed) . Air Dryer Repair

Engineered Services: Complete System Design • In-Plant Air Surveys • Energy Audits • Leak Detection · Pressure, Flow & KW Monitoring

Web Site: www.drgair.com • Email: don@drgair.com

and of course... SERVICE SERVICE SERVICE!



Heat Treatment Manual focuses on heat-treating to ASM, SME, and AISI standards. It has been created for use in student education, as well as to guide professionals who have been heat treating their entire lives.

What is different with this manual is that it goes beyond dealing with just the heat side of the treatment process. It continues the process by using cryogenics to produce a 99.9 to 100% transformation of the finest, best grain structure possible. The hardness reading of a steel is strictly an indication of hardness. It doesn't reveal how well the heat treat process was performed, nor does it reveal how terrible the wear resistance might be because the grain structure condition should always be the real goal. This manual tells exactly how to get the real cost savings and best possible life.

If you desire to produce the best heat treated metal possible and gain an understanding of what goes on in the heat-treating process, this manual will

Written in everyday easy to grasp language, it will serve as a training manual from day one in a classroom, then serve as a day-to-day reference for

This full-color, illustrated manual zeros in on the popular tool steels, alloy steels, heat-treatable stainless steels, case hardening steels, and more. It deals with these metals with fully illustrated processing recipes

Written for toolmakers, engineers, heat-treaters, procurement, management personnel, and anyone else who is involved in metals.

Page size 7.75" x 10.625" 338 pages, spiral soft cover to lay flat open for easy reference. Available also in eBook

TO ORDER

Call: 877-751-5052 Fax: 708-534-7803

Web: www.hanserpublications.com





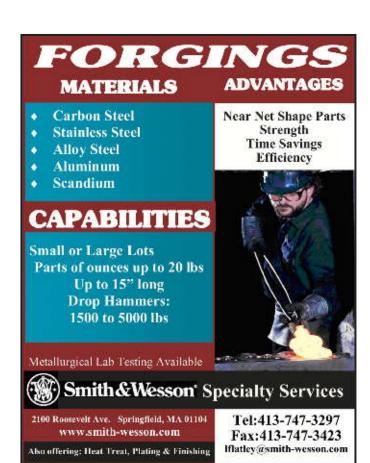
Dry Film Lube & Teflon Coatings · Industrial Painting EMI/RFI Shielding . Powder Coating . Silk Screening Pad Printing • Laser Marking & Engraving • Contract Manufacturing Assembly · Custom Packaging · Stripping & Sandblasting

866-247-4082 53 North Cherry Street Wallingford, CT 06492

www.pauwaycorp.com







Non-Metallic Die Cutting & Stamping



The Buswell Manufacturing Company is a precision die cutter of non-metallic material, for seals gaskets, diaphragms and washers, used by the automotive, marine, industrial & bearing industries.



Since 1945, we have specialized in die cut bearing seals made from rubber coated fabric, Teflon® and Teflon® coated glass fabric. We also perform in house tool & die making.



229 Merriam Street ● Bridgeport, CT 06604-2915
Phone: 800-682-5207 ● Fax: 203-368-2374
E-mail: Buswell.mfg@snet.net
ISO/TS 16949: 2002 Registered



HERE QUALITY COUNTS **CNC Machining Prototype & Production Quantities** Let us put our engineering and machining talents to work for you! Precision Milling Precision Turning • AutoCAD Design • Design Capability Master CAM Machine • Ouick turnaround • Personalized Service Now offering LASER PART MARKING Using our new 1 LASER MARKING MACHINE We offer one-stop shopping where we will handle your complete job. So whether heat treated, plated or painted we can supply to your requirements the way you want it. ISO 9001:2000 **SAE AS9100** 106 Finnell Drive. Ste 24 Weymouth, MA 02188 Tel: 781-331-4300 Fax: 781-331-4800

www.rsredco.com



email: sales@rsredco.com





Performance Machine, LLC Concord, NH www.jcbperformance.com (603) 415-0110

CNC Machining of Stainless Steel 303, 304, 316, 321, 347 17-4PH H1150, HH1150, H900 Nitronic 50 & N50 HS, Nitronic 60

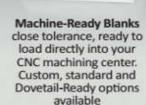
CNC TURNING MULTI-AXIS MACHINING







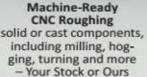
Machine-Ready Solutions™ Rethink Your Workflow-Reduce Cycle Time



Machine-Ready Material Prep squaring, flattening and milling, including adding features and removing large amounts of material

Your Stock or Ours







Finish Machined Components complete-to-print machining, including processing and sub-assembly

Machine-Ready is Lean-Ready

Being Machine-Ready lets you get right to the high value process of finish-machining, by eliminating material prep and other time consuming processes. Choose the Machine-Ready Solution that best supports your busy shop and start increasing throughput, now.



Call us to discuss your next production job. 800-234-5613 www.tciprecision.com his road sign posted in 1942