

NETCASTER

CAST EXPO 2008, SPRING EDITION

ENTER

Buyers/Designers

of metal castings

CESTIVE

buyCASTINGS cuts costs and adds value

ENTER

Foundries

Reduce cost, access new markets

ENTER

Suppliers

to foundries

buyCASTINGS expands markets





Page 2

Growth in the GLOBAL MARKETS

Two New Additions to bC Staff

Page 7

Continued from page 1 bC by the Numbers What Customers Say Trade Shows

Page 8

DLA Selects bC



buyCASTINGS.com on Team to Develop an Army Mobile Foundry

buyCASTINGS.com has teamed with the South Carolina Research Authority (SCRA) to develop, deploy and integrate a fully deployable TacFab, the Tactical Metal Fabrication System. The project team includes SCRA, SeaBox, Ajax Tocco, and Thermo Fisher. Together with the Army's operational Rapid Manufacturing System (RMS), TacFab will support significant and synergistic

The Army's TacFab System ... Saving Time, Saving Money, Saving Lives

capability to support the warfighter in theater with the rapid re-supply of a broad spectrum of cast and machined parts for Army combat and combat support units. It is anticipated that the contract will be awarded to SCRA within the next 60 to 90 days.

TacFab will augment the RMS by providing the means to produce on-demand cast parts to duplicate original parts. This new resource would be deployed to the same locations as RMS so that when a warfighter brings a defective or worn or broken part to RMS and it is determined to be a cast part, the mobile metal casting asset could be immediately tasked to make the required casting. Once made, the casting would then be final machined back in RMS.

Additionally, TacFab will support Army Continental United States (CONUS) RESET activities at various locations with a cast part production capability. The system will have dual-use applications as well, particularly in the U.S. energy sector (e.g., utilities), municipalities (e.g., water handling, treatment, and delivery systems) and in Homeland Security for disaster response support.

We have targeted several military parts for demonstration at the TacFab Demo Facility (TDF) in Dayton, Ohio. As shown below, the steel cast part such as this bracket which goes in the controller for the HumVee Gun Turret. This critical part may arrive at the TacFab deployment site in-theater broken or bent. Since this may be causing the machine gun turret to be down hence the entire weapon system to be inoperable, this is an urgent repair/replacement need in battle. TacFab would reverse engineer this cast steel bracket, cast it and deploy it over night.

Continued on Page 7

HumVee with Gun Turret, The Gun Turret Controller Assembly & the Cast Steel Bracket Part



Growth in the global markets...OR MAYBE NOT

By Neil Chaudhry

buyCASTINGS has doubled revenue three times in the past four years NOT because of the global growth but primarily because of the orders for our foundries right here in the USA! "...WHO WOULD HAVE THOUGHT IT?"

Everyone thought that the internet would allow us take casting orders to China and India and Brazil...NOT REALLY TRUE. Yes, the internet made it easier for someone to shop, search, and procure but ultimately where people buy is where they find value, quality, and human service (like people who can speak in English...simple STUFF like that.)

While the media talks about the FINANCIAL CRISIS, THE CREDIT CRUNCH, THE VOLATILE MARKETS, AND THE MORTGAGE MELT DOWN, our foundries are seeing some of the strongest growth and order stream in 10-years. Yes, we are affected by the crazy metal prices, and the cost of energy going through the roof BUT the demand for castings in the niche markets that we serve is as high as or higher than ever in history. We do almost everything except automotive stuff...we stayed away from that from day one. We choose to work with buyers that understand what's good for them is also good for the supplier - a profitable relationship. We also innovate, create, and add value with respect to quality, cost, and quick turn around and follow through!!

At buyCASTINGS, we do not make any cold calls...the vast majority of our buyers come from word of mouth. Yes, we are one of the dot coms that survived but we have never relied on the internet or on our website alone for leads or business or customers or orders. We realized very early on in the dot com mania that it was NOT about B2B (Business to Business e-commerce, as people used to refer to us) INSTEAD IT WAS ABOUT P2P (PEOPLE TO PEOPLE.) The internet was and is just a tool to make life easier...no different than the fax machine, cell phone, or computer.

SO HERE IS WHAT WE SEE GLOBALLY...

Europeans are coming to the USA -- not just to visit Disney World but to set up manufacturing plants, procurement offices, and buy goods here for export to Euro-land and for sale in the US.

Indians are too busy serving their domestic market foundries there are growing at 20 to 40% or more per year, primarily by serving the domestic demand and not necessarily looking to export to US.

Chinese prices are going up fast -- as the subsidies are going away, currency conversion is not as favorable, AND the prices of metal and energy are much higher.

TWO NEW ADDITIONS TO THE buyCASTINGS STAFF

"Welcome aboard and we look forward to continued growth!!"

Earlier this year, Mr. Stefan Susta joined the buyCASTINGS.com team as the VP of Government

Programs and Commercialization. His focus will be on business development, commercialization of our R&D activities, and managing the government project portfolio. Prior to joining buyCASTINGS.com, Mr. Susta was the Director of Technology Transfer Programs at the Edison Materials Technology Center (EMTEC), and a technical consultant for the Department of



Defense. Mr. Susta graduated from Virginia Tech with undergraduate degrees in Chemical Engineering, Chemistry, and German and received an MBA from Wright State University.

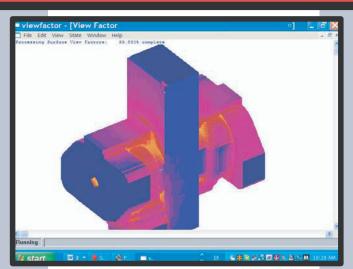
With a solid background in tooling, Mr. Nick Cannell has over 20 years of experience in metal castings, including positions on production, management and R&D sides of the casting industry. He is a member of the Ohio



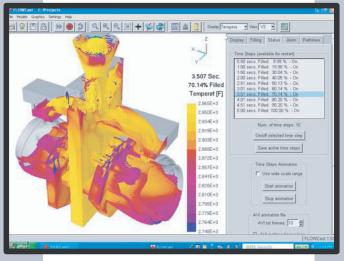
Cast Metals Association, a past Chairman with both the Canton chapter of the American Foundry Society, and the Cleveland Chapter of the North American Die Casting Association. Over the last 12 years, Mr. Cannell has been primarily involved in technology transfer with the casting

industry. He has helped many foundries incorporate new technologies such as rapid prototyping, solidification modeling, and computed tomography reverse engineering/metrology into their everyday operations. He has been instrumental in assisting foundries to expand their capabilities. This has helped these foundries be more competitive and increase their revenues. For example, Laszeray Technology of North Royalton, Ohio attributes 50% of their total business to Mr. Cannell's assistance in securing casting work utilizing the latest rapid prototyping techniques. He takes a "hands-on" approach to projects by visiting foundries and buyers, learning of their needs, and then putting them in contact with companies or organizations that can help them improve and diversify their businesses. Much of this work has been with small foundries, which constitute a large share of the casting industry. With buyCASTINGS, Nick will be in charge of program management, plant start-up, and business development.

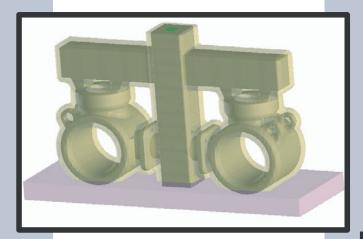
Why software from Finite Solutions?



Radiation View Factor Analysis



CFD-Based Filling Analysis



Automatic Shell Creation

- Largest User Base in the World
- Easiest to Use
- Fastest Results
- Special Features for Investment Casting
- AUTOMATICOptimization
- Lowest Cost to Buy and Use
- Flexible Payment Plans Available
- Multiple Language Versions
- World Wide Support

Visit us at Booth 3746 at AFS Cast Expo May 17-20 in Atlanta



www.finitesolutions.com

Casting simulation for the working foundry

World Equipment & Machine Sales Co.

6111 Cochran Road

Solon, Ohio 44139 U.S.A.

440-519-1745, Fax: 440-519-1748

World Equipment & Machine Sales Company has now completed our move to a new facility with warehouse and office space under one roof. We have more than 100,000 sq ft of warehouse space full of good used foundry equipment. Refurbishing services are also now available.



www.foundry-eqpt.com

<u>Featured Stock Equipment – New Arrivals</u>

- ✓ Disamatic, Model 2110, Core Setter, AMC, SBC (new 1995)
- ✓ Disamatic, Model 2013 MK4-B PLC, Core Setter, AMC, SBC, Spares (new 1988 2 available)
- ✓ SINTO Machines, FMB-III 20" X 26", FBM-I 14" X 19", Both With Handling Lines, 1998
- ✓ Cope and Drag Squeezers, Osborn, BMM, International, Spo, IN STOCK
- ✓ Hunter Line, Model HMP-18C with 3 Level Stacking Turntable, With Spares, 18" X 20" Mold Size
- ✓ Hunter Line, Model HMP-20C with 3 Level Stacking Turntable, Many Spares, 20" X 24" Mold Size
- ✓ Hunter Machines, Models 10, 20, 30, and 32, All Ages with PLC's

Shakeouts and Media Drums, Screens

- ✓ Late Model DIDION RS-200 Shakeouts, (1) Didion MD-100 Media Drum
- ✓ Like New SIMPLCITY Screen, 48" Wide X 10' Long, Double Deck, 10 HP

Sand Mullers

- ✓ Late Model SIMPSON 2F Sand Muller, Rebuilt by Simpson in year 2002
- ✓ B&P 85-B Speedmuller, With HARTLEY Bond Determinator and Bond Transporter, Allen Bradley
- ✓ Simpson Multimull Mullers, Model 215G, 22G, 26G

Induction Furnaces

- ✓ ABB Induction Furnace, 1994, ITM-6000, 1250 Kw, 240 Hz, 3T Steel Shell, Complete
- ✓ Inductotherm Power Trak, 1500 Kw, 200 Hz, (2) 4T Steel Shells, With Spares, 1985
- ✓ Inductotherm Power Trak, 125 Kw, 3000 Hz, 500 Lb. Hydraulic Box, Cooling
- ✓ Inductotherm Power Trak, Used for Holding, 500 Kw, 100 Hz, 4T Steel Shell, Late
- ✓ Pillar MK7, 1500 Kw, 200 Hz, 4T Steel Shell

Miscellaneous

- ✓ LECO C-200 Carbon Determinator, With Spares, Spectro Spectrometers in stock
- ✓ HI VAC 75 HP Industrial Vacuum, Late Model
- ✓ Hydraulic Wedge with Hydraulic Pump and Controls
- ✓ Colossio 800 Ton Die Casting Machines, UBE 800 Ton RHEOCAST Die Casting Machine, Late

--much more equipment available, call us with your needs--

--Always looking for surplus, TOP DOLLARS PAID for Induction Furnaces and Molding Equipment--











EPS "A QUALITY PRODUCT AT A FAIR PRICE"

Lost Wax Process Investment Castings Saves time, Improve processes & product and Increase profits EPS Industries, Inc.

At **EPS** we provide an extensive list of both ferrous and non-ferrous options for your investment casting needs. Listed below are a few of the more common alloys that we pour regularly.

Stainless Steel

Tool Steel

Carbon Steel

Non-Ferrous

Cobalt Base High Temperature Plus many other air melt alloys



Above are a few examples of products we cast using the lost wax process

Contact EPS Industries about our Lost Wax Process Casting

Address: 585 Second St. Ferrysburg, MI 49409

Phone: 616-844-9220; Fax: 616-844-9030

Email: sales@epsind.com

@ EPS Industries. Inc.

buy CASTINGS.com

Your One Stop Source For All Metal Castings

buyCASTINGS.com matches requests for castings to an expansive group of qualified foundries. With over 150 years of experience in materials, metallurgy, metal castings, tooling, prototypes, foundry supplies and production of metal castings of all metals and all casting processes, buyCASTINGS.com serves customers in defense, aerospace, transportation, chemical, industrial, electronics, research and other manufacturing sectors. http://www.buycastings.com/how_to_request_casting_quote.html



• Database of 600+ foundry partners to match castings

- Reduce manufacturing costs
- Casting process optimization
- Prototype metal castings
- Reduce request quote times
- Casting sourcing assistance
- Manage procurement teams
- Metal and Plastic prototypes
- Alternate material analysis
- Program management

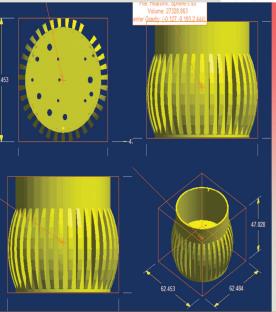
ALL CASTINGS TYPES
ALL CASTING PROCESSES
RAPID PROTOTYPES
RAPID TOOLING
FOUNDRY EQUIPMENT
DESIGN/ENGINEERING





3-D Model of Coil

COMPUTED TOMOGRAPHY,
REVERSE ENGINEERED
RAPID PROTOTYPED,
INVESTMENT CAST REPLICA
OF THE ORIGINAL LIBERTY
BELL



Procast, Opticast, Optistrut, All major CAD packages

References: DOE, PPPL, General Electric, WPAFB, P & G

Contact:

1-866-buyCAST

sales@buyCASTINGS.com

http://www.buvcastings.com/

Dayton, Ohio



con't from page 1

buyCASTINGS.com on Team to Develop an Army Mobile Foundry

The operational scenario is for a broken Cast Steel Bracket to be a critical need item for one or more HumVee weapon systems. The TacFab mission is to scan the broken part(s), generate CAD data to include an STL file, use the data as input to the Mold Build Machine, make the mold, cast the part(s) and deliver the part to the warfighter in hours or days vs. weeks or months for the conventional part re-supply system.

The TACFAC System...

- Up to 10X faster part delivery
- Significantly less waste & scrap
- Greater number of metal/alloy types available for part re-manufacture
- Closer match to part's original design intent and physical properties

Growth in the global markets...OR MAYBE NOT

Recent McKinsey Global Institute research showed several critical long-term trends, such as increased ties between the financial markets of the developed and emerging worlds, the shift of financial weight in Asia from Japan to China, the Euro zone's growing financial clout, and the growing financial role of Middle Eastern countries (thanks to our non-stop appetite for middle east oil, shame on us).

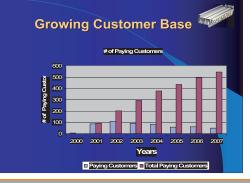
YET HERE ARE THE FACTS:

- The value of financial assets in emerging markets reached \$24 trillion in 2006.
- Japan accounted for just 6 percent of foreign investments in emerging Asian countries.
- The Euro-zone accounted for 44 percent of the growth in cross-border investment from 1996 to 2006.
- The value of euros in circulation surpassed that of dollars in April 2007.

Despite the flourishing of the Euro zone, China, India...the United States remains the world's largest financial market and we see a bright future for our manufacturing and foundry sectors....Sorry but the pundits and the professors are wrong in predicting the death of manufacturing in the US.

buyCASTINGS by the Numbers

- 836+ Foundries Worldwide
- 1900+ Buyers Worldwide
- 457+ Suppliers to Foundry Industry
- Average 100,000 "hits" per month
- 100% Focus on the Metal Casting Industry



What customers are saying...

"We look to you to help us with castings, it's something we don't do everyday like you do"

West Coast Manufacturer

"Thanks for presenting me all the different casting options. There is a lot to know, your guidance has helped."

North Carolina Casting Buyer

"We appreciate your honesty...a big thank you for catching the error and issuing a credit to us."

Ohio Purchasing Manager

"Together with buycastings.com, we are helping our customers succeed."

Michigan Foundry

VISIT US AT THESE UPCOMING TRADE SHOWS

<u>April 5 - 10, 2008</u> 3D Systems

North America Stereolithography Users Group Costa Mesa, CA

May 17-20, 2008 AFS CAST EXPO Atlanta, GA Booth#1006

May 20-22, 2008 SME Rapid 2008 **Orlando, FL** October 19 - 22, 2008
Investment Casting
Institute Technical
Conference & Expo
Dallas, Texas
Booth #618

December 1 - 4, 2008

Orlando, Florida

December 2 - 4, 2008

Orlanda, Florida

Defense Logistics Agency(DLA) Selects buyCASTINGS to Develop Low Cost Tooling for Investment Casting Patterns

Through their newly established Small Business Innovative Research (SBIR) program, the DLA has selected buyCASTINGS' FOPAT program for funding a Phase I program to develop low cost and short lead time tooling for investment casting patterns.



The DLA is responsible for providing parts to maintain military operations. These parts include many castings and machined castings and some of the parts were originally manufactured 50 years ago. This results in a problem of finding the original manufacturer and the tooling. The tooling may have been moved to another manufacturer or just completely lost or misplaced. The parts are typically low run quantities and tooling is a significant portion of the overall cost and time to get replacement parts.



buyCASTINGS working with FOPAT LLC have developed a new multicomponent foam casting pattern for investment casting. This material can be injected into traditional aluminum tooling but has shown promise with injection into alternate molding materials. The DLA funded phase I program will look at a few of the potential tooling materials. They are wood, Ren board, Stereolithography(SLA) and

silicon rubber molds. Since the FOPAT material is injected into the molds with low pressure and temperature and does not need to be cooled to extract heat from the tool, these tooling materials may be cost effective as well as reduce the tooling lead-time.

The three parts that will be evaluated during the program, which runs thru May 2008, with a possible follow on after that, are a machine gun turret bracket for HumVee's and MRAP's, an aerospace support

structure and a cast duplex stainless steel hinge for the latest MRAP vehicle.

The program manager is Mr. Dan Gearing for the DLA headquarters in Ft Belvoir, VA. buyCASTINGS has teamed up on this program with FOPAT LLC, with Mr. Raymond Monroe from the Steel Founders Society of America SSFA (www.ssfa.org) and NexTec of Springfield, OH.



Do you have at least two induction melting furnaces? Is your plant demand greater than 2000Kw? Is your demand charge greater than \$6/kw? CALL 1-866-buyCAST AND ASK FOR OUR NO COST, NO OBLIGATION ENERGY COST REDUCTION PROGRAM!

Branded Products with Your Logo THE buyCASTINGS.com eSTORE www.buyCASTINGS.com/estore





buyCASTINGS.com 3155 Research Blvd. #101 Dayton, Ohio, 45420 PRSRT STD U.S. Postage PAID Dayton, Ohio Permit No. 966



Contact us 1-866-289-2278 www.buycastings.com/equipment





View and Measure CAD Data

Supports popular CAD file formats

Calculate volume, surface area and wall thicknes
Inspect interior geometry

Free full function trial available from www.solidview.cccall 1-888-SOLIDVU (888-765-4388) for a free CD

or