

PURCHASING'S GATEWAY TO NEW SOURCES

No. 261

FREE SUBSCRIPTION

# THE Gateway MAGAZINE

KEEPING PURCHASING DECISION MAKERS INFORMED

25,000+ readers read THE GATEWAY in over 7,500 companies

March 2021



**BOULEVARD  
MACHINE & GEAR**

SEE PAGE 3



**Five Trends  
Creating Impact on  
Manufacturing 2021**

SEE PAGE 15

BE SURE TO SHARE YOUR STORIES: [WWW.THEGATEWAYMAG.COM](http://WWW.THEGATEWAYMAG.COM)

COVER PHOTO : **BOULEVARD MACHINE & GEAR** | Westfield, MA | 01085

# CONTENTS

MARCH 2021 | ISSUE 261

## COMPANY SHOWCASE

**03** Boulevard Machine & Gear

## INDUSTRY INSIGHTS

**15** Five Trends Creating Impact on Manufacturing 2021

**20** Five Questions with Manufacturing Minds

## INDUSTRY NEWS

**25** Regional Press

Somewhere in the confines of this issue of the Gateway there lies a quote from the late Larry King, who proclaimed “You make your own luck. Luck is the residue of design.” And, for it’s worth, that quote speaks to a great many things and is timely given that March, to some extent, places the spotlight on the Irish, which of course, insinuates some degree of sentiment in “luck.” The second part of that quote is hinged on design, which is some of what we’re looking to push through with this issue. The fact that, it’s been a year since our world was rocked by the Covid-19 pandemic and industries far and wide are still feeling the aftershock of that quake. But dwelling on our woes isn’t going to push us through to a prosperous future. It’s about design. It’s about taking a long hard look at where we’ve been, and working out the best path forward. Which is in no doubt what we’ve all been doing for the better part of the last year.

In this issue you’ll find our thoughts on current trends that will inevitably shape the rest of our 2021. With any luck, these trends will—at least mildly—get you thinking about your own design and plotting the advance of your business as it best works for you and your set of customers (and prospects, of course). Keep in mind that the Gateway community are likeminded in the sense that, together, we can accomplish anything we put our mind, heart, and tools to. Where you need a helping hand, there exists a pair or two within these pages.

So go ahead, poke around. Let us know if you find something you like, or if there’s something we’re missing that you’re hoping to voice. We’ll get you heard, or, at the very least, we’ll hear you out. Consider the Gateway YOUR platform to your community of peers. As much as we love doing the talking, we want all of you to take up some space in these ongoing issues as well.

Best of luck!



March 2021

# THE Gateway MAGAZINE

## PUBLICATION MANAGER

Matthias Roberge

## EDITORIAL DIRECTOR

Chris Hislop

## ART DIRECTOR

Adam Kaufmann

## ADVERTISING INQUIRIES

(877) 463-4020

[info@thegatewaymag.com](mailto:info@thegatewaymag.com)

Hours: 9am-5pm Mon-Fri

## MAILING ADDRESS

PO Box 70

Portsmouth, NH

03802

## FOR FREE SUBSCRIPTIONS

[www.thegatewaymag.com](http://www.thegatewaymag.com)

## CHANGE OF ADDRESS:

In ordering a change of address, give both the old and new addresses. Allow two months for change to become effective. The publisher will attempt to handle unsolicited articles with care, but magazine assumes no responsibility for them.



© 2021: Reproduction in whole or in part  
without permission is strictly prohibited.



# LASER CUTTING SERVICES

36 6<sup>th</sup> Rd. Woburn, MA 01801

*Plate, Sheet, Pipe & Tube*



### SHEET & PLATE CUTTING

Carbon Steel up to .875"  
Stainless Steel up to .50"  
Aluminum up to .375"  
Brass & other Alloys

### TUBE & PIPE CUTTING

3/4" up to 8.625" Diameter  
Up to 6" Rectangular & Square  
Square to Round Transitions  
Elbows  
Coping & Mitering



Welding, machining and full metal fabrication services available.

617-479-7374 [www.quality-laser.com](http://www.quality-laser.com)  
Email: [info@quality-laser.com](mailto:info@quality-laser.com)



# NORTHEAST 3D SOLUTIONS

ne3d.net

## 3D PRINTING & SCANNING SERVICES

### 3D Printing Services

Rapid Prototyping Parts  
Parts for End Use  
Workholding for Machining  
Machinery & Wear Parts  
Lost Wax Models  
Corrosion Upgrades  
3D Part Modeling  
Reverse Engineering  
Engineering Support

### 3D Scanning Services

Product/Tool Inspection  
Tool and Die duplication  
Spare part development  
Scan to CAD Comparison  
Product Development  
Replication/Reproduction  
Quality Assurance/Control  
Visualization/Animation  
Sculpture and Art



Northeast 3D 156 Wall St. Springfield VT 05156 Tel (802)698-3764



## A LEADER IN THE MACHINING OF ALL HIGH PERFORMANCE PLASTICS



- Machine PTFE & all other high performance plastics
- Machine down to 0.010" diameter & up to 1" diameter
- Drill holes as small as 0.006" ID
- Pick up & back drill, eliminating 2nd operations



Call Today: 860-526-3565  
[parasonmachine.com](http://parasonmachine.com) • Deep River, CT



## BOULEVARD MACHINE & GEAR – A WOMAN OWNED AND OPERATED MANUFACTURING POWERHOUSE



**From humble beginnings in 1954, Boulevard Machine has grown to serve some of the largest Tier 1 aerospace and defense customers across the industry. Originally launched as a family business all those decades ago—transitioning from founding father, to an uncle, and finally, on down to a son—Boulevard Machine was established as a gear company in the Pioneer Valley, storied home of the paper mill industry.**

The modest, hardworking company found a new and exciting foothold within the industry when it was acquired by Susan Kasa nearly 15 years ago in 2006. The inherent base of this acquisition has made Boulevard Machine a certified women's owned business enterprise through the Women's Business Enterprise National Council (WBENC).

The machine and gear manufacturer is AS9100, Revision D, ISO 9001:2015 and an ITAR registered company.



As a part of her ensuing venture and to bolster operative processes, Susan recognized the need to modernize the equipment and increase a younger workforce. Over the past decade-and-a-half Boulevard Machine has gone from an 11 person workforce to 24+ – realizing healthy, steady growth along the line. The company understands that to stay ahead of the curve they must continually invest in capital equipment—investing 20+% of their revenue each

year back into this imperative piece of the business. As parts, and components change over time, manufacturing tools and processes must adapt to meet these changes and improvements. This is exactly what Kasa and Boulevard have made it a point to accomplish as the years press on. Industrial process automation helps meet the needs of a changing manufacturing system by providing solutions and addressing the needs of current and impending customers.

## MILLING MACHINES

### Lathe Machines:

- 2016 HAAS ST-25 CNC Lathe – 15” x 21” x 3” Bar Through
- 2014 HAAS ST-35 CNC Lathe – 21” x 26” x 4” Bar Through
- KIA 21 CNC Lathe - 8” Chuck 2” Bar Through Capacity
- SUPER KIA 21 CNC Lathe - 8” Chuck 2” Bar Through
- Capacity TRAK TRL1745P CNC Lathes with Proto-Trak LX2 Controls
- MILLTRONICS ML28 CNC Lathe - 27” Swing, 118” Length, 4.3” Bar Through, 15” Chuck, 20 HP
- MILLTRONICS ML18 CNC Lathe – 17” Swing, 39” Length, 2” Bar Through, 9” Chuck, 12 HP

### 5 Axis:

- 2019 DMG-MORI DMU 75 MONO BLOCK 29” X 25.6” X 22” 20K Spindle
- 2018 DMG-MORI DMU 50 3RD GEN 25.5” x 20” x 18” 20K Spindle
- 2014 HAAS UMC-750 30” x 20” x 20”
- 2011 HAAS VF-3YT: 40” x 26” x 25”, 5th Axis TR200Y Trunnion

### 4 Axis:

- 2009 HAAS VF-3: 40” x 20” x 20”, 12” rotary
- 2018 HAAS VF-2YT: 30” x 20” x 20”, 8” rotary
- 2019 HAAS DM1: 20” x 16” x 15.5”, High Speed 5C Collet rotary

### 3 Axis:

- TRAKDPMV5-40”x20”x19”
- SPORT K2 Milling Machine with Proto-Trak M2 Control
- BRIDGEPORT SERIES 1/ PROTOTRAK-30” x 12” x 12” Z

### Grinders:

- Chevalier Surface Grinder 12” x 18”
- Gardner No. 1-1/2 Surface Grinder 8”x12”
- Harig Surface Grinder 6” x 12”
- Harig Surface Grinder 6” x 18” Sintex OD Grinder

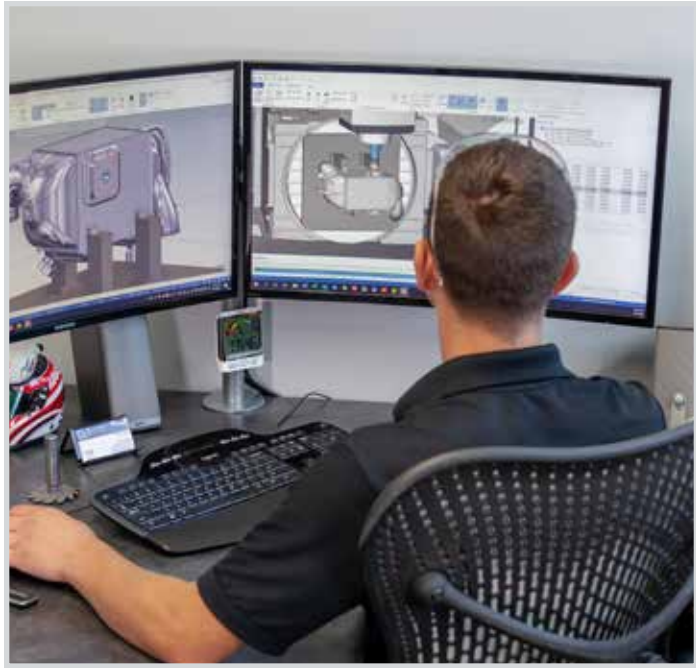
### CMM Machines:

- MITUTOYO CMM 20” x 24” x 15”
- ZEISS ECLIPSE CMM
- ZEISS CONTOURA 9/12/8 CMM

### Inspection Machines:

- Altia 600 Trimos 24” Micro Height Gage
- Mitutoyo Absolute Digimatic Height Gage (6)
- J&L Comparator PC-14A
- Mitutoyo Profile Comparator
- Trimos V4 27” Height Gage





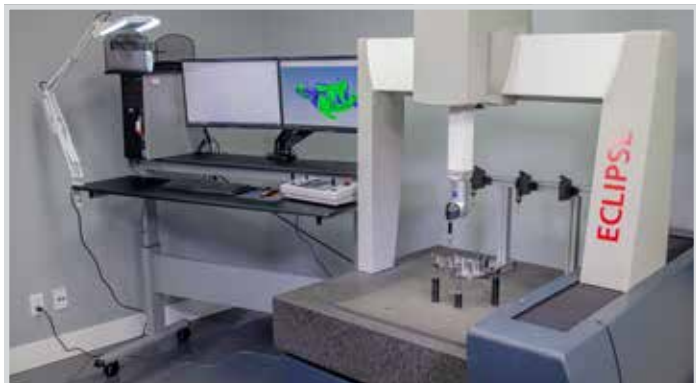
### A COMMITMENT TO EXCELLENCE

Boulevard's core competencies lay in their unique ability to machine complex multi-axis components from modeling, programming, machining, to first article inspection with responsive lead-times. Boulevard's blend of talented machinists provides unparalleled quality components while utilizing a mix of 5-Axis Milling, CNC Turning, and CNC Gear Cutting equipment. While the manufacturing of gears was once Boulevard's mainstay, they have transformed into a versatile manufacturing facility under the undying persistence of Kasa.

Over the years, 5-Axis complex machining has become the specialty. Both prototype with short-lead time, balanced with long-run production parts. Boulevard Machine combine the heavy-duty strength and agility of high-tech, intelligent CNC machines with the unmatched skill of their team of machinists.

### A COMMITMENT TO EXCELLENCE

Boulevard Machine & Gear is truly focused on exceeding their customers' needs and expectations and their team of employees are dedicated to producing top quality products and services, competitive pricing, and total customer satisfaction. Boulevard's reputation, internal technical capability, delivery performance, and quality service has resulted in major corporations selecting Boulevard as their strategic service HUB for targeted products. As large corporations continue to consolidate their supply base and as non-competitive suppliers decline in numbers, Boulevard remains a strong and valued supplier.



### Customers Include

- **Boeing**
- **UTC Aerospace Systems**
- **Harris Corporation**
- **Siemens**
- **Parker Hannifin Aerospace**
  - **Hydroid, Inc.**
  - **Otis Elevator**
  - **Proctor & Gamble/ Tambrands**
  - **Solo Cup/Sweetheart/Dart**
  - **Timken Purdy Systems**
  - **Titeflex Aerospace**
  - **GE Healthcare**
  - **HP**
  - **The U.S. Army**
  - **And more...**

(CONTINUED ON PAGE 7)



# RIGGING AND HEAVY HAULING

- ◆ 70 Years Experience
- ◆ Forklift Capacity to 60,000 lbs
- ◆ Machinery Moving
- ◆ Mill-Wright Services
- ◆ Domestic & Export Crating
- ◆ Inside Storage / Warehousing



Tel. (603) - 623-1533

**RIGGERS**

[lpcote.com](http://lpcote.com)

# JCB



Performance Machine, LLC

(603) 415-0110 Concord, NH

## PRECISION MULTI-AXIS MACHINING

Specializing in Mill/Turn Machining of  
Stainless Steel and Non-Ferrous metals:

**316L • 304L • Nitronic 50/60**

**17-4 H1150 • HH1150 • H900**



[www.jcbperformance.com](http://www.jcbperformance.com)

## Gear & Spline Specialists Since 1954!

AS9100 REV C & ISO9001:2008 CERTIFIED



**UNITED GEAR  
& MACHINE, CO.**

1087 EAST STREET SOUTH  
SUFFIELD, CT 06078

860.623.6618 FAX: 860.654.1521

[SALES@UNITEDGEARCT.COM](mailto:SALES@UNITEDGEARCT.COM)

**NO JOB  
TOO  
SMALL!**

**[WWW.UNITEDGEARCT.COM](http://WWW.UNITEDGEARCT.COM)**

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

**WE CUT  
STRAIGHT  
BEVEL  
GEARS**



Thread Rolling

Knurling

Centerless & Cylindrical Grinding

Precision Machining



36 Cedar St.  
East Hartford, CT 06108 USA

860.289.8209

[www.horstengineering.com](http://www.horstengineering.com)

## COMPANY SHOWCASE: BOULEVARD MACHINE & GEAR



The company's internal investments and its business initiatives are aimed at providing solutions at valued proposition allowing its customer to grow market share.

Strict compliance with the most recent and stringent AS9100 Rev D and ISO9001:2015 Standards serves as Boulevard's operational guidepost in which specific attention is given to the predictability and repeatability of all processes in order to sustain the quality and precision craftsmanship on which our customers have come to rely.

Boulevard Machine & Gear continue to stay current with all versions of software (such as JobBoss, MasterCam, Solidworks, Zeiss Calypso & Office 365. etc.) within the facility to ensure continuity across the board. They operate under the guise of CMMC Compliancy regulations and are also NIST-800 compliant, ensuring stringent security efforts amongst all of the technology and data they deal with as a working piece of their business.

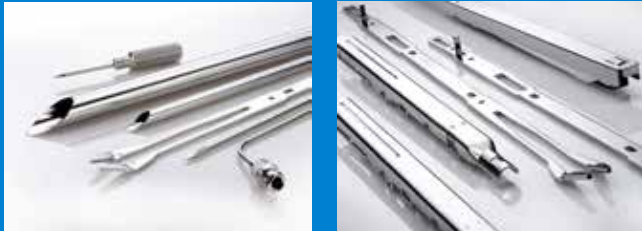


(CONTINUED ON PAGE 10)



# ELECTROPOLISHING SERVICES

- ⊖ New England's Largest Electropolisher
- ⊖ ISO 9001 & 13485 Certified
- ⊖ 12 Electropolishing Lines
- ⊖ Precision Rates of Removal (.0001")
- ⊖ Small & Large Parts
- ⊖ Custom Packaging Services
- ⊖ Expedited Service Available



New England Electropolishing  
800-672-6616  
www.neelectropolishing.com  
sales@neelectropolishing.com



## Precision Sheet Metal Fabrication

Capacity to 1/4" Mild & Stainless Steel, Al., Lexan, and more!

**3D Design Help**  
**3D Design Help**

Our 40+ yr. exp. assures your project the BEST that our Engineering Dept. can offer.

From *Prototype to Production:*

**We do it all!**



7 Brookfield Street  
Worcester, Ma. 01605  
sales@HowardProducts.biz  
508-757-2440 Fax: 508-831-9990

## WHERE QUALITY COUNTS

# CNC Machining

**Prototype & Production Quantities**  
Let us put our engineering and machining talents to work for you!

### Precision Milling

AutoCAD Design  
Master CAM Machine

### Precision Turning

Design Capability  
Quick turnaround

Personalized Service

**Now offering LASER PART MARKING**  
Using our new  
**TRUMF VMC1 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

## R & S REDCO, INC

106 Finnell Drive, Ste 24 Weymouth, MA 02188  
Tel: 781-331-4300 Fax: 781-331-4800  
www.rsredco.com Email: sales@rsredco.com

## CONSUMABLE SUPPLIES

**Highest Quality. Competitive Prices.**

SMS carries a large selection of metallurgical supplies for your in-house lab needs. We cover all of your sample preparation requirements and are *happy to provide samples to evaluate.*

- Grinding Papers
- Polishing Cloths
- Diamond Suspension
- Diamond Paste
- Hot Mount Powders
- Mounting Clips
- Mold Cups
- Saw Blades
- Cold Mount Epoxies
- And so much more...



Sturbridge  
Metallurgical  
Services, Inc.



[www.smslabs.com](http://www.smslabs.com)

1-866-340-5288

**We Armor Your Assets**

# MuShield®

AS:9100D | ISO 9001:2015 Certified | ITAR Registered Company

For over sixty years, The MuShield Company has been a worldwide industry leader as a manufacturer of custom magnetic shields and precision sheet metal fabrication.



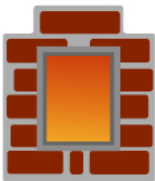
For Orders and Pricing:  
Contact MuShield today for more information

**[ 888.669.3549 ]**

The MuShield Company, 9 Ricker Avenue, Londonderry, NH 03053 | Toll Free: 888.669.3539 | [info@MuShield.com](mailto:info@MuShield.com)  
[MuShield.com](http://MuShield.com) | [MuMetal.com](http://MuMetal.com) | [HydroformingManufacturing.com](http://HydroformingManufacturing.com) | [CryoPermShielding.com](http://CryoPermShielding.com)



# HEAT TREATING



- VACUUM
- INTEGRAL QUENCH
- CONTINUOUS BELT
- NITRIDING
- STRESS RELIEVING
- ANNEALING

\*Pick up and Delivery Available\*

**Certified By General Dynamics for AMS 2759**  
Aluminum Heat Treating      Long Vertical Capability  
Sandblasting                      Parts Cleaning  
Brazing                                Straightening

## COUNTY HEAT TREAT

32 Howe Avenue | Millbury, MA 01527  
Tel: (508) 865-5885 Fax: (508) 865-4033  
Website: [www.countyheattreat.com](http://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.



## RIGGING & FABRICATION



INDUSTRIAL TRANSFER & STORAGE INC.

- Lifting Capacity Over 100,000 lbs
- Servicing New England, The U.S., & Internationally
- New 10 x 12 CNC Plasma Table
- Specialists in Plant Relocation & Strategic Machine Moves

**Successfully Moving Industry Since 1984**

**508-765-9178**

Southbridge, MA • [www.industrialtransfer.com](http://www.industrialtransfer.com)

MOVING FORWARD

*“We are extremely proud to move into our new building in Westfield. The larger, modern facility will allow us to continue delivering highly innovative products and quality service to our customers and provide an improved work environment to our employees,” said Kasa.*

On January 12th, 2021, Boulevard announced that it had moved its headquarters to a new, larger space in Westfield, Massachusetts to accommodate the steady business growth the company has realized over the last decade of operation.

Boulevard will leverage its new facility to provide additional capacity for its customers while providing new internal operational efficiencies. The new facility also will provide Boulevard with improved, state-of-the-art production space to facilitate internal and external collaboration and communication, while providing the company with further room for growth with its ongoing invest in equipment.

The newly constructed factory will accommodate leading-edge manufacturing technologies, lean equipment layout and automated workflow, resulting in increased efficiency, and better overall customer experience.

It’s an exciting time in the lineage of Boulevard Machine & Gear. For nearly seven decades the company has continued to grow and expand and shows no signs of slowing in the near future. And with Kasa leading the charge, Boulevard hangs proudly onto their laurels of being a certified woman-owned business—being in great hands now and for many years to come. In short, the present is good and the future holds many more great things. Boulevard is proud to be a precision machined components manufacturer for the aerospace, defense and medical markets—an ideal single source solution for close tolerance machining and finishing.



**326 Lockhouse Road  
Westfield, MA 01085**

**Phone: 413-788-6466**  
**[skasa@boulevardmachine.com](mailto:skasa@boulevardmachine.com)**  
**[www.boulevardmachine.com](http://www.boulevardmachine.com)**

LOOKING TO HAVE A FEATURE DONE ON YOUR COMPANY?

***We would like to hear it. Contact us to give us your input or feedback.  
We’re always looking for new stories to discuss.***

**[chris@thegatewaymag.com](mailto:chris@thegatewaymag.com) or Call: (877) 463-4020**





**BAY STATE MACHINE**  
GRINDING & HONING

## GRINDING & HONING SPECIALIST

- ID-20" Swing
- OD-84" Long
- Surface Grinding 24"x60"
- CNC Cylindrical

**ID & OD GRINDING  
HONING  
SURFACE GRINDING  
CNC CYLINDRICAL**

Top Quality • Any Quantity • Pickup & Delivery • Same Day Quotes

Plainfield, CT tel: 860-230-0054 baystatemachine@hotmail.com



**PLASTIC DESIGN INC.**  
Specializing in plastic fabrication & plastic components

- Corrosion Resistant Products
- Biomedical Research Products
- Laboratory/Clean Room Products
- Wet Process Equipment
- Custom Design and Fabrication
- Engineering & Installation Assistance
- Mass Production
- Direct & Wholesale Sales
- Raw Materials Sales
- Stainless Steel Products



**CUSTOM DESIGN AND FABRICATION OF PLASTIC PRODUCTS**

ISO 9001: 2015 Certified  
North Chelmsford, MA  
978.251.4830

www.plasticdesigninc.com

## S.M. Engineering & Heat Treating

Since 1956, we have prided ourselves on providing the finest quality workmanship, efficient service and competitive pricing.

**Processes:**

- Certified Heat Treating
- Bright Annealing SS
- Bright Hardening SS
- Controlled Atmosphere
- Nichrome Brazing
- Copper Brazing
- Gold Brazing
- Silver Brazing
- Hardening/Annealing
- Case Hardening
- Deep Case Carborizing
- Normalizing
- Sintering
- Stress Relieving
- Precipitation
- Hardening

508-699-4484  
sm-furnaces.com



North Attleboro, MA



## WANT TO BE SEEN AS A THOUGHT LEADER IN YOUR INDUSTRY?



Reach your target audience with sponsored industry content.

Contact **Matthias** at the Gateway for pricing.



INFO@THEGATEWAYMAG.COM  
OR (877) 463-4020

**GET STARTED**

## 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**

**Federal Firearms License**

**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



HEAT TREATING & BLACK OXIDE SINCE 1963

From start to finish,  
prototype to progressive...



**WE ARE YOUR  
ONE STOP SHOP!**



**WIRE EDM  
PRECISION TOOL & DIE  
CNC MILLING  
METAL STAMPING**

**11 Center Street  
Raymond, NH 03077  
(603) 895-1200  
info@shookustools.com**

**National  
Chromium**

**(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](http://www.nationalchromium.com)



**Fast Hole, Wire and Sinker EDM  
Precision Tools, Dies, Jigs and Fixtures**

**Border Tool and Die,**

DBA Bengtson Tool and Die

240 Gale Street Canaan, VT 05903  
T: 802-266-9666 F: 802-266-9667

[richard.btd@gmail.com](mailto:richard.btd@gmail.com)



**ACCURATE  
METAL  
SALES &  
FABRICATION**  
A Division of Industrial Transfer & Storage, Inc.

Mild Steel  
Stainless Steel  
Aluminum  
Hot Rolled • Cold Rolled  
Abrasion Resistant

Sheared • Plasma Cut  
Bent • Rolled • Saw Cut  
Punched • Drilled  
Welded • Fabricated

*Where Service is  
Stronger Than Steel*

508-765-4929

In House Design Services • Mig & Stick Welding • AWS D1.1  
[www accuratemetalsales.com](http://www accuratemetalsales.com)  
Southbridge, MA



are now



50+ years of fabrication experience combined with 50+ years of plastic distribution experience all under one name.

Serving the New England area with 3 locations

Londonderry, New Hampshire: 800-752-7759

Agawam, Massachusetts: 800-521-3003

Marlborough, Massachusetts: 800-252-8085

For more information or to contact any of our 48 branches visit us at [www.piedmontplastics.com/locations](http://www.piedmontplastics.com/locations)



10 Riedell Rd  
Douglas, MA 01516  
508-476-1200  
Visit us at [monalexmfy.com](http://monalexmfy.com)

**QUALITY PRECISION MACHINING**



At our facility, you'll find state of the art CNC equipment & tooling, used to engage in machining of raw material to customer specification. We currently serve industries for oil and gas, aerospace, process control instrumentation, medical, automotive aftermarket- just to name a few!

**WE GRATEFULLY ACCEPT THE CHALLENGE THAT EACH NEW JOB BRINGS!**



# TRACEY

**GEAR & PRECISION SHAFT**

ISO 9001 CERTIFIED

## Custom Gears Thread Grinding & Precision Shafts

*Serving New England since 1945*

740 York Avenue  
Tel: 800-774-GEAR

Pawtucket, RI 02861  
[www.traceygear.com](http://www.traceygear.com)

[sales@traceygear.com](mailto:sales@traceygear.com)



# SHARPLES

## CNC MILLING

- Large Work Areas with Vacuum Tables
- Nesting Software
- Quick Turnarounds
- For Plastics, Composites, Wood, Aluminum and Rigid Foam Core
- Small or Large Runs



**CREATIVE.  
INTRICATE.  
EXCEPTIONAL.**

CALL 508-695-5656 OR VISIT SHARPLESCUT.COM

# 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

# ABLE Air

## Air Compressor Sales and Service

- We service ALL Brands of compressed air equipment
- Compressors, vacuum pumps, air dryers, blowers...etc.
- 24-hour emergency service
- Air piping design and installation
- Flow and KW metering

- Reliable
- Energy Efficient
- Fixed speed from 3 hp to 605 hp
- Direct coupled one-to-one drive compressors
- Variable speed drive compressors from 10 hp to 350 hp
- German engineering at its finest!
- Rotary screw compressors for every budget!



Serving  
Vermont,  
New Hampshire  
and Maine

www.ableairne.com



**KAESER**  
COMPRESSORS  
*Built for a lifetime.*

**New England's Original Dealer and Still the Best Place to Buy Your New Kaeser**

**For prompt, professional service, call: 1-800-462-0228**

Serving New England For Over 50 Years

# FIVE TRENDS CREATING IMPACT ON MANUFACTURING BUSINESS AS 2021 PUSHES ON

**As we near the end of Q1, the scope of 2021 remains open, but a little more defined as the year pushes forward and we begin to find our way out of the Covid-19 pandemic. Vaccines are being positioned, and, though complicated and still finding footing from an efficiency standpoint, there is an end in sight. Bold words, for sure, but, like everything else in life, there's an end to this as well. All things culminate at some point, and so too will this moment in our history.**

So, with that said, let's take a look at five things we've been hearing a lot about in our industry that manufacturer companies continue to ruminate over as trending, viable topics that will position more positive results in facilities moving forward.



## PREDICTIVE MAINTENANCE

No, this isn't a new revelation. At this point, applying the means necessary to understand the benefits of predictive maintenance is decades old methodology that has long been old enough to drink. That methodology, however, is still finding its way with regard to finding stout application processes in facilities around the country. Technologies have never been stronger and solutions to realize predictive maintenance have sharply increased in the initial investment, making it more accessible, and of greater benefit to the industry as a whole.

In short, predictive maintenance and the advancements in technology is an optimized practice to help you prevent equipment failures and resource downtime—which offers promise in bolstering that bottom line. With downtime there exists negative impact which can clog the production line greatly.

While we're not married to any predictive maintenance solution exclusively, it's imperative that you start in on the research to find the software that best fits your facility. Google will give you all the options. Sure, there's an investment in not only the solution out of the gate, but also in the time it takes you to get the data necessary into the system to better understand your environment, but that investment is well worth the task.

Predictive maintenance at its core will help you to:

- ***Reduce costs***
- ***Optimize operative capabilities***
- ***Produce fewer failed operations***
- ***Minimize downtime and optimize uptime productivity***
- ***Have better data to make more informed delivery decisions***
- ***Streamline parts and mechanics replacement needs***
- ***Understand the working capacities of your fleet***

## LOCALIZED SOURCING

We've also been pretty longwinded about this one for the last year or so. The biggest thing here is, obviously, we'd like to see more collaboration amongst all of the readers of this magazine and keep business going within our local/regional economy. It's in the best interest of all of us to keep the New England region a strong hub of manufacturing activity. The more we can promote each other, the more business we'll all bring to our collective pipeline.

Outside of that, localized sourcing is a shift that just makes sense given the hiccups we saw in the chain as 2020 unfolded. Sure, there's an argument to be made that nobody could have predicted the detriment to delivery and product shortages that a pandemic would bring, but, therein lies a truth that if you can keep things closer to the belt, the stronger the links of your chain are going to be. Of course there are circumstances that prevent this in some cases—a supply shortage is a supply shortage and sourcing will be a challenge no matter the method, but, a takeaway from 2020 is to be prepared for another 2020.

We've long thought globally for our needs, which isn't necessarily a mistake, but when the chain breaks down and delivery methods used to distribute goods and materials are overwhelmed, we're going to be hurting and unable to operate as best as we'd like to. Sourcing materials closer to home and advocating for

the creation of more supply warehouse hubs is going to strengthen our production going forward. And again, if we can keep ourselves well vested in each other, we're going to be the envy of the rest of the manufacturing world. Thinking on a local and regional level will enable us to better meet the demand across the board.

## IOT

Ah, the Internet of Things. Such a strange name. Also a strange subject. And many of the old school manufacturers that exist in our own community here in the Northeast, have a hard time wrapping their head around it. And that's okay. But it's not okay to ignore it. Doing so could prove a likely detriment to the health of your business.

The boiled down idea here is in the fact that many aspects of our modern existence are fueled and informed by smart technologies. I mean, you can start your car with your phone now... It's weird. But, to that, IoT environments are hinged on the idea of efficiency. According to a recent study by the MPI Group suggest that 31% currently have manufacturing processes operating that incorporate smart devices and intelligence software into their operations. And further, another 32% plan to embed IoT technology into their processes in the near future.

With the idea that IoT technology offers users the ability to remotely monitor and predict the operative activity of the shop floor, the underlying sentiment here is that this kind of capability provides powerful analytics and decision making opportunities to bolster the entire makeup of the manufacturing process of a facility. Visibility and management capability from afar, in the palm of your hand is a crazy concept to imagine, but, it's not an imaginary concept anymore. It's a real, working solution for technology forward manufacturers. Bolstered efficiencies in the literal production of a shop's fleet of machines paired with the ability to understand and act on energy efficiency within that fleet is a substantial opportunity to boost costs and increase margins. The digital transformation of the factory floor has been speeding up, and it will continue to accelerate this year, and beyond. If you're not prepping for it, you're missing out and making it harder as it become more the norm moving forward.





## INCREASED EXPECTATIONS

Another lesson we pulled from 2020 was increased expectations. With people stuck at home and rethinking the way they live their lives, more and more households put their literal dwelling to work for them. What this meant was purchasing in abundance to bring their home up to speed on being able to fulfill what they were accomplishing and experiencing away from home. An increase in product spending led to an increase in manufacturing for consumer goods in an attempt to fulfill demand. It wasn't easy, and, by-and-large, it was quite a slog. It was extremely hard to keep up. And delivering those products? Forget about it...

Consumer demand will continue to drive the economy and customer demand in 2021 and we need to understand our current capabilities and, where it makes sense, ramp up to keep combatting the uptick in spending and expectations. With demand for products greatly on the rise, we as manufacturers are being pressured to produce high-quality products without the luxury of time. So, how do we keep up? Well, we can work together to collaborate on what we're producing and who can help where. Where a job requires myriad functions, it may be best to source lesser competencies to a partner in the local area who can excel and help meet the demands you, and we, are all facing.

Expectation and customer service are at the forefront of the business world. We need to be able to offer great experiences that produce results for all who are tapping into our services and influencing our collective revenue streams.

## SUSTAINABILITY

One thing we've been asking as a working piece of many of our manufacturer features is, "what are you doing to realized greener sustainability practices within your production missives." And, for many of you, this is an active piece of "what you do." Whether shifting to solar energy for a portion or all of your electric needs, to robust recycling programs, many of us here in the Northeast have "bought in" to sustainable practices. That said, "many" doesn't equal "all." What we're discovering more frequently as time presses on is, sustainability practices are not an overlooked byproduct of doing business. Customers and potential net-new opportunities are questioning sustainability competencies up front. It's a piece of the sales process. And this isn't going to diminish anytime soon. In fact, it's only going to increase, and somewhere in the near future, it's going to be a question we're all asked. Mark our words, it WILL BE a deal maker, or a deal breaker. Sustainability is not a fad. It's a movement. It's fueling not only customer decisions, but investing tactics as well. Think on it long and hard if you're not doing what you can to bolster your sustainability efficiencies. Otherwise, your own sustainable health will fall into jeopardy.

# RECYCLE YOUR CARBIDE



## ReCarb

Tungsten Carbide Recycling

STRIVING TO GET YOU THE HIGHEST POSSIBLE  
RETURN VALUE FOR YOUR MATERIALS:

Inserts, Drills, Solids, Sludges, Filters



617-593-8242 • [www.recarbllc.com](http://www.recarbllc.com)

28 Wolcott Street, Readville, MA



WORKHOLDING SPECIALISTS



Image courtesy of CBM Industries

*“Last year, we sold 7,000 pieces. This year, we’ll deliver approximately 70,000 pieces. It’s about 6,000 pieces a month.”*

- Strongest, lowest profile options for high-density applications
- Innovative solutions for the most demanding fixturing

Free Design Consults

[MiteeBite.com](http://MiteeBite.com) 800-543-3580

## EXTREME **HEAT TREATING** FOR EXTRAORDINARY RESULTS



# MuShield®

AS:9100D | ISO 9001:2015 Certified | ITAR Registered Company

MuShield has a longstanding history of in-house heat treating using our hydrogen furnace and state of the art vacuum furnace. We apply specialized heat treating cycles to every project on our production floor.



For Orders and Pricing:  
Contact MuShield today for more information

[ 888.669.3549 ]

The Mushield Company, 9 Ricker Avenue, Londonderry, NH 03053 | Toll Free: 888.669.3539 | [info@MuShield.com](mailto:info@MuShield.com)  
[MuShield.com](http://MuShield.com) | [MuMetal.com](http://MuMetal.com) | [HydroformingManufacturing.com](http://HydroformingManufacturing.com) | [CryoPermShielding.com](http://CryoPermShielding.com)







# CONNECTICUT TOOLING & MACHINING ASSOCIATION

**Dee Babkirk**, CTMA Executive Director  
For more info contact: [director@ct-ntma.org](mailto:director@ct-ntma.org)  
Learn more at: [www.ct-ntma.org](http://www.ct-ntma.org)

The Executive Suites  
440 North Main Street  
Bristol, CT 06010  
P: 860.604.8963 F: 860.254.7191



**UNITED**  
**CENTERLESS GRINDING & THREAD ROLLING**

25 Rosenthal Street ■ East Hartford, CT 06108  
phone: (860) 289-2987 ■ fax: (860) 289-3142  
web: [www.unitedcgr.com](http://www.unitedcgr.com)  
e-mail: [njgoulet@unitedcgr.com](mailto:njgoulet@unitedcgr.com)



Precision Metal Stamping      CNC Machining  
Precision Assembly              Secondary Operations

*The best place to start your precision metal part*

Phone: 860 -349-1756 | [www.hobsonmotzer.com](http://www.hobsonmotzer.com)

ISO 9001:2015 CERTIFIED    IATF 16949 CERTIFIED



ISO: 9001:15

**Precision Sheet Metal Fabrication**  
Capacity to 1/4" Mild & Stainless Steel, Al., Lexan, and more!  
*3D Design Help*  
*3D Design Help*

Our 40+ yr. exp. assures your project the BEST that our Engineering Dept. can offer.  
*From Prototype to Production:*  
**We do it all!**



7 Brookfield Street  
Worcester, Ma. 01605  
[sales@HowardProducts.biz](mailto:sales@HowardProducts.biz)  
508-757-2440 Fax: 508-831-9990



## Teflon™ coatings

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](http://www.donwell.com)  
For FREE Coating Sample



Licensed Industrial Applicator  
Chemours

Use of the Teflon™ mark requires a direct trademark license. Customers and distributors of Donwell can only resell LICENSEE's product as licensed with the Teflon™ mark.

- ABRASION RESISTANT
- NONSTICK
- LOW FRICTION
- ELECTRICAL
- CHEMICAL RESISTANT
- NONWETTING





Name: **Brian Beland**  
Title: **President**  
Company: **KV Tooling, LLC**  
Website: **[www.kvtooling.com](http://www.kvtooling.com)**

# Industry 5.0

Five Questions with Manufacturing Minds

***Give us the elevator pitch about your company. What's your primary focus? Who is your ideal customer?***

**BELAND:** KV Tooling, LLC is a small tool manufacturing and reconditioning company in business in Augusta, Maine for 17 years.

We are dedicated to delivering the best cutting tool design, manufacture and reconditioning services to small - medium sized metalworking and manufacturing businesses around New England and beyond. Our ideal customer has contracts with military, aerospace, firearms, and power generation sectors and utilize high-end CNC machines in production of complex components. Our cutting tools deliver consistent, high quality results at very competitive rates.



***What differentiates your company within the industry? What do you pride yourselves on?***

**BELAND:** We are a forward-thinking customer service oriented company. We pride ourselves with being experts at tool design and process improvement through direct consultation and collaboration with engineers, buyers, tool crib personnel, and programmers. We deliver award-winning designs (ANCA 2019 Tool of the Year Competition Winner) to enhance your company's productivity and can find solutions to most machining challenges. We always deliver on our promises.

***What are the main challenges your business is faced with? How do you tackle these challenges, and what kind of advice would you give to others in a similar position?***

**BELAND:** The constant challenges are keeping up with changing technology and training, and finding and retaining highly skilled labor. Over the past 5 years we have invested mid-6 figures in our equipment and in new and upgraded technology to allow us to run more efficiently and provide even higher accuracies with our tooling. I have found that, in business, if you're not growing and investing, you're going backwards. Others will find those niches that you will miss out on due to lack of investment in new tech. I serve on our local trade school Manufacturing Technology advisory board in order to support the education of the next generation of machinists.

***What's your outlook for the industry as we look at the next 5-10 years here? Any insights you see changing the way we look at things and run our facilities?***

**BELAND:** The next 5-10 years will be a bit of a correction period due to the changes in the way we manufacture and sell products. 3D printing and robotics will disrupt some manufacturing sectors. The good news is, that where some industries are going away, others will emerge, and some will grow. Medical manufacturing will always be strong as boomers enter retirement age. Military and energy will continue to evolve and grow. Aerospace will shake off this stagnant period and bounce back with a vengeance as people emerge from COVID-19 pandemic lockdowns

and begin to travel again. Our facilities will become “smarter” and more energy-efficient as the IIOT (Industrial Internet Of Things) becomes more prevalent in our world.

***Outside of providing for the good of the company and the workers that make things happen, what kind of good are you guys doing out in your community?***

**BELAND:** Here at KV Tooling, LLC we believe in giving back to our community. All of our redeemable cans go to support the local food bank and homeless shelter. We participate in a local recycling effort to reduce waste. We help sponsor several state and local charities and youth sports leagues. We appreciate the people in our community that serve to protect our liberties and assist the less fortunate among us. We believe in supporting local firefighters, healthcare workers, and law enforcement now and always.

HAVE A STORY IDEA?  
LIKE WHAT YOU'RE READING?

*We would like to hear it.*

*Contact us to give us your input or feedback. We're always looking for new stories to discuss.*

**chris@thegatewaymag.com**

or

**Call: (877) 463-4020**

• Tungsten Carbide • EDM Wire • Inconel • Titanium • Ferrous • Nonferrous

*Specializing in Recycling Industrial Scrap*

# HARDING

## METALS, INC

**Creating recycling solutions for any type of business**

- Utilizing our easy to deal with staff
- With our clean and uniform equipment



**Handling all types of metals, in any form**

- From mild steel to high-temp aerospace alloys
- Chips, punchings, turnings, borings, skeletons, inserts, bits. **You produce it; we handle it.**

**Call or email us about Recycling and Reconditioning your Cutting Fluids**

<b>1-800-370-JUNK (5865)</b>	<b>info@hardingmetals.com</b>
<b>42 Harding Dr. Northwood, NH 03261</b>	<b>www.hardingmetals.com</b>

*Big enough to get things done, small enough to do them efficiently.*

AIRBORNE PARTICULATES, PATHOGENS/VIRUS & ODOR MITIGATION

# AIR TO AIR HEAT EXCHANGERS

## SOLUTIONS FOR HEALTHIER SHOPS



**FRESH AIR  
VERSE  
BREATHING**

**.HAZE  
.FUMES  
.SMOKE  
.TOXINS**



**CALL NOW : 800-622-8078    WWW.VENTUSA.COM**



*Increasing fresh air exchange in all buildings is highly recommended "AND THE RIGHT THING TO DO" more than ever to lessen employee exposure to toxins , odors, viruses, airborne pollutants.*

**INCREASING THE SUPPLY OF FRESH AIR IS A PROACTIVE APPROACH FOR HEALTH**

**HELPING YOUR VALUABLE EMPLOYEE'S  
HEALTH WITH CONSTANT SUPPLY OF**

***FRESH AIR***

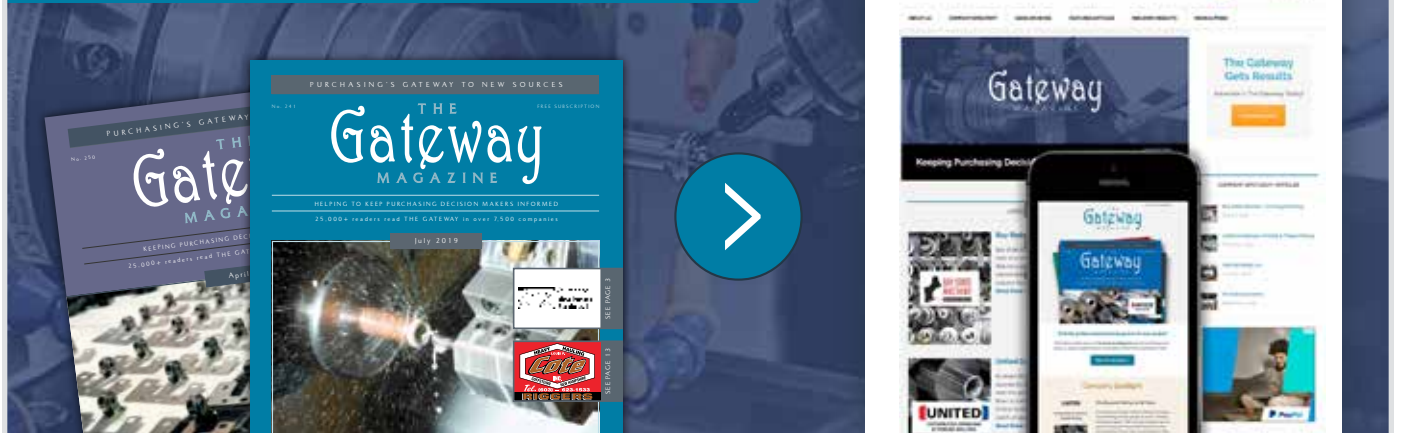
**800-622-8078 • info@ventusa.com**





# HAVE YOU SEEN OUR ONLINE DIRECTORY?

*Signup for the Gateway Magazine newsletter and don't forget to share your showcase piece!*



MANUFACTURING  
**BOLD**  
MARKETING SUCCESS

## 10+ Years of Results Driven Sales Leads and Acquisitions

We're defined by who we are. Hardworking. Experts in both traditional and digital worlds. Lovers of great creative. Our workboots are never clean. Let's push the bounds of manufacturing and keep the shop floor bustling with innovation.

**603.436.2065**



[BOLDWERKS.COM](http://BOLDWERKS.COM)



**BOLDWERKS**

871 Islington Street | Suite L5 | Portsmouth, NH 03801

## 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](http://www.innovative-machine.com)

[tmhaskins@innovative-machine.com](mailto:tmhaskins@innovative-machine.com)

## Quality Turned Machined Parts New Hampshire Machine Products, Inc.

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

J-1276A



J-1270A

**QUALITY TO CLOSE TOLERANCES:** Utilizing single spindle automatic screw machines from 1/32" through 2" capacity, as well as CNC 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 raw material traceability.

**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](http://www.newhampshiremachineproducts.com)

E-Mail: [barbara@newhampshiremachineproducts.com](mailto:barbara@newhampshiremachineproducts.com)

## Wire & Sinker EDM Services

- ⚙️ 5 Axis Wire EDM
- ⚙️ Orbiting Sinker EDM

Tel: 207-743-7273

Fax: 207-743-7269

**NORTHEAST TOOL & DIE CO., Inc.**

PO Box 28

16 Aldrich Ave.

Norway, ME 04268

[www.northeasttool.com](http://www.northeasttool.com)



- ⚙️ Metal Stampings
- ⚙️ Precision Machining
- ⚙️ Prototypes
- ⚙️ Fixture Tooling
- ⚙️ Compound Dies
- ⚙️ Progressive Dies
- ⚙️ Secondary Dies
- ⚙️ Injection Molds

Quality Tooling Solutions since 1992



HENKEL ADHESIVE TECHNOLOGIES

Recently announced that they have joined sustainable label consortium CELAB. Henkel, a leading supplier of high-impact solutions in adhesives, sealants and functional coatings, has joined the global consortium toward a Circular Economy for Labels (CELAB). The consortium is dedicated to creating a more sustainable self-adhesive labeling industry. The organization brings together companies across the matrix and liner industry value chain, working together to address the wide variance in production processes and recycling capability in different markets.

With CELAB, Henkel joins other leading companies to facilitate collaboration at a global level, foster regional initiatives and find and encourage the universal adoption of industry best practices.

“In order to truly rethink packaging and create a viable circular economy, we must all work together across the entire value chain,” said Brian Lawrence, Business

Development Director at Henkel. “This is why we became one of the first members of CELAB and are looking forward to working side-by-side with self-adhesive label manufacturers to align and engage our global resources.”

CELAB will work to increase education and focus on regional options to promote material recycling for all components to improve the sustainability of products.

“A globally-focused consortium to develop recycling solutions was needed,” said Paul Nathanson, a Senior Principal at Bracewell LLP and spokesperson for CELAB. “Brands are eager to communicate their commitment to sustainability in response to consumer demands to reduce their carbon footprint. With increased recycling capability gradually emerging from suppliers, producers, waste management, chemical recyclers and others, we see a tremendous opportunity to facilitate collaboration with partners up and down our industry’s value chain.”

**Visit [www.henkel.com](http://www.henkel.com) for further information.**

WINSLOW AUTOMATICS

New Britain, CT, has and continues to be a 4th generation Family business since 1958. It’s beginnings as an aircraft parts manufacturer, has helped them evolve over the years to be a diversified supplier of Aircraft, Commercial, Medical, Defense and service industries around the world. We have expanded our capabilities to include 4 axis Mill Turning, 5 axis milling, and Wire EDM. Our Aerospace, Defense and Medical work has opened up doors to many new opportunities. We welcome any new projects that are difficult to machine or are tight tolerances. We welcome the difficult parts to machine and look forward to solving companies toughest challenges.

**For more information visit: [www.winslowautomatics.com](http://www.winslowautomatics.com).**

Federal Firearms Lic  
# 6-06-009-07-7G-03042

**CT LASER**  
& ENGRAVING

**YOUR ONE STOP SHOP  
FOR ALL YOUR PART MARKING NEEDS**

203-265-9366 | [sales@ctlaserengraving.com](mailto:sales@ctlaserengraving.com)  
[www.ctlaserengraving.com](http://www.ctlaserengraving.com)



# HEAT TREATING

Vacuum High Pressure Quench

Non - Ferrous Heat Treat

Austempering

Marquenching

Carburizing

Nitrogen Tempering

Solution Heat Treating

Water Quenching

## MATERIALS

High Speed Steels

Alloy Steels

Tool Steels

Stainless Steel

Aluminum

Plastics

## OTHER SERVICES

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



**HARDLINE**  
HEAT TREATING, INC.

Consistent On Time Delivery  
Pickup & Delivery Available  
Member MTI / ASM

134 Ashland Ave. Southbridge, MA 01550

[www.hardlineheattreating.com](http://www.hardlineheattreating.com)

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

7 & 9 Electronics Ave Danvers, MA 01923

## PROCESS

- ▶ 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

## SERVICES

- 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](http://www.tdfmetalfinishing.com) Email: [info@tdfmetalfinishing.com](mailto:info@tdfmetalfinishing.com)

## WHY HACKERS LOVE MANUFACTURERS AND HOW TO STOP THEM

THE  
Gateway  
MAGAZINE

THE  
**Gateway**  
MAGAZINE

FOLLOW US ON  
SOCIAL MEDIA

*Support your partners and  
join us us on social media.  
Make sure you share your  
features online and  
increase your exposure.*





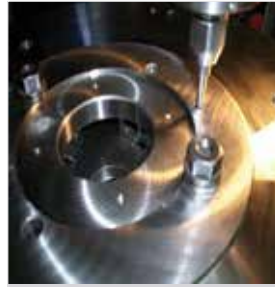
**Spur & Worm Gears  
Internal / External Splines  
Broaching, Hobbing, Shaping**



**JoVal Machine Company, Inc.**

515 Main Street Yalesville, CT 06492  
Tel (203) 284-0082 Fax (203) 284-9605

[www.jovalmachine.com](http://www.jovalmachine.com)



*PRECISION MACHINING  
- SINCE 1963 -*

**- Precision Machining -  
- Toolmaking -  
- Jig Grinding Service -  
CLASSIC JIG GRINDING**

[jiggrind@snet.net](mailto:jiggrind@snet.net)  
[classicjiggrinding.com](http://classicjiggrinding.com)  
Ph (860) 870-4900  
Fax (860)870-1900



Contract and prototype manufacturing of precision screw  
machined parts for volume production

217 Harrison Rd.  
Bridgton, ME 04009

[www.merrimackmfg.com](http://www.merrimackmfg.com)

207-647-3566  
[info@merrimackmfg.com](mailto:info@merrimackmfg.com)

**MINI-BROACH MACHINE CO., INC.**

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

[info@minibroach.com](mailto:info@minibroach.com)  
Tel: (978) 386-7959  
Fax: (978) 386-7123



**Rush Broaching Services Available!**

**Complete Bearing &  
Industrial Supply Solutions**



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



[www.qpgllc.com](http://www.qpgllc.com)

1-866-868-9574



**PAUWAY CORP.** Accredited  
*Nadcap*<sup>™</sup>  
**THINK OF THE FINISH BEFORE YOU START!**

Aerospace & Defense Painting • C.A.R.C. Coating Specialists  
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

866-247-4062  
63 North Cherry Street  
Wallingford, CT 06492

AS9100 & ISO 9001 Certified  
[www.pauwaycorp.com](http://www.pauwaycorp.com)

**SEEING YOUR  
COMPETITOR'S ADS  
IN THE GATEWAY?**

THE  
**Gateway**  
MAGAZINE

**So are your  
clients and  
prospective  
buyers.**

[INFO@THEGATEWAYMAG.COM](mailto:INFO@THEGATEWAYMAG.COM)  
OR (877) 463-4020

**GET STARTED**

**DYNAMIC BALANCING**



*Industrial, Medical & Commercial applications from one piece to large production runs.*

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-spintech.com](http://www.ne-spintech.com)

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

Companies that use  
WD-40....

Du-Lite's RG-55 cost less, last longer and protects parts from corrosion for up to 18 months when stored indoors.

ASK FOR FREE SAMPLES  
CALL 860-347-2505

OR EMAIL: [dulite@sbcglobal.net](mailto:dulite@sbcglobal.net)  
[WWW.DU-LITE.COM](http://WWW.DU-LITE.COM)

**WANTED OLD GAS FORK LIFTS**



We Buy Old Forklifts for Parts. Gas or Electric, Large or Small, Running or Not.

We pay reasonable prices.  
Call Walt 860-508-9164  
Will Pick Up and Pay Cash

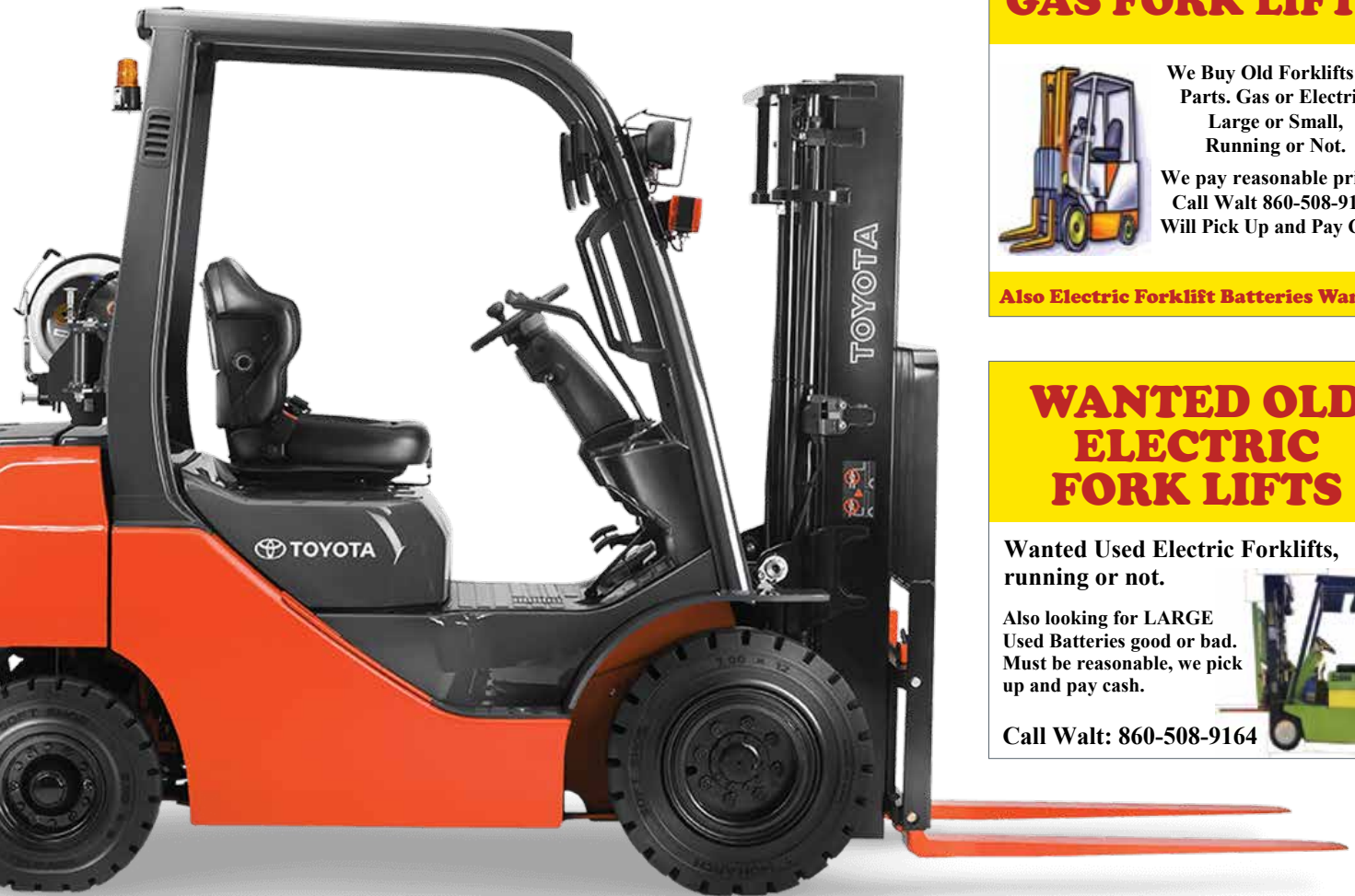
**Also Electric Forklift Batteries Wanted**

**WANTED OLD ELECTRIC FORK LIFTS**

Wanted Used Electric Forklifts, running or not.

Also looking for LARGE Used Batteries good or bad. Must be reasonable, we pick up and pay cash.

Call Walt: 860-508-9164





# HIGH PERFORMANCE ALLOY SPECIALIST



**NICKEL  
COBALT  
STAINLESS STEEL  
ALUMINUM ALLOY  
ALUMINUM EXTRUSIONS**

**WATERJET CUTTING  
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  
sales@aalloys.com www.aalloys.com



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

## Bodycote

- 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](http://www.bodycote.com) for more information

BERLIN Connecticut    SOUTH WINDSOR Connecticut    IPSWICH Massachusetts    WORCESTER Massachusetts    LACONIA New Hampshire    CINCINNATI Ohio

### 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
- Tool steels

THE  
**Gateway**  
MAGAZINE

ENJOYED THIS  
MONTH'S FEATURES?

Read these and many more  
on our website!

[WWW.THEGATEWAYMAG.COM](http://WWW.THEGATEWAYMAG.COM)

GO NOW!



PROMOTE YOUR COMPANY  
IN THE GATEWAY MAGAZINE

---

25,000+ readers read THE GATEWAY in over 7,500 companies

---

**info@thegatewaymag.com or call: (877) 463-4020**



THE  
**Gateway**  
MAGAZINE



871 Islington Street, B105 | Portsmouth, NH 03801 | Toll Free: 877.463.4020 | [info@thegatewaymag.com](mailto:info@thegatewaymag.com)

[www.TheGatewayMag.com](http://www.TheGatewayMag.com)