



Your One Stop Source for All Metal Castings

NETCASTER

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Buyers/Designers
of metal castings

buyCASTINGS cuts costs and adds value

ENTER

Foundries

Reduce cost, access new markets

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Suppliers

to foundries

buyCASTINGS expands markets

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TacFab Project



FOPAT Production, Inc. Signs Deal with Two Major Distributors Serving the Investment Casting Industry

FOPAT

FOPAT Production Inc., a spin-off company of buyCASTINGS.com, Inc. is engaged in the development and production of FOam PATtern for the investment casting industry. It will replace wax in the lost-wax process and overcome the limitations of wax such as shrinkage and handling issues.

FOPAT also allows casting designers to expand the design envelope to do complex shapes, large sizes or thin sections. "FOPAT has been producing an advanced, dimensionally accurate, temperature-stable, energy-efficient, cost-effective, and smooth surface foam and the process to produce full scale patterns for the investment casting industry. The minimal pattern shrinkage produces stable patterns while improving handling and avoiding creep issues typically present in wax. Patterns can also be shipped & stored without heat damage or distortion," said Bob Dzugan, President of buyCASTINGS.com, Inc.

On January 14, 2010, buyCASTINGS.com, Inc. a leading provider of metal castings, announced FOPAT Production Inc. has extended their distribution channel through a new agreement with Ransom & Randolph and Buntrock Industries, Inc. The agreement entitles Ransom & Randolph and Buntrock Industries, Inc. the rights to sell and distribute FOPAT. These two companies will utilize their sales force to strengthen FOPAT's presence in the investment casting market.



Ransom & Randolph is located in Maumee, Ohio. They develop, manufacture and supply materials for ceramic shell, solid/block mold, and jewelry investment casting. R&R has served the investment casting industry since World War II and is strongly committed to providing its customers with innovative, high quality products with exceptional technical service and customer support. Steve Lazenby, Vice President & General Manager at R&R stated "Ransom & Randolph has a long history of being the innovator in investment casting binders that provides significant value and technological benefits to the industry. We believe that the FOPAT material fits into our product and technology portfolio very well and we anticipate that the industry will embrace this new pattern technology. Our Sales and Technical teams have been fully trained on the FOPAT material and are excited to help customers realize the benefits of this material. We are looking forward to bring this technology to market". For more information about Ransom & Randolph, visit their website at www.ransom-randolph.com.



Buntrock Industries, Inc. has been selling to the investment casting industry since 1973 and are located in Williamsburg, Virginia and Portland, Oregon. Buntrock Industries, Inc. is pleased to have been selected by FOPAT to assist in marketing this new technology. Kermit Buntrock, President and Owner of Buntrock Industries, Inc. said "Our company has always embraced new innovations in both materials and equipment. We feel we take a holistic approach to the entire investment casting process and see a nice fit for FOPAT in our industry".

Buntrock Industries, Inc. serves only the investment casting industry and is unique in that it offers over 300 items which were specially developed, selected and or designed for use by that industry. These items cover all phases of the investment casting process and include both the process equipment and the materials that are consumed in the process. Buntrock Industries, Inc. takes pride in the uniquely qualified layers of technical support that they offer to their customers and the companies they represent.

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The Economy & Markets

WHAT IN THE WORLD...?

Perspective By Neil Chaudhry

(written February 23, 2010)

What in the world is going on here? It's confusing. **Are** we out of the Great Recession yet? **Is** there a double dip coming in the economy? **Are** we in Inflation or Deflation? **Is** the market going up or down? **Is** Euroland going to survive the debt crisis? **Are** commodity prices going up or down? **Is** the healthcare reform doomed? **If** we are in a global warming then why is there so much snow and cold temperatures all over the world?

Well if life was simple, it wouldn't be fun, would it. Let's look at each of these profound questions carefully and see if we can unravel the mysteries.

Are we out of the Great Recession yet? Yes, for the most part. But, if you are a construction worker or an automotive employee, you may not feel that way. My prediction is that we are entering a strong industrial and manufacturing cycle in the United States after years/decades of growth in the services sector. The Financial Engineering will be replaced by "real world" engineering; restoring our profession from the recent scams in the banking and mortgage industries. The service sector will still continue to create jobs due to the rising prices in the healthcare and education sectors. These two sectors continue to raise prices even in a deflationary, recessionary, or whatever condition we are in. Why doesn't the free market work in these sectors like it does in the manufacturing of cars, electronics, etc.? Almost all manufactured goods have been falling in prices for years and decades. Could it be competition from off shore and cheap labor in China? Unfortunately, we cannot do that in healthcare or education, so we clearly need to come up with a better solution.

Is there a double dip coming in the economy? Maybe, but not likely. There are too many people, programs, and dollars in place that have created a floor in the financial system to cause a debt crisis or commercial real estate meltdown. This will keep us from falling into a double dip. The only thing that could cause a double dip would be some other type of shock. A new war anywhere; new terror strike anywhere; anything unexpected which is not managed properly. Short of that, we are clear sailing ahead!

Are we in Inflation or Deflation? There is far too much debate and hype about the coming inflation due to the mounting debt and way too much government spending. But the reality is that we just busted the credit bubble from consumers and corporations. The government borrowing and spending is only making up part of that credit bubble we were in. So, my prediction is no major inflation cycle or hyper-inflation as some pundits are predicting. There is too much capacity, equipment, excess labor to cause inflation. In fact, we are still closer to a deflationary cycle like Japan was for decades - a country that saves too much and consumes not enough. But, as soon as our economy picks up (which I expect this year), and unemployment comes down, and consumers start spending more normally, we will be out of deflation and back to a normal 2-4% inflation rate.

Is the market going up or down? The stock market is heading higher most likely due to a rebound in industrial production and capital spending by the companies that have been sitting on a lot of cash for some time now. Low interest rates, stable banking and real estate sectors will bring back the confidence. So, barring any major surprises (such as higher taxes or over-regulation or geo-political event) I expect a higher market by year end.

Is the Euroland going to survive the debt crisis? Yes, but with a lot of issues and challenges. Germany is not going to bail out Greece, or Spain, or Portugal, or Ireland without assistance from the IMF, World Bank or from other European powers. The United States may even have to step in and provide some assistance. But, it needs to be done to keep the euro from collapsing and the dollar from sky



rocketing. This is the most ironic thing of all; US financial giants caused the global meltdown in late 2008 and the dollar went up, NOT the euro, NOT the yen, NOT the aussie dollar or any other

free currency. Nor did all the investors head to China, the fastest growing, strongest balance sheet economy - they all fled to US treasuries. This is how strong we are in the world!! In time of crisis, we are the best place to be. As Americans, we do NOT realize how good we have it. Yes, even despite all of our problems and short comings.

Are commodity prices going up or down? Metal prices along with energy and other commodity prices should head lower to flat this year. Yes, even with higher demand which is typical after a recession, we have already seen a big run up in commodities in 2009. So, my prediction is a higher to flat dollar, and thus, lower to flat commodity prices in 2010. Gold and precision metals may be the exception due to the fear of inflation and mounting debt issues with the US and Euroland.

Is the healthcare reform doomed? Yes, at least in the form that we saw proposed in 2009. But some form of reform will be passed. It is the biggest challenge that we face; the rising healthcare costs and the insurance premiums for everyone. This hurts the competitiveness and profitability of every business who is trying to compete in a global marketplace. This hurts the future liability of this country trying to take care of an aging population. This affects every retirement plan of every person! This is huge and must be priority number one of every American. Solution? Focus on cost reduction via waste reduction, automation, technology, and innovation. NOT politics.

If we are in a global warming then why is there so much snow and cold temperatures all over the world? We can all theorize, but please let me know if you have the answer to this one.

The views expressed here are personal, NOT the company's or buyCASTINGS or anyone else at the company. Pls consult your investment advisor or legal council or tax attorney for the appropriate advice for your personal situation.

We like to hear your views too. Please email to Neil:
nchaudhry@buyCASTINGS.com

buyCASTINGS Inc.

YOUR ONE STOP SOURCE FOR ALL METAL CASTINGS



buyCASTINGS is a value-added integrated supplier of custom manufacturing services for metal castings and machined parts. We work with buyers, designers, and engineers to bring them choice, convenience, and competitive costs while offering an unprecedented level of flexibility and precision when finding the right source for your casting job.

Key Services & Expertise

- Casting Design
- Casting Manufacturability
- Casting Process Optimization
- Prototype Metal Castings in All Processes
- Rapid Manufacturing Services
- Fabrication of Prototype Tooling
- Metal and Plastic Prototypes
- Alternate Material Analysis
- Material and Process Optimization
- Program Management
- Nondestructive Testing Consulting
- Design Optimization
- Weight Optimization
- Structural Optimization
- General Manufacturing Assistance
- Digital Dimensional Verification Services
- Reverse Engineering Services

New Advanced Technology in Metal Casting:

- Superior Dimensional Accuracy
- High Quality Surface Finish
- Precision Linear & Geometric Tolerances – “Near Net Shape”
- Thin Wall Sections Achieved to 0.030” to 0.060” ± 0.005 ”
- Improved Casting Integrity with Higher Metal Yields
- Ability to Produce End Products with Little or No Machining
- Capable of Casting Titanium and Superalloys



buyCASTINGS Team:

The Team at buyCASTINGS has worked in all segments of the casting industry and focuses on providing their technical application experience, knowledge, and solutions to get you your metal casting at the highest quality for the best price. The Team is made of the following Project and Program Managers, they are:

1. Bob Dzugan, President – rdzugan@buycastings.com
2. Neil Chaudhry, Chief Operating Officer (COO) – nchaudhry@buycastings.com
3. Dave Rauen, Project Manager – drauen@buycastings.com
4. Toni DiGeronimo, Project Manager & Tech. Support – tonid@buycastings.com
5. Tim Large, Program & Commercialization Manager – tim.large@buycastings.com
6. Nick Kirst, Program Manager – nkirst@buycastings.com
7. Nick Cannell, Program Manager – ncannell@buycastings.com
8. Bart McMannon, Program Manager – bartm@buycastings.com
9. Ralph Pollard, Project Engineer – ralph.pollard@buycastings.com

Please feel free to contact any of the above on your project or application needs!



CALL 1-866-buyCASTINGS(289-2278)

Let buyCASTINGS take the guess work out of your next project!



Members In the News

Kovatch Castings - Precision Investment Castings

Good news for Kovatch Castings in NE Ohio! Kovatch submitted an advanced energy funding proposal last October and was granted an award of \$1 million to help them replace three inefficient ovens with two energy-efficient gas ovens at its foundry. The new ovens are expected to reduce gas consumption by 47 percent. They will also be expanding the building and creating about 45 jobs. Doug Kovatch, President, said his company is contributing \$2 million to the project which is projected to cost \$3 million. "We expect this to have a huge impact on our company," said Kovatch, whose father founded the company on Home Avenue in Akron in 1976 while the Kovatches lived in Parma. "Our sales were \$15 million in 2009, and we project to have sales at \$25 million in five to seven years."

Kovatch Castings has been a stalwart leader in the investment casting industry and Doug Kovatch is the current president of the Investment Casting Institute for the 2009-2010 term.

buyCASTINGS.com has purchased aluminum castings recently from Kovatch, made from FOPAT polyurethane patterns in place of wax. The castings will be used as replacement parts for a military application.

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buyCASTINGS' Manufacturing Company

For more information about Buntrock Industries, Inc., visit their website at www.buntrockindustries.com.

Neil Chaudhry, Chief Operating Officer of buyCASTINGS.com, Inc. explains "Both distributors' network and customer contacts will provide us with the market penetration needed to reach our full sales potential. FOPAT has considered many distribution partners and we are confident that Ransom

& Randolph and Buntrock Industries will help us deploy this engineered product in the investment casting market".

To find out more on FOPAT visit FOPAT's website at www.fopat.com.

Neil Chaudhry
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nchaudhry@buycastings.com

New Additions to the buyCASTINGS.com Team

Gina Baker joined the FOPAT Production Inc. team as Accountant/Bookkeeper part-time. She has over 15 years accounting experience. Most recently, Gina worked in the accounting department at L.M. Berry Co., Dayton, OH. She also held the position of Senior Accountant at Stateline Power Corp., Greenville, OH. Gina has a B.A. in Business Administration from Wittenberg University, Springfield, OH.



Nicholas (Nick) Kirst joined buyCASTINGS.com as Program Manager. He has over 40 years experience in metal castings industry mainly with the production of large ferrous castings. He has served in a variety of positions from Metallurgist to Engineering Manager to Executive Vice President. His employment history included positions at Buckeye Foundry, Hamilton Foundry, Frank Foundries, H.P. Deuser Co., Kingsport Foundry, Erhart Foundry, and Cast-Gab Technologies. He has helped the development of new military armament as well as many projects for the renewable energy industry. He is a past chairman of the Southwest Ohio American Foundrymen's Society and former member of the Research Steering Committee of the Ductile Iron Society and the Iron Castings Research Institute. His education includes a Bachelor of Science in Metallurgical Engineering from the University of Cincinnati.



Christine Ehrstine joined the FOPAT Production Inc. team also part time as Sales & Marketing Assistant. She brings to FOPAT Production Inc., over 25 years experience working in sales and



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FOPAT

Patterns for Investment Casting



Outsource Your Wax Room!

What is FOPAT?

FOPAT is an innovative material designed to help you streamline your production pattern process. This green technology offers Aerospace, Industrial Gas Turbine, Medical, and many other industries the ability to manufacture metal parts that are often difficult, costly, and impossible to produce and/or machine using standard methods.

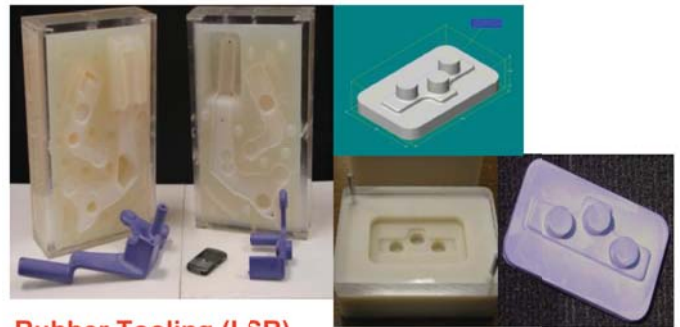


Advantages of FOPAT:

- Superior Dimensional Accuracy
- Superb Temperature Stability
- Durable Patterns for Thin Sections
- Reduced Tooling Costs
- Elimination of Need for Chills
- Energy Efficient & Cost Effective
- Improved Manufacturability & Ergonomics
- Shippable Patterns & Handling-Storage Stability

Low Cost Tooling & Rapid Prototyping:

Alternative and lower cost tooling methods can now be realized in production of patterns with FOPAT. Since FOPAT is injected at very low pressure and utilizes an exothermic process, little to no heat is required to be added or removed from the tooling material allowing less energy intensive and less expensive tools than those traditionally used. FOPAT can be produced from tooling made of epoxy resin, stereolithography (SLA) resin, liquid silicone rubber (LSR), and low cost aluminum tooling just to name a few.



Rubber Tooling (LSR)

CAD to SLA to FOPAT Pattern

Decreased Weight Distribution with FOPAT Sprues & Runners:

FOPAT's rigid structure helps reduce weight and pattern fatigue often caused by heavy wax or RP gating methods. Buoyancy is no issue, since FOPAT is stronger than wax and is about 10 times more dense than polystyrene.



Reduce Core Breakage in Patterns

Because of FOPAT's unique formulation, this material slowly expands into the cavity of the die allowing the pattern creation process to require lower pressure than the wax injection process, therefore reducing core movement and breakage in the die.



Go from this to this



Contact FOPAT Today to Learn How to Lower Your Pattern Production Costs

Sales@FOPAT.com or www.FOPAT.com

FOPAT Production Inc., 2411 Cross Pointe Drive, Miamisburg, OH 45342, Phone: 1-866-289-2278 or Fax: 937-247-9468

NETCASTER Tech Profile

Oakland University & École Polytechnique de Montréal Team Up with Solid Concepts for Formula SAE Competitions

Attracting over 140 schools annually, the Formula SAE (Society of Automotive Engineers) has become world renowned as one of the most prestigious student engineering competitions. The competition requires each student team to use their creativity and engineering intellect to design, fabricate, fund and compete with a small single seat racecar. The Formula cars are then judged as a possible production product in numerous categories including design, innovation, reliability and performance.

In 2009 Solid Concepts Inc. paired with two Formula SAE teams, Oakland University in Rochester, MI and École Polytechnique de Montréal in Montréal, Canada. While the two teams needed to build fundamentally similar racecars, each used Solid Concepts' capabilities in a unique way.

Oakland University enlisted Solid Concepts to help produce their Formula-style car body. Solid Concepts created four CNC molds from tooling board for layup molds. The molds were then used to create the carbon fiber panels that composed Oakland University's car body.

École Polytechnique de Montréal sought out Solid Concepts for the construction of numerous parts for their car's engine and dynamometer. Since eleven of the team's geometries needed to withstand varying degrees of heat and vibrations, Solid Concepts' Project Engineers worked closely with the team to select the ideal process and materials to meet each of the geometry's requirements.



Ultimately, Selective Laser Sintering (SLS) was used to produce the parts, utilizing the exceptional properties of both the glass filled Nylon 12 GF and carbon fiber filled Nytek™ 1200 CF materials. During preliminary tests on a flow bench, the team found that the new intake system made by Solid Concepts' SLS material produced a 15% increase in air flow compared to the old systems.

"This article was provided courtesy of Solid Concepts, providing rapid prototyping, custom manufacturing and production parts to a wide range of industries. Learn more at www.solidconcepts.com"

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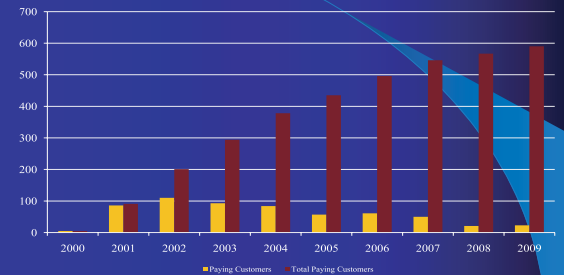


buyCASTINGS by the Numbers

- 914 Foundries Worldwide
- 1970+ Buyers Worldwide
- 527 Suppliers to Foundry Industry
- 100% Focus on the Metal Casting Industry



Growing Customer Base



Continued from Page 4

New Additions to buyCASTINGS.com

marketing administration and customer service. Christine was the Sales Administration Manager at Standard Register Co assisting the sales reps to help achieve their quota goals. She also worked at YSI, Inc. in Sales & Marketing developing a lead management system. She moved on as their Customer Service Leader working with domestic and international customers. Christine has her Associate in Science degree from the University of Cincinnati.

Ralph Pollard joined buyCASTINGS as a CAD Engineer. Ralph brings with him a wealth of knowledge with 23 years experience in design, layout and detail for commercial, industrial, and medical products. He has worked for Covidien where he has three shared patents pending and one individual patent pending for nuclear pharmacy tools. In addition at Covidien, he supervised and completed environmental testing of finished Mallinckrodt Contrast Injectors and Liebel Flarsheim Urology Procedure Table for Chinese export. Ralph has done 3D models, assemblies, and drawings for companies such as Grainger, Home Depot, Johnson Controls, and Lowes. Ralph's education includes an AS Applied Science, Electro-Mechanical Technology degree from Miami University.



FOPAT

What customers are saying...

"It is great talking with you about metal parts projects, you guys seem to know a lot about metal casting options and value differences." OEM service company

"We appreciate your input and assistance on the specifications and how they relate to the metal casting industry." Detroit area contracting company

"Thanks for watching my project the whole way through. We just don't have that kind of time anymore in our daily routines." East coast development company

"We have to make this successful [referring to FOPAT] - We have a lot of issues in wax." Aerospace Foundry

Visit Us at These Upcoming Tradeshows

March 20-23, 2010

AFS CAST EXPO

Orlando, FL

April 24-29, 2010

3D SYSTEMS NORTH AMERICA USERS GROUP

Santa Fe, NM

May 18-20, 2010, Booth #312

SME RAPID & 3D IMAGING EXPO

Anaheim, Ca

June 14-18, 2010

ASME TURBO EXPO

Glasgow, UK

October 10-13, 2010

INVESTMENT CASTING INSTITUTE, 57th ANNUAL TECH EXPO

Dearborn, MI

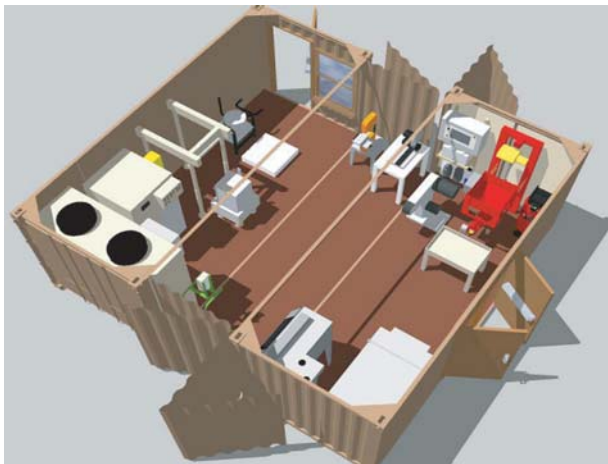
Nov. 29 - Dec. 2, 2010

DEFENSE MANUFACTURING CONFERENCE

Las Vegas, NV

buyCASTINGS is in its 2nd year and is ahead of schedule in the development of a Mobile Tactical Fabrication Unit (TacFab).

Today's warfighter is equipped with advanced weapons along with a wide array of electronic and protective gear. The metal components needed for armament and transportation systems are still the major part of defense and are susceptible to wear and breakage. With troops deployed throughout the world, the supply chain for part delivery to repair this equipment is taxed, but with TacFab, parts can be produced on-demand in the field.



Casting Complex / Engineering Complex

Sand Mixer
Ferrous/Non-Ferrous Melters
Power Supply
Sand Blaster / Belt Grinder
Heat Treat Furnace

Metal Analyzer
Laser Scanner
OCR/Modeling Software
RP Pattern Printer

TacFab is a blending of current reverse engineering/rapid prototyping technologies with traditional foundry practices to quickly deliver net shape cast components to the warfighter.

buyCASTINGS has all TacFab components up and running and has been making test/sample parts. Next steps for the program include the integration of all machinery into shippable containers which would be eventually deployed as the foundry in the field producing parts on-demand!

TacFab Team



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