CBI
Ministry of Foreign Affairs

CBI Competition:

Metal parts and components: Iron and Steel Castings in Europe

Introduction

The iron and steel castings industry is diverse. Consequently, buyer power ranges from very high to extremely low. Buyers appreciate sound relationships with foundries and do not switch easily. Competition in the European market is expected to intensify slightly in the next few years, as more foundries from Developing Countries will meet European requirements every year and start to export to Europe.

The price level of European foundries remains high. Developing Country suppliers of castings as well as other metal parts and components will thus be in a good position if they can offer prices at least 25% lower than their European counterparts. If this is not the case, European buyers will not perceive any benefit in switching to new Developing Country suppliers, unless they face quality or delivery problems with their current suppliers.

For Developing Country exporters it is important to strategize: if you cannot be competitive in terms of price, you could look for success in the delivery of specialty products.

More competition from supplying countries outside Europe

The foundry industry in Europe is dominated by Germany, Spain, France, Italy, Turkey and Poland.
Together these countries account for almost 85% of ferrous metal castings production in Europe. Non-ferrous metal castings production is even more concentrated; Germany and Italy alone account for more than 50%.

Looking at leading suppliers to Europe in the category of metal parts and components (there are no details for iron and steel castings) shows the following:
Germany is the leading supplier, accounting for more than 20% (with a value of more than €25 billion) of total supplies to Europe. Germany is followed by China (11% share) and Italy (8% share). The following countries round out the top ten:

- Czech Republic, Poland, Austria and France (each with a 4% share)
- Spain, the Netherlands, Switzerland, United States of America and Taiwan (each with a 3% share)

With a share in European supplies of 11% (or €12.5 billion), China is the largest exporter to Europe from the group of Developing Countries. This is mainly due to its ability to offer competitive prices. China and 12 other countries (listed below according to share size) add up to 97.5% of all European imports of metal parts and components from Developing Countries. These figures are more or less the same for iron and steel castings. However, exact figures for that category are not available.

- Turkey (good for 1.7% of European imports, equal to €2.0 billion)
- India (1.1% share, €1.3 billion)
- Vietnam (0.4% share, €497 million)
- Malaysia and Thailand (each with a 0.3% share, €365 and 370 million respectively)
- Serbia, Bosnia and Herzegovina, Tunisia (0.2% share)

Mexico, Indonesia, South Africa (0.1% share)The strongest growth in exports to Europe was realised by Indonesia (+18% on average per year in the period 2011-2015), Vietnam (+17%), Bosnia and Herzegovina (+14%) and China (+9.6%).

Tips:

- Most metal parts and components, including cast articles made of iron or steel, are imported from countries with relatively well-developed metal industries, like India and China. Producers from these and other Developing Countries only have opportunities if they meet strict European requirements in terms of quality and price.
- Manufacturers in South Eastern European countries such as Bosnia and Serbia should benefit from the relatively short transport distance to the rest of Europe.

Market entry: A few more Developing Country exporters will qualify for entry to the European market in the next decade

It is expected that a certain number of foundries from Developing Countries will manage to meet European quality standards each year in the coming years. This trend is the result of ongoing European buyer interest in Developing Country suppliers, which encourages these suppliers to invest time, effort and money in achieving compliance with European quality standards.

Several of these foundries will focus on quality products, which appeal more to European buyers. However, European buyers will only be interested if Developing Country foundries can offer a price advantage of at least 25% compared with their local (European) suppliers. This is necessary to cover the European buyer's costs and the risks involved in global sourcing. Or, if the current supplier is already in a Developing Country, then the savings must be 5-10% or it will not be attractive enough to switch.

There are no specific legal requirements for iron and steel castings in general, though there may be legal requirements related to the product a part is used in. These could be general product safety requirements or specific requirements such as CE marking. Some industries with specific legal requirements for products and their parts are the construction industry, the automotive industry and the rail industry. Another example is the aerospace industry: getting European airworthiness certification (EASA approval) for processes and parts is particularly demanding for suppliers in this field.

Tariffs vary depending on the HS code under which a casting is classified. For example, the tariff for agricultural equipment parts is 0%. Tariffs for other parts can be much higher, but several countries may benefit from a preferential 0% tariff.

Tips:

- The CBI website offers more insights on European buyer requirements.
- Offer European buyers the "best costs of ownership". This means the best price/quality ratio for your product and its delivery.
- The ITCs Market Access Map provides you with information on gaining access to global and European markets.
- The TARIC database gives more details on EU import tariffs. Note that it is only possible to claim a preferential tariff treatment if you have a Certificate of Origin.
- Through partnerships with European buyers these buyers may support you to meet the quality standards.

Product competition: Material requirements are set to rise in the medium to long term

Substitution is not one of the main issues in the foundry industry, as the unique characteristics of iron and steel make substitution difficult. However, substitution has been observed in some sectors, such as the automotive industry. Metal parts have been replaced by plastic parts in cars where possible, but the main risk of substitution is that more stringent material requirements are likely to be in place in the medium and long term.

Company competition

Buyer power: Buyers prefer to stay with reliable suppliers

The relationship between foundries and buyers will continue to be very important in the coming years. Although switching costs seem to be low because moulds are usually owned by the buyer, it is most likely that switching to another foundry also requires investments in new tooling, dies or moulds, as well as building a new relationship. Hence, buyers prefer to stay with suppliers they have found to be reliable. This makes it difficult for Developing Country exporters to start trading with European buyers. At the same time, however, it offers opportunities for a reliable and long-term trading relationship.

Concerns about product quality also depend on the reputation of the country of origin of the castings. For example, many companies still think that castings produced in Chinese foundries are not of the same quality as those produced in Europe. European foundries have built up a lead in speciality castings which require complex designs, minimal tolerances and strict material specifications.

Tips:

- Improve your process quality by implementing improvement programmes such as Lean Manufacturing, Six Sigma or total quality management.
- Improve your delivery reliability to meet European (buyer) requirements. For example, establish a warehouse in Europe, perhaps in partnership with other exporters from your country. Or argue the need for an adequate transport infrastructure in your own country and implement an ERP (enterprise resource planning) system in your company.
- If your country has not yet built up a positive image in the eyes of European buyers:
    - Strive to be an exception to the rule.
    - Work in your sector association to set up a collective campaign to improve the country's image in this field.
    - Find out about positive developments in your country, and pass on this information to your buyers.

Supplier power: Suppliers of raw materials used by foundries are less powerful under current market conditions

The suppliers of the metals used by foundries have traditionally been in a strong position with respect to foundries, though current market conditions may challenge this predominance.

The metals industry operates on a much larger scale than the foundry industry, and the fact that metals are traded on world markets tends to even out metal prices in different countries. There are only about 800-900 steel producers worldwide with 15 companies accounting for almost 40% of global steel production. Meanwhile, the total number of foundries in the world is much higher.

The global metals industry has continued its process of consolidation in recent years as companies focus on improving their financial strength, increasing their negotiating power with customers (including foundries) and suppliers, and boosting capacity utilisation. This consolidation process has strengthened the bargaining power of the customers (the metal companies, including foundries) until recently.

In addition, although steel is traded on world markets and tends to have equivalent prices in different countries, regional differences in material costs do exist, reflecting local market conditions and transportation costs.

For example, the relatively strong competition between steel producers in China in 2014-2016 resulted in very competitive steel prices. This happened both in China and globally, as China plays such an important role in the global steel industry.

Another example: In several Developing Countries there is no local metal production. As a result, the metal must be imported from other countries, Thus reducing the competitiveness of metal parts and components producers in these countries. Examples of such countries are the Philippines, Egypt and Vietnam.

For more information about the influences of China's movements on the global steel industry, see our study [CBI Trends: Metal Parts and Components in Europe.]

Tips:

- In the context of the above-mentioned trends, you should do your best to make as much use of locally available raw materials as possible while ensuring that you pay no more than world market prices for your materials.
- You should draw up a supply contract with your main material suppliers, stipulating that you pay no more than world market prices (plus transportation costs) for your materials.
- Select one of your top employees for the post of materials manager. In view of the large role that raw materials costs play in the cost price of your products, you need a highly qualified person in this position to monitor price and quality trends and to order the raw materials you need.
- Be aware that you are at a competitive disadvantage if your country needs to import metals, as is the case for various types of metals in countries such as Tunisia, Vietnam, Egypt and the Philippines.

Degree of rivalry: Degree of rivalry for specialties will remain small

There is relatively little rivalry between European foundries in the high-quality product range. What matters to them is establishing a good relationship with their clients. Buyers will not switch to another foundry as long as they are satisfied with quality and delivery reliability. These good foundries therefore have very little need to compete with one another. In contrast, there is a high level of rivalry among foundries delivering standard series-produced products with low added value, such as manhole covers. The main source of competition here is low wage countries like China.

Most exporters in the Developing Country group come from China, followed by India and Turkey. The export from other Developing Countries is increasing, although the degree of rivalry remains low. China has managed to gain a big share of the market for low-added-value series-produced products. A large part of the supply of such commodities comes from China, but several European companies are still producing them for the local market. Most Developing Country exporters are not so interested in these products, as these commodities cannot easily be sold at competitive prices on the European market.

Since China is expected to remain strong in low-added-value, large-volume products, Developing Country exporters would do better to focus on specialty products both now and in the years to come. There are particularly good chances for:

- High quality metal parts in low quantity
- High quality assemblies of metal parts
- Moulds

Tips:

- As a Developing Country supplier, you must realise that you are only likely to be successful in selling commodities to European buyers if your price is competitive compared to Chinese products in particular.
- If you cannot be competitive in terms of price, you could look for success in the delivery of specialty products. Focus on a limited number of products aimed at specific market segments to improve your chance of gaining a foothold in the European market. Concentrate on one or two products, core technologies or services that are truly unique and in which you have a competitive edge.
- It is important to offer the "best costs of ownership" for such specialty products. This means the best quality/price ratio for your product and your delivery performance. Without this, you will be unable to compete with European and other Developing Country suppliers.

See our study CBI Channels and Segments: Metal Parts and Components in Europe for more information about channels and segments.

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