-		- 0				_	ROUTING
AST.	1 2		1 40	12.9	@ dr	2	Mr. Soc
AÓ	$\mathbb{N}_{\mathbb{Z}}$, W	a u	10.	Garger Stiger
411	Helping to Ke	ep Purchasii	ng Decision Mo	ikers Infor	med 2	4	Predicates
 	25,000+ people SUBSCRIPTION		ULY 2016	_		₩₩	Color to





Newington, Connecticut

Address changes?
Please send changes
gatewaybill@yahoo.com

Paramon Set programmen Set 128 (DHV, maille)



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 Ilc 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: imcnulty@vortexmetal.com





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





MONWETTING



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

Black Oxide

Bright Dip

Cadmium

Copper

Gold

Bright Nickel

Caustic Etching

Electroless Nickel

Chemical Film

Electropolish

Passivate

Pickling

Silver

Zinc

Rhodium

Phosphate

Brass

Black Passivate

Bright & Matte Tin

Fax: 978-223-4297

Web: www.tdfmetalfinishing.com

Email: info@tdfmetalfinishing.com







LYNN WELDING

Newington, CT

ynn Welding started in 1979 by Jim Inglis. He started out welding brackets out of his home shop and owned just one Tig welding machine. Jim's brother, Joe Inglis, and a friend, Robert Schoenberger, joined Jim in 1985 and began diversifying into the precision machining market using their machining experience.

Jan (John) Kania, President and Owner, bought Lynn Welding in 2007 when Jim and Joe retired. Jan had over 30 years of manufacturing experience but saw something special in Lynn Welding that he liked. After purchasing the company, he sold the very successful manufacturing company he owned so that he could put all of his focus on growing his new company. His core initiatives included: Capital reinvestment, asset utilization, continuous improvement, customer satisfaction, innovation and many other components of operational excellence.

Their ability to weld, machine and fabricate entire assemblies is what makes Lynn Welding truly unique. Lynn Welding holds an extensive list of qualifications from a broad cross section of customers and is extremely well respected within the aerospace community when it comes to producing X-RAY quality welds

Welding Solutions

Strengths in welding are focused around 3 core functions: Resistance Welding (spot welding, seam welding, and stitch welding) Tig/Mig welding, and Brazing. They are NADCAP accredited welders for each of these 3 core functions

Resistance Welding

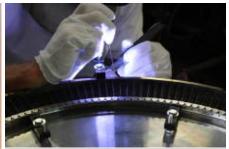
Lynn Welding provides resistance welding services to many of its customers. They utilize



Jan (John) Kania, President and Owner, with son Darius Kania, Sales Mgr.



A10 Thunderbolt II after taking on fuel over Afghanistan.



Fusion welding in process.

Today Lynn Welding is one of the most well known names when it comes to welding and machining for the Aerospace, Defense, Nuclear, Industrial, and Medical industries What started as a small one man welding shop has turned into a company that is considered the ultimate solution when complex welding and machining assignments arise.



The Lynn Welding team.

SCIAKY welders which are considered the best in the world for maintaining the strictest tolerances required by the aerospace industry. SCIAKY welders are capable of welding aluminum, stainless steel, titanium, Inconel and most other metals while maintaining the proper conditions to ensure a quality weld.

Their resistance welding operations are closely monitored by

Continued on page 7





Machining Solutions

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

Certificate #3929.01

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

Long Vertical Capability Parts Cleaning Straightening

Brazing

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 **Solution Heat Treating**



OTHER SERVICES

MATERIALS

High Speed Steels

Alloy Steels

Tool Steels

Stainless Steel

Aluminum

Plastics

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



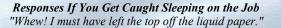
VISA

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







GTAW welding (Gas Tungsten Arc Welding) of a jet engine case assembly.

their internal quality department which ensures that all of the resistance welding functions fall within the guidelines set forth by NADCAP(National Aerospace and Defense Contractors Accreditation Program) and AS 9100.

Fusion Welding

Lynn Welding's reputation really comes to light when you see the weld bead produced by one of their certified welders. Gas Tungsten Arc Welding (GTAW) is one of their specialties. Experienced welders follow all of the NADCAP requirements needed to ensure a quality weld. Whether welding aluminum or stainless steel, rest assured that the end result will be well within your tolerances and the weld will be of X-ray quality. Because Lynn Welding is NADCAP accredited they must follow a very defined and strict set of guidelines when welding customer's components. These guidelines ensure that qualified welders are tested regularly in all metal groups to ensure that their welding skills remain intact.



Lynn Welding's resistance welding department.



Resistance spot welding of a combustion liner.

Torch Brazing

Lynn Welding is NADCAP accredited for brazing. Certified brazers regularly join dissimilar materials to X-ray standards while maintaining blueprint and customer requirements. Lynn Welding's brazing department carries most silver and nickel based filler alloys in stock to ensure a quick turnaround. Lynn Welding also performs soldering services for electrical applications in the aerospace industry.

Machining Solutions Precision CNC Machining

They offer a state of the art CNC machining and tool making department capable of 4-axis milling, wire EDM and CNC turning capabilities. They have a full time staff of machinists with decades of experience in programming and operating CNC equipment as well as operating manual equipment. Their machinists are capable of running highly complex and dimensionally critical parts from most standard and exotic materials.



Local youth group learning about manufacturing at Lynn Welding.



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
- Teflon
- Peek
- Lexan
- MechanicalsPolyethylene
- Nylon U

 CNC Routing
- ♦ Precision Saw Cutting
- ♦ Plastic Welding
- ♦ Fabrication
- Machining



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

sales@plasticsupply.com Visa or MC accepted Quick Turnaround



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

Visit us at www.sharplesdie.com

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





5 Axis machining fixture designed and built by Lynn Welding.

Precision Wire EDM Machining

Lynn Welding has been performing wire EDM services in Connecticut for many of its customers since 2009. Today Lynn Welding operates three wire EDM machines.

Tolerances are typically .0005".

Machines are set up to run both .004" and .010" diameter wire. Lynn Welding can wire EDM internal and external splines, gears, square holes, etc. Many of their welded assemblies are also finish machined using wire EDM's to bring the weldments into tolerance. Lynn Welding also provides accurate wire EDM tapers up to 30 degrees.

Fixtures and Tooling

Lynn Welding has been designing and building welding fixtures for over 30 years. Over time their customers saw the quality in their welding fixtures and asked them to help them with their requirements. Today Lynn Welding builds fixtures for many applications such as work holding, inspecting and testing.

Fabrication Solutions

Their strengths in fabrication are also focused around 3 core functions.

Steel Fabricator in CT

Lynn Welding offers expert welding and precision machining under one roof, using the resources of those two departments to offer fabrication services. They have the ability to form, cut, and bend metal to almost any requirement. Taking a set of prints for an assembly, making all of the components in-house, and then assembling to final completion all under one roof. Lynn Welding fabricates for many industries, and has a broad range of abilities to accept almost any job. They fabricate and assemble weldments ranging from a few



Resistance welding in inert gas chamber.



Duct assembly that was resistance and fusion welded.

pounds to a few thousand pounds, using fabrication tables, jigs and fixtures to construct the most complex assemblies.

Lynn Welding Co. is a NADCAP accredited, LCS approved and AS 9100 certified welding shop specializing in GTAW welding,

resistance welding and brazing. The resistance welding department is a national leader and provides spot and seam welding services for many civil and military aerospace platforms. The GTAW welding department has eight certified welders on staff which allows them to provide a 5-7 day lead time for most jobs. Lynn Welding has an LCS approved laboratory enabling them to expedite lead times and reduce costs on Pratt and Whitney parts.

Lynn Welding is involved with major contracts such as welding replacement parts for the A-10 Thunderbolt, Sikorsky Blackhawk and the General Dynamics F-16. Lynn welding has CWI's (certified welding inspectors) on staff.



75 Rockwell Road Newington, CT, 06111 Tel: 860.430.4057

Fax: 860.667.3040 Website: www.lynnwelding.com





PERFORMANCE ALLOY

AINLESS STEEL ALUMINUM ALLOY ALUMINUM EXTRUSIONS

WATERJET CUTTING EDM CUTTING **MILLING & TURNING** SAWING



Near Net Shape Cutting

Laser Quality Inspection

Finish Machining

Bloomfield, CT 06002 11 Britton Drive Tel: 860-882-0019 or 800-214-0475 Fax: 860-882-0967 sales@aalloys.com www.aalloys.com



ISO 9001:2000 AS 9100B Certified &W LCS APPROVE

PRECISION METAL FABRICATION SPECIALISTS

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

South Hadley, MA 01075 Fax: 413-536-4647

Email: tech.fab@verizon.net www.techfabinc.com

ENGINEERING ASSISTANCE

JIT DELIVERIES

ZERO DEFECT QUALITY

PROTOTYPE TO PRODUCTION

- FINISHING SERVICES
- ♦ CAD/CAM
- DEPENDABLE ON-TIME DELIVERY
- **ACCOUNTABILITY**

Bodycote

ROBOTIC WELDING

WELDING (MIG, ARC, TIG AND SPOT)

Specialists in the thermal processing of components used in aerospace & defense industries

1 West Main Street

Tel: 413-532-9022

 Maintains major accreditations (ISO 9001:2000, AS 9100, Nadcap). and approvals from prime aerospace manufacturers and their supply chains Nadcap



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

BERLIN SOUTH WINDSOR Connecticut

Connecticut

IPSWICH Massachusetts WORCESTER

New Hampshire

CINCINNATI

Processes

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

Materials

- Aluminum
- High temp alloys
- lool steels





INLINE PART MARKING FOR INDUSTRIAL TRACEABILITY

Easy Integration into Automated Production Lines & Custom-Engineered Solutions

- » Integrated 16 bus card
- » Eliminates need for vision identification/control equipment
- » Multiple mounting options for easy integration
- » IDI Track detects missed parts or marks and predicts product outages - eliminates the need for additional vision equipment and significantly reduces downtime
- » IDI Mark ensures consistent marks, even on uneven surfaces
- » User-friendly software; no PC required
- » Dot peen marking of text, logos, data matrix codes, barcodes, date codes, QR codes, serial numbers and more







17/A 13/R/A MARKING SYSTEMS

Tungsten Carbide

www.DapraMarking.com 🤷 (800) 442-6275

EDM Wire

 Inconel Titanium

Nonferrous

Specializing in Recycling Industrial Scrap

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, nserts, bits. You produce it; we handle it.

Call or email us about Recycling and Reconditioning your Cutting Fluids

1-800-370-JUNK (5865)

42 Harding Dr. Northwood, NH 03261

info@hardingmetals.com

www.hardingmetals.com

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







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

IATERIALS

- **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



www.accugrind.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! It 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



RIGGING AND **HEAVY HAULING**





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



Industrial Air Filtration

Made in the U.S.A.

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

Wire & Sinker

5 Axis Wire EDM Orbiting Sinker EDM

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

EASTOOL & DIE CO., Inc.

PO Box 28

16 Aldrich Ave.



- Metal Stampings
- Precision Machining
- Prototypes
- ☐ Fixture Tooling
- Compound Dies
- Trogressive Dies
- Secondary Dies
- Tnjection Molds

Quality Tooling Solutions since 1992

Norway, ME 04268

www.northeasttool.com





PRECISION FINISHING





HIGH ENERGY TUMBLING

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

GNGMAGHINING

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

Gear & Spline Specialty for Over 60 Years!



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

Dimensional DEBION WORKS, LLC

711 Shore Drive, Laconia, NH

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



91

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

Quality Turned Machined Parts New Hampshire Machine Products, Inc.

- OUICK TURNAROUND ON OUOTES
- JOBS PRICED COMPETITIVELY
- BROAD RANGE OF MATERIALS

J-1276A





QUALITY TO CLOSE TOLERANCES: Utilizing single spindle automatic scrow machines from 1/32" through 2" capacity, as well as CNC equipment. SUPPORTED BY: A broad-sange 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 proces.

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

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



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

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

PRESS RELEASE

MITEE-BITE PRODUCTS

is the innovator of compact, low-profile edge clamps geared towards improving productivity, capacity and providing solutions for difficult workholding applications.

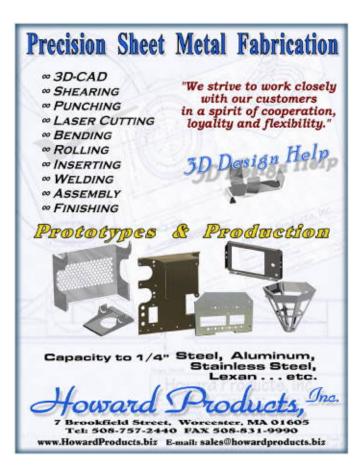
(US & CANADA ONLY) | 800-543-3580

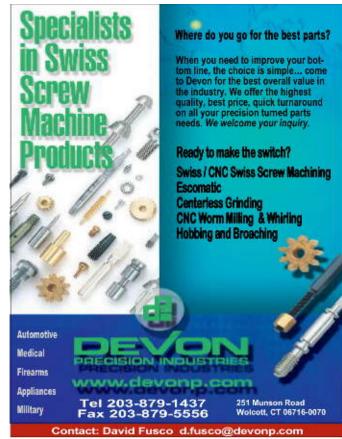
MITEEBITE@MITEEBITE.COM











NEW & USED MACHINERY SERVICES & ACCESSORIES

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





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



FAST, FRIENDLY, KNOWLEDGABLE

HEAT TREATING

- ◆ Heat Treatment
- ◆ Annealing
- Stress Relief
- Hardening
- Small Lots
- Fast Service
- Personalized Service
- Reasonable Prices

WEAR AND STRESS RELIEF WITH

CRYOGENIC PROCESSING

- **◆ Increase Metal Wear Resistance**
- **♦ Non-Discoloring Stress Relief**
- Stabilization

SNOW'S METAL TREATING

Formerly Innovative Tool Sales

81 Holliday Drive Shaftsbury, VT 05262

Tel: 802-442-3866

hardsnow@comcast.net







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 -

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 Fax: (978) 386-7123

Rush Broaching Services Available!



Automatic screw machine and CNC Machined products for your industry

Merrimack Manufacturing Company Inc.

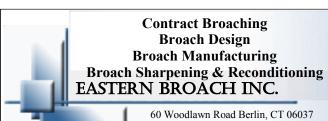
- 217 HARRISON ROAD BRIDGTON, MAINE 04009 TELEPHONE 207.647.3566 • FAX 207.647.3588 mmc6@myfairpoint.net
- * Also available: Inserts for rubber / plastic moldings

(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



Phone: (860) 828-4800 Fax: (860) 828-7632

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

GRINDING SPECIALIS

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

Bay State Machine, LLC



Complete Bearing & **Industrial Supply Solutions**





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









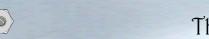


www.qpgllc.com

1-866-868-9574

Meaningful Quotes

- If all teens had a baby sister or brother screaming 24/7, I suspect that teen pregnancy rates would hit an all-time low.
- In the 60s, people took acid to make the world weird. Now the world is really weird and people are taking Prozac to try to make it normal.
 - Why does a slight tax increase cost you two hundred dollars, and a substantial tax cut save you thirty cents?
 - © All of us could take a lesson from the weather. It pays no attention to criticism.
 - Protons have mass? I didn't even know Catholics allowed them membership.
 - © It's good to be open-minded, but not so open that your brain falls out.
 - I had amnesia once or twice. I can't remember.





PRESS RELEASE

TCI Precision Metals Adds Latest Duplex Milling Technology

TCI Precision Metals today announced the installation of its newest high tech milling machine. The new Amada, THV430 represents the pinnacle of technology and precision in duplex milling. The THV430 provides a 4X increase in throughput over traditional milling machines and will help TCI shorten customer lead time and handle increased demand for its Custom Machine-Ready BlanksTM.

TCI Machine-Ready Blanks are milled in width and length using the THV430's specially designed twin spindle in one setup instead of two. This reduces set up time and increases efficiency. One or more Machine-Ready Blanks can be produced together, up to the machines overall dimensional capacity of 16.93"W x 16.93"L x 5.91"H. The value is passed to TCI customers through shorter lead-times and competitive pricing. Quality from TCI Precision metals is a given, of course.

"At TCI we continuously refine our equipment and processes to maximize quality and efficiency. As a result, we are able to provide customers with cost effective, high value, Machine-Ready Blanks that can reduce a shop's overall cost by as much as 25% on a given production job," said Ben Belzer, President of TCI Precision Metals.

Custom Machine-Ready Blanks are precision milled to the customer's net specifications and can be furnished as close as +/-.0005" dimensionally and as close as .0002" in flatness, squareness and parallelism. Each Machine-Ready Blank is deburred, cleaned and vacuum packaged – ready to go directly from receiving into CNC machining centers. Machine-Ready Blanks eliminate material prep, reduce set up time, part movement, scrap and wear and tear on machine tool inserts and cutters used to square material in process.

Founded in 1956, TCI is a third-generation family-owned value-add wholesale plate and sheet distributor, producing precision Machine-Ready Blanks from aluminum, stainless steel and other alloys. Direct-to-mill with Alcoa, Kaiser and Hulamin Aluminum, including 6061, 2024 or 7075 aluminum plate and sheet, stainless steel plate and several other alloys, TCI stocks over 500,000 lbs. of material for quick turn-around on customer requirements. TCI serves the needs of the aerospace, defense, energy, industrial equipment, food packaging, semiconductor and many other industries.

For more information, visit: http://tciprecision.com or call: 800-234-5613

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



P860.289.8209 F860.289.2961

Aerospace • Medical • Industrial • Motorsports East Hartford, CT

TURNING • SWISS SCREW MACHINING MILLING • ASSEMBLY

www.horstengineering.com



p860.528.1515 p860.289.2961

ROLL THREADING • ROLL KNURLING CENTERLESS GRINDING

www.threadrolling.com NIMA





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

A 'Can Do' Attitude Since 1912

METAL STAMPINGS

PRECISION COINING

PROGRESSIVE DIES

LASER WELDING

ASSEMBLY

FINISHING

PRECISION FORM GRINDING AND THREAD ROLLING SPECIALIST



Unitedcenterlessgrinding.com (860) 289-2987



25 Rosenthal Street East Hartford, CT 06108 fax: (860) 289-3142





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





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



Want to tell New England what your company does?

We are always looking for companies to showcase in Spotlight Feature stories.

If you have a product, or service, made, used or performed in New England, we're interested in telling your story to our NE readers.

Whether you are a small or large company, makes no difference. This is an open opportunity for any manufacturing or service company that uses or is involved in metal or plastics applications in NE.

You DO NOT need to be an advertiser with us and we never call you to sell anything.

It is FREE!! No Strings Attached! Don't want to do a story? We also publish press releases for free.

Request details at gatewaybill@yahoo.com or call Bill at The Gateway 603-755-9232





PRESS RELEASE

Dapra Opens Milling Tech Center in Rockford, IL

New State-of-the-Art Facility is Designed for Training, Testing and Applications Development Using Company's Indexable Milling Tools

Dapra Corporation – a proud USA manufacturer of high-performance indexable milling tools and supplier of direct part marking solutions – has announced the opening of a new Midwest Tech Center site for customer training and testing.

For many years, Dapra has provided practical training to ensure that customers are getting the most out of their tools and milling processes. This centrally located Tech Center in the well-established manufacturing hub of Rockford, IL is a logical evolution of those efforts. It serves as a site for training, prototype testing, turnkey application development and educational opportunities – all with the goal of helping customers maximize their milling efficiency and increase their productivity.



"We take very seriously the concept of being a total 'solutions' provider," said Mike Bitner, Dapra's Vice President of Sales and Product Management. "Selling the tool is only one small step in a process that includes process evaluation, tool and insert grade/geometry selection, operating optimization, troubleshooting and productivity enhancement. We believe that education on the process – not just on our product – is critical to our customers' success."

The new Tech Center is intended to provide a combination of both theoretical and practical training, with a 30-horsepower, 12,000 RPM Haas

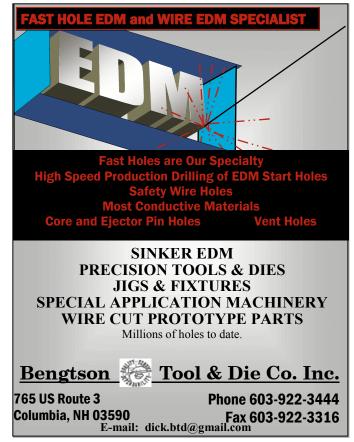
VM-2 machine tool on the classroom floor for hands -on demonstrations. This mold/die machine is well-suited for complex 3-dimensional surfacing, as well as typical 2D profiling and face milling. All training classes cover many practical examples, with the entire class exploring insert grade and geometry selection, ideal operating parameters, setup and programming tips and more. Dapra's direct part marking capabilities are also available for demonstration.

Information on the facility and how to attend a milling training class are available at http://dapra.com/techcenter.

For more information, please contact:

Mike Bitner – Vice President, Sales and Product Management

Dapra Corporation Phone: (860) 616-1172 mbitner@dapra.com



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-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

ROLLING

East Coast Thread Rolling

Threading **SEMS**

Assembly



Knurling **Forming**

Phone 203-441-6944 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.

JOB SHOP

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: gatewaybill@yahoo.com and owner will contact you.

Uncle Willy's Funny Bone Gateway Humor

IT IS NOT MY JOB!

This is a story about 4 workers named ANYBODY, EVERY BODY, SOMEBODY and NOBODY. There was a very important job that needed to be done and EVERYBODY was sure that SOMEBODY would

ANYBODY could have done it, but NOBODY did it. SOMEBODY got angry about that, because it was EVERYBODY'S job. EVERYBODY thought ANYBODY could do it, but NOBODY realized that EVERYBODY wouldn't do it.

It ended up that EVERYBODY blamed SOMEBODY when NOBODY did what ANYBODY could have done!

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: gatewaybill@yahoo.com. Owner will contact you.

The Gateway Magazine

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.

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

Tel or Fax: 603-755-9232 E-mail: gatewaybill@yahoo.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 gatewaybill@yahoo.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.







17 Park Ave, Hudson, NH 03051

Serving New England 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

Emglo 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

Oil 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 & Teffon 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 63 North Cherry Street Wallingford, CT 06492

www.pauwaycorp.com



PLATING & FINISHING

PROCESSES

- Black Oxide
- **SST Passivation**
- Nickel Plating Electroless Nickel Plate
- Manganese Phosphate
- Anodizing
- Black, Clear Chemical Brightening
- Zinc Phosphate
- Stripping
- Ultrasonic Cleaning
- Polishing
- Tumbling
- Buffing
- Sandblasting

ADVANTAGES

- Up to 60" long.
- Rack or Barrel
- One Stop Shopping
- Quick Turnaround
- Economical
- World-Class Capability





Smith&Wesson' Specialty Services

2100 Roosevelt Ave. Springfield, MA 01104 www.smith-wesson.com

Also offering: Forgings & Heat Treating

Tel:413-747-3297 Fax:413-747-3423 Iflatley@smith-wesson.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 mak-



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

CNC Turn/Milling





WaterJet Cutting





248 Sheep Davis Road - Concord, NH 03301 Ph:(603)224-4872 - Fax: (603)224-5927 E-Mail: Info@hydrocam.com www.hydrocam.com

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

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**

106 Finnell Drive. Ste 24 Weymouth, MA 02188

Tel: 781-331-4300 Fax: 781-331-4800

www.rsredco.com

email: sales@rsredco.com





This road sign posted in 1935





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

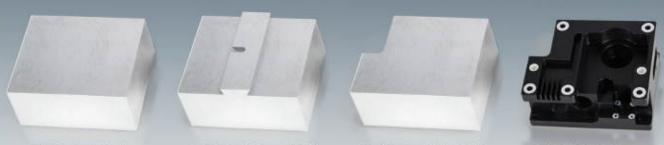






Machine-Ready Solutions™ Rethink Your Workflow - Reduce Cycle Time

SEE US AT IMTS2016 BOOTH #W-1279



Machine-Ready Blanks Made to order from one to thousands, close tolerance and ready to load directly into your CNC machining center.

Machine-Ready Dovetail Blanks Dovetail Blanks include a precision dovetail to match your brand and model of workholding fixture.

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 finish components, including added process sub-assembly and managed inventory.

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