Volume 1, Issue 2

January 3, 2007

Brass Tacks

Mid-America Fittings, Inc.

Influx of Inferior Imported Brass Hits US Shores

Since the beginning of May 2006, when brass raw material began to make its historic price accent, we have seen numerous imported production samples of brass fittings that do not conform to the known metallurgic standards set forth by SAE, ASTM and ASME.

While you may not notice any visible difference in the brass fittings you currently purchase you may in fact be sitting on potentially defective inventory. Imported brass fitting manufacturers, due to high product demand and a shortage of both raw copper and scrap brass, have decided to stretch their supply by adding fillers to their brass like iron, aluminum, manganese, and silicon. The fillers in brass act the same way as inexpensive fillers act in food. They offer no real nutritional value in the case of food and no metallurgic value in brass, and they can end up doing more harm than good. While they help to control the cost of the product they can be pathways for disaster down the road.

The metallurgic material property standards were set forth by SAE, ASTM, ASME, and others around the world to protect OEM's and end users from inferior products. These standards were designed to create the very best combination of machinability for the brass fitting manufacturer while providing end users with the safest and longest lasting material available. The result was the near elimination of catastrophic failures due to metallurgic fatigue and thus a dramatic reduction in the number of product liability claims annually.

In the US there are two basic types of brass raw material being used for pneumatic and hydraulic fittings. They are C36000 and C37700. An in-depth look at these two materials can be found on page 2 of this newsletter. What we are seeing come in from China, India, Malaysia, and Indonesia is a metallurgic combination of elements closely related to the above mentioned materials, but containing inexpensive fillers (impurities) that reduce the quality, machinability, corrosion resistance, and durability of a finished product thus increasing your potential for product liability.

What can you do to protect yourself? Ask your brass fitting supplier where they get their finished product from. Ask specifically about the product you are purchasing and not just a general question. Many fitting suppliers will source from a variety of places, and many of those places are off-shore. If you don't ask the specific question about the specific parts you buy you will normally get a generic response that would lead you to believe the part was made domestically. After you ask them where the part was manufactured ask them to provide you with a certificate of conformance for the raw material. All domestic manufacturers will have material certifications on file from the domestic raw material manufacturer, and will be able to provide proof of purchase for free or a nominal fee. Mid-America Fittings will provide certificates of conformance for orders, if requested in writing, that clearly document our material source of supply.

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2006 4th Qtr. Sales Promotion Winners Announced

We are pleased to announce the winners in our "Just In Time For That 2007 Football Championship Game You Can't Say The Name Of Electronics Extravaganza". "I was surprised by the number of registered entries we had from our customer base", said National Sales Manager for Mid-America Fittings, Inc., Dennis Strickland. "This was our first ever sales promotion on a national scale and I must say I was shocked by the level of interest", Strickland went on to say.

And the winners are……

Grand Prize Winner: D.J. Smith

1st Runner Up Winner: James Trapasso

2nd Runner Up Winner: Mark Maupin

3rd Runner Up Winners: Brian Clark, Brian Deskins, Terry Dickens

We would like to thank everyone who participated in this promotion and please look for more promotions to come in the near future.

New Equipment Innovations For 2007 On The Way

Mid-America Fittings, Inc. is pleased to announce the arrival of our new 21,000 pound bouncing baby Miyano on December 1st 2006. See our baby picture to the right.

This super turning center is capable of processing both standard part short-run and custom part production efficiently in a single setup. Each of its two upper turrets and one lower turret are capable of holding revolving tools in twelve different stations. That's a whopping 36 tool stations to perform complex, simultaneous front and back operations in a single machine setup from 14 vertical and horizontal axis points.

"This machine allows us to pull any complex part off complete, thus avoiding costly additional setups or second end work."

This machine can handle material up to 2-1/2" in diameter with tool speeds ranging from 40 to 4,000 revolutions per minute.

This machine allows us to pull any complex part off complete, thus avoiding costly additional setups or second end work. It also gives us the capability to store pre-programmed short-run setups for future use should a customer need a smaller quantity for initial production and more at a later production date.

So send us your RFQ's for short-run custom parts and help our baby grow up. Send your RFQ's to sales@midamericafittings.com

What Makes Brass So Brassy & So Expensive Right Now?

In this issue we have talked about the influx of inferior brass fittings coming into the United States from off-shore locations. We have talked about two basic types of brass used by US manufacturers to make brass fittings—C36000 a.k.a. CA360 (barstock or extruded rod) and C37700 a.k.a. CA377 (forged). What we have not talked about is what metallurgic compounds make up each material and why is it important to you.

Both materials are known as "copper alloys" and are therefore given the prefix "CA". They are given this designation due to the large percentage of copper (roughly 60%) in each material. That is what gives the material its brassy sheen and also its resistance to corrosion versus a material like steel. CA360 is rated at 100% machinable while CA377 is rated at 80% machinable. You will find the specific chemistry data for each alloy listed to the right.

So if you are wondering what will happen to the price of brass in 2007 keep an eye on the COMEX exchange in your local newspaper to see what copper and zinc are doing and that will give you a pretty good idea of how brassy brass is going to become. You can also visit our web site www.midamericafittings.com for the most up-to-date price on copper and brass in the US.

CA 360 (Barstock Brass)	CA 377 (Forged Brass)
60-63 % Copper	58-61% Copper
2.5-3.7% Lead	1.5-2.5% Lead
0.35 Iron (maximum)	0.30 Iron (maximum)
Remainder is Zinc	Remainder is Zinc
Impurities Must Not Exceed 0.50%	Impurities Must Not Exceed 0.50%

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Is Your Brass RoHS Compliant & Does It Matter?

You probably have begun to hear the term (RoHS) in the past six months, and you will hear it a lot more in the year to come.

RoHS stands for "the restriction of use of hazardous substances" in electrical components and equipment being sold to or by any European Union member country. Four key elements—mercury, lead, cadmium, and hexavalent chromium have been eliminated or greatly limited from any component found in these finished goods.

We are mostly concerned with the directive that limits the amount of lead in any copper alloy to no more than 4% by weight. For now, that means both domestically manufactured CA 360 and CA377 are allowed under the directive that went into effect on July 1, 2006. It means that any inferior off-shore brass alloy would contain too much lead to meet the directive. It also means that no cast bronze fitting may be used in any component or equipment due to its high lead content. Therefore, if you sell any products to any EU country you need to check your source of supply. At Mid-America, our yellow brass fittings are RoHS compliant.