

Casting Services Buyer's Quick Reference Guide



Choose worry-free with MMP, "The only foundry owned and operated by a MetallurgistSM"

What is a Casting?

Metalcasting is a process in which molten or liquid metal is poured into a mold made of sand, metal or ceramic, to form geometrically complex parts. The most common metals include iron, aluminum, magnesium, zinc, steel and copper-based alloys. Metal castings are used in cars, trucks, planes, trains, mining and construction equipment, oil wells, kitchen appliances, pipes, toys, space shuttle, wind turbines, nuclear plants, tanks, bombs, and more. (American Foundry Society) Look around- you will always find castings nearby!

What you didn't know about castings:

- Of those that signed the Declaration of Independence, 7 were metalcasters.
- 90% of all manufactured goods contain metal castings.
- The U.S. is the global leader in casting applications and second in production.
- You are rarely more than 10 ft. from a metal casting in the United States.

Delivery

On time is important. Ensure you know the on-time performance of your supplier. At MMP, we are proud of our record and gladly share it. Your business is important, and we know it!

Service

There are many areas that are service, even in the foundry world. For example, look for a supplier who gives 'front of the line' service if your team finds a problem with a delivered item or service. A supplier who offers shorter lead times through a premium program can keep your line moving when you might have given up hope!

Quality- things are different when a metallurgist owns and operates the plant. No matter what standard of quality you choose, we will not only meet or exceed it, we will put you at the front of the line if you find a problem with anything we deliver!

Why have a Metallurgist on staff?

It's like having a surgeon in the emergency room. When you need one, you need a problem solved fast!

What does that word mean?

Wonder what a casting word means?

Don't be confused, just go here: Bit.ly/castingdictionary

Want to learn more? Casting education online!

<http://www.afsinc.org/about/content.cfm?ItemNumber=6947>

<http://www.afsinc.org/about/content.cfm?ItemNumber=7932>

Price

The cost of castings and services is important as one component of the Total Cost of Ownership. When you partner with MMP, we work side by side to reduce the TCO, which saves more money than just buying cheap castings.

Who trusts us?

At MMP we are proud to serve those who value castings and services delivered on time, on cost, and meeting or exceeding the quality specs. These include such national and international companies as GE®, Siemens® and Caterpillar®.

Price vs Cost: The Value Discussion

<http://www.reshorenw.org/>

TCO Estimator:

<http://www.reshorenw.org/tco-estimator/>

"REDUCE SUPPLIER RISK" CHECKLIST

Evaluating Risk when sourcing castings, finishing or heat treating

6 simple questions to ask any casting supplier

1. What is the debt load vs revenue?

The more debt, the higher the possibility of risk with your quote. Foundries have been closing at a rate as high as 50 a year in the US and you don't want your castings, tooling, and drawings lost in bankruptcy proceedings...

2. Is a metallurgist on staff?

A Metallurgist is a highly trained expert who uses his specialized knowledge of the physical and chemical properties of metals to your advantage. They keep costs lower, and deliveries on time, because they identify potential issues that would cause high scrap rates BEFORE they occur. When there are problems in any foundry, they call in an outside metallurgist. If one is on staff, it reduces your risk.

3. What is the on-time delivery rate for the past 12 months?

You need your parts delivered on time. Why not ask what their on-time delivery percentage is? There is no reason it should ever be below 95%. But things happen, like weather delays, equipment failures, or catastrophic events. If you don't ask, it's your fault when your quote isn't delivered on time...

4. What is the scrap rate using "retail value of scrapped parts divided by revenue"?

Not all castings are perfect. With over 1000 variables, that's to be expected. But the scrap rate is a simple measure of how well the foundry is doing. There are many ways to measure scrap, but using "retail value divided by revenue" is the most logical way to determine the scrap rate. While some foundries will tell you they re-use the scrap, or it varies from product to product and pour to pour (both may be true), this simple formula tells the real impact on the business. Higher scrap rates may indicate higher risk.

4. What percentage does each of the top 5 clients contribute to Gross Revenue?

If a single customer contributes more than 10-12% to a foundry's revenue, that customer could leave and bring down the whole operation. Ask for the percentage that the top 5 customers contribute to gross revenue.

5. What percentage does each Market Sector contribute to Gross Revenue?

A foundry with more than 15% of their production in a specific area, say wind energy, may have problems when there is a downturn in the wind energy sector. Since most foundries are small businesses, you need to know the risk to your quote and delivery time if there is a downturn in another industry. Asking the Market Percent of Gross is a numerical analysis to judge the risk of one economic sector impacting your order.

6. Does the foundry just do casting, or do they offer heat treating, finishing services, and an engineering support capability?

A diversified business has more strength and stability over the long run. Plus, a well run foundry will accept other castings for finishing or heat treating, giving added value versus in-house. Risk is reduced when there is a diversification of services as well as capabilities.