

Service by Trained Craftsmen

Manufacturer's Brass & Aluminum Foundry will work with you to deliver the castings you want — when you want them.

Our facility, over 35,000 square feet, is operated by TRAINED CRAFTSMEN who regularly attend seminars and workshops on the latest foundry techniques.

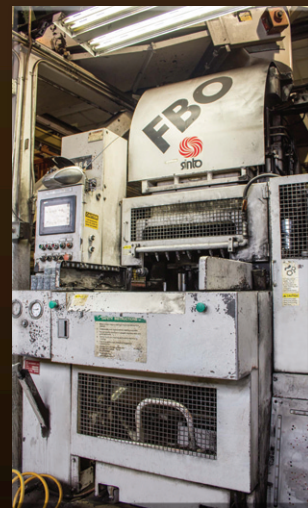
Blueprint to end product, we'll consult with you every step of the way. Recommending alloys to furnishing X-rays, we'll assure you that our castings will meet your specifications.

We take pride in our work. That's why our inspection process is so thorough. We inspect cores and check molten metals. We perform sand tests and check molds. With quality castings and on-time deliveries, we thrive on customer satisfaction.

AND to further serve you, MBAF offers

- **Machining of our castings**
- **Heat treating**
- **Plating**
- **Powder coating**

As your "SINGLE SOURCE" for these services, we can significantly reduce your lead time and expense on castings that require further processing.



(left) This large white machine is a green sand automatic molding machine that provides 20" X 24" dimensionally accurate molds.

(right) This green machine is the state of the art green sand processing plant with complete sand compact-ability control.

(bottom) The no-bake molding area is for the production of large floor molds with good dimensional accuracy.



Aluminum

Brass

Bronze

Copper

Specializing in CUSTOM SOLUTIONS

So CAST ASIDE ANY DOUBT and call us.

Our castings are made with pride...
one of the MANY reasons why we've been sand casting for over 85 years....
and why we'll be here for you into the FUTURE!

As members of the AMERICAN FOUNDRY SOCIETY we have access to literature, research information, and training facilities, as well as the ability to work on industry related problems with their engineering staff. Members of our staff are active participants in various AFS technical committees.

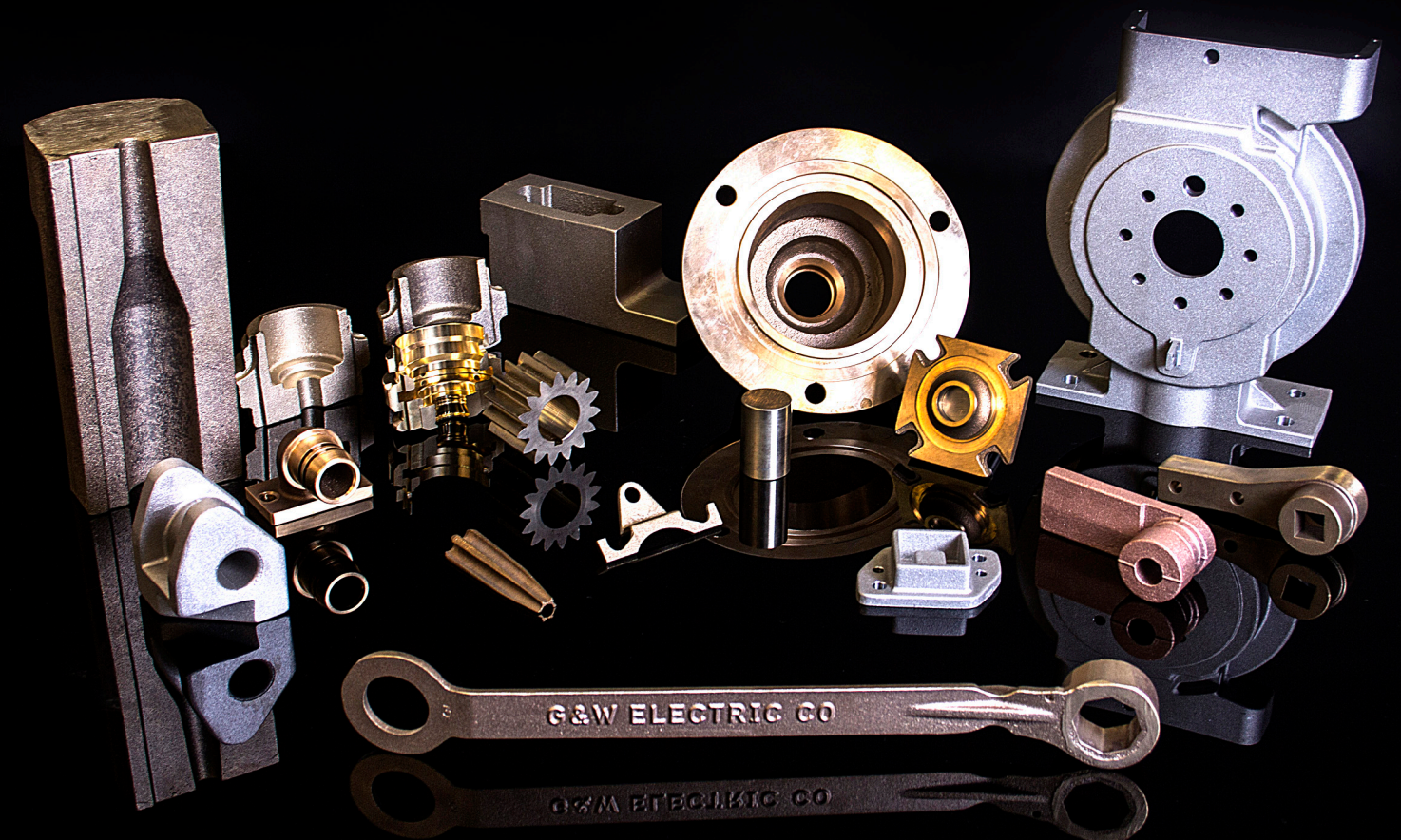
We can supply sand castings in the as-cast form or fully machined and, upon request, will supply certifications and chemical analysis of all alloys we pour.

We WELCOME YOU and YOUR STAFF to tour our facilities and discuss your casting needs.

Let Manufacturer's Brass & Aluminum Foundry supply you with the Lead Free Alloy that best fits your needs.

Visit us at www.MBAF.US

Manufacturer's Brass & Aluminum Foundry, Inc.
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CAST ASIDE ANY DOUBT

Manufacturer's Brass & Aluminum Foundry can provide the quality sand castings you need and expect...

Aluminum, Brass, Bronze or Copper.

Whether it's a small run or large volume, simple design or complex configuration, MBAF specializes in CUSTOM SOLUTIONS. That's how we've been satisfying the exacting needs of our customers since 1927. Our long list of satisfied customers covers a wide range of industries including FOOD PROCESSING, GLASS MOLDING and HIGH VOLTAGE ELECTRICAL, just to name a few.



Flexible Core and Mold Making

Manufacturer's Brass & Aluminum Foundry uses the latest equipment to assure product quality.

We utilize three kinds of cores: shell process, no-bake, and cold box cores. This flexibility allows us to provide the best type of core process for your specific casting requirements.

Accuracy is the key when making molds. That's why we offer various types of mold-making processes:

1. Green Sand using either Rota-Lift or jolt squeezer to handle any job — prototype and low volume.
2. Air-Set/No Bake for large castings which require maximum accuracy.
3. Automatic green sand match-plate molding for large volume production.

Strict Quality Controls

All of our mold-making processes include strict sand controls. Our computer controlled muller monitors sand compactability and moisture, assuring the proper sand preparation to produce the finest castings.

Manufacturer's Brass & Aluminum Foundry uses electric induction melting processes; we sample, de-gas, and inspect our aluminum and brass before pouring. We check molten metals with digital pyrometers to maximize temperature control which minimize scrap.

Because of all this care, we can make precise castings, with dimensional stability, a clean surface finish and internal integrity. Just what you'd expect.

The following is a partial list of quality assurance systems:

- ISO 9001 registered quality systems
- ISO 14001 registered for environmental compliance
- Computerized green sand compactability process control
- Digital pyrometer inspection of molten metals
- Use of CMM for first article, where required.
- Exclusive use of electric melting furnaces
- Continuous industry awareness through association memberships
- State of the art Bruker Ion Spectrometer for in-house metal analysis

20 Different Alloys

Manufacturer's Brass & Aluminum Foundry is flexible. Presently we pour over 20 different alloys from common aluminum to sophisticated bronze engineering alloys; from pure copper, degassed with lithium, to patented lead free white manganese bronze.

Our flexibility also covers sizing. From simple castings to intricate and detailed shapes. From castings weighing less than one pound to a few hundred pounds. Our full service operation is ready to handle your next job.

Need a solution to the rising cost of copper-nickel alloys and stainless steel?

Manufacturer's Brass & Aluminum Foundry has been supplying our patented MBAF174 LEAD FREE copper base alloy to the food processing industry for over 10 years. MBAF174 not only has better ductility than the lead free copper-nickel alloys, it's more easily machined and it's FDA approved for use in contact with all meat and poultry products.

And due to the high cost of nickel, MBAF174 is more competitively priced!!!

Now, in addition to castings made to your design, MBAF is pleased to announce two new solutions to your lead free requirements:

- We supply stock sizes in 13 inch lengths of rounds and flat bars up to three inches.
- We now have an additional MBAF alloy for the food processing industry.



Manufacturer's Brass & Aluminum Foundry now offers another choice of MBAF lead free alloys,

INTRODUCING... MBAF 180 (patented) to complement our patented MBAF174 and MBAF190 alloys.

Although MBAF 180 has very similar characteristics to our MBAF 174 alloy, the differences can offer specific features to better meet the end use casting requirements:

BETTER ELONGATION

MBAF 180 has a 38% improvement in elongation over MBAF 174. (Increased elongation does however result in lower tensile and yield.)

MACHINABILITY

When MBAF 180 is machined using coolant with carbide tooling, the speed and feed settings are normally faster than those settings used to machine stainless steel. And the chips are small and easy to transport for recycling.

APPEARANCE

MBAF 180 has the silver chrome appearance of MBAF 174.

NON-GALLING

MBAF 180 is highly non-galling; test results available upon request.

CORROSION RESISTANT

MBAF 180 has 40% better corrosion resistance to chlorine based cleaners compared to 304 stainless steel and is excellent for components used in food processing equipment.

COST SAVINGS

Because of the much lower amounts of nickel, the MBAF alloys are much less susceptible to pricing volatility than the typical copper-nickel dairy metals.

ANTIMICROBIAL PROPERTIES OF COPPER BASE ALLOYS

Additionally, MBAF 180 contains 6% more copper than MBAF 174. US EPA approved testing demonstrates that when cleaned regularly, antimicrobial copper alloys kill 99.9% of various bacterium organisms within two to six hours. The MBAF180 element composition does conform to the EPA registration as an anti-microbial alloy for touch surfaces. (The Copper Development Association (CDA) has formed the antimicrobial copper alloys working group which is designed to support the responsible use of antimicrobial copper products. Additional information can be found at www.copper.org/antimicrobial/homepage.html.)

Let us show you what we can do to **SAVE TIME and MONEY...** converting fabrications to castings by switching to an MBAF alloy (from the more costly materials you are now using).