

CBI MARKET SURVEY

The castings and forgings market in Ireland

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Introduction

This CBI market survey provides exporters in developing countries (DCs) with information on some of the main developments in the castings and forgings market in Ireland. The information is complementary to the information provided in the CBI market survey 'The castings and forgings market in the EU', which covers the EU in general. That survey also contains an overview and explanation of the selected products dealt with, some general remarks on the statistics used, as well as information on other available documents for this sector. It can be downloaded from <http://www.cbi.eu/marketinfo>.

1 Market description: industrial demand and production**Industrial demand**

Because no data for the demand for castings and forgings are available, this survey puts a focus on two major end-user industries that offer good opportunities for developing country (DC) exporters: the engineering and the construction industry. Since both industries use many cast and forged parts and products, the production output of both industries is a good indication for the demand for cast and forged parts in these industries.

Engineering industry

Irish production in the engineering industry increased 1.8% per year in the period 2002-2006, to about €5 billion in 2006. The small Irish engineering industry ranked fifteenth in the EU, behind Denmark and Hungary, but ahead of Slovakia and Portugal. Of the main castings and forgings consuming engineering categories, "machine tools, woodworking machinery and welding equipment" (+0.7% per year) and "bearings, gears and other driving elements" (+0.6%) performed the best. The position of Ireland in the EU was especially strong in "electric motors, generators and transformers (9th with 4% market share).

Despite the world, EU, and Irish economic growth forecasts for 2008 (+3.8%, +1.7% and +2.5% respectively) and 2009 (+3.9%, +1.8% and +2.7%), leading to a good demand for engineering products in the country, it is difficult to predict to what extent the Irish manufacturers will benefit from this, as outsourcing and off shoring may increase. One example of a recent move (2006) is the Irish Crown facility producing the smaller range of lifting trucks, which closed after production shifted to a new plant in China. Please also note that, although the EU is far from running the risk of recession, the EU and Irish economy is and will be clearly affected by the housing and credit crisis in the United States.

Construction industry

After a total growth of 21% in the period 2002-2005, the Irish construction industry amounted to €31 billion in 2005. For the period 2006-2008 it was expected that the industry would grow by 11% in total to €34.4 billion in 2008. However, recent news showed that output in the industry is stagnating. Although the rate of house completions was expected to decline in 2007, the relative number of new houses built in Ireland is high with 19.5 units per 1,000 inhabitants. Civil engineering has also continued to grow in 2006 and 2007, boosted by continued government spending, mainly on road building. The medium-sized Irish construction industry ranked seventh in the EU, behind Spain and the Netherlands, but ahead of Austria and Belgium.

Production

Unfortunately, data of the Irish foundry and forge production are not available. However, it can be assumed that both industries are among the smallest in the EU, even smaller than the Greek ones, for example. According to data from the Central Statistical Office of Ireland, production output of metals and metal products in 2002 was down by 10% compared to 2000. It went up in 2004 again, remaining stable until 2006, albeit still 5% below the output in 2000. The output of the Irish foundry industry is most probably comparable to the Danish output, although it may be even smaller than that. There are only a few – most small – foundries in Ireland, such as Bailieboro (<http://www.bfl.ie>), and Roscommon Precision Castings (<http://www.iol.ie/~rpcl>). As in the UK, also in Ireland foundries (Bailieboro for example) still produce low added-value serial products such as manhole covers. Atlas Aluminium - <http://www.atlasalu.ie> shut down operations in December 2007. The company, which was specialised in aluminium and zinc pressure die castings for the automotive industry, said it was forced to take the decision due to the loss of its major customers Nissan and Renault.

Trends and characteristics

A major trend that influences the castings and forgings demand and production in Ireland is the growing number of innovative applications of aluminium and magnesium castings. Other trends are:

- **Growing demand for light weight and energy-efficient applications.** Due to the growing care for the environment, in several industries – for example the power generation industry – the search for energy efficiency and the limitation of CO₂ and NO_x emissions has led and should lead to the increased use of energy-efficient and light weight applications such as electric variable speed drives and energy-efficient engines, turbines, motors and generators. As a result, prospects for cast and forged parts in such applications are bright.
- **Relocation of engineering production.** In recent years, some engineering production has been outsourced to low cost countries (LCCs), especially Central and Eastern European (CEE) countries. So far, outsourcing often concerns labour-intensive and series production of standard products and parts that can easily be made in LCCs.
- **Engineering industry aims at improving its competitive position.** Many leading engineering companies are now undertaking sophisticated value adding activities within their segment. These activities include Advanced Manufacturing, Supply Chain Management, Research and Development and Shared Services. They are supported by a highly developed sub-supply network, high quality engineering skills, university level research and advanced logistics.

Opportunities and threats

The main opportunities and threats for developing country (DC) exporters are the following:

- + Growing construction output will lead to an increasing demand for castings and forgings.
- + Light weight products and eco-friendly and energy-efficient technologies offer good opportunities for those DC exporters that are able to supply such products.
- + Ireland is still home to some low added-value serial production of castings. This offers opportunities for DC foundries, which can take over this kind of production.
- ± The fast growing economy is expected to drive a healthy demand for engineering products in the years to come, which could also stimulate local engineering production. The economic growth in Ireland is much stronger than the average economic growth in the EU. On the other hand, the shift of engineering production towards LCCs may lead to a deceleration of demand growth for castings and forgings of the Irish engineering industry.
- Ireland is a small producer of engineering products.

Refer to Section 7 of the CBI market survey covering the EU market for more information on opportunities and threats.

2 Trade channels for market entry

Trade channels

The most common trade channels for DC exporters are direct sales to end-users, trade via traditional importers, supply agents, traditional agents, or subcontracting by EU foundries or

forges. Although there are several options, supplying directly to end-users has some advantages and could be one of the most interesting trade channels, because there is a larger chance of a long-lasting relationship. DC exporters should therefore put efforts into building up supplier relationships with end-users. One example of an end-user in Ireland is Liebherr Container Cranes (<http://www.liebherr.com/lh/en/35279.asp>). Please refer to the CBI market survey covering the EU market for castings and forgings for a detailed explanation on the trade channels in this sector.

Price structure

It is very difficult to give a general idea of the price structure in this industry, as prices and margins differ to a great extent. They may depend on size of the order, length and type of distribution chain, terms of delivery, added value / finishing and materials concerned. Bearing this in mind, some rough indications of margins in the chain could be given. Agents work with margins between 3-7%, for importers this is 15–35%. The margin depends on the level of care and attention an intermediary has to give to the process. Products that do not need much extra care, like finished and ready-to-use products, such as valves, will be sold with a smaller margin than products that need extra handling or even need to be stored.

Useful sources

Some examples of available sources to find clients:

- Irish Chambers of Commerce - <http://www.chambers.ie>
- Member list of the Irish Farm Tractor and Machinery Trade Association - <http://www.ftmta.ie/memb.asp>
- Europages - <http://www.europages.co.uk>
- Kellysearch - <http://www.kellysearch.com>
- Kompass - <http://www.kompass.com> - in the paid version the website of the company is also listed.

With Europages, Kellysearch and Kompass, it is possible to search by product, by company name or by business sector. Another general source is Direct Industry - <http://www.directindustry.com> - you can search by product, company ('exhibitors') or catalogues and technical brochures. Here it is possible to get an idea of products made by Western European end-users.

3 Trade: imports and exports

Imports

In 2006, Ireland was a medium-sized importer of castings and forgings, ranking nineteenth in the EU, behind Finland and Greece, but ahead of Slovenia and Luxembourg. Between 2002 and 2006, the total import value annually increased by 7% to €2.9 billion (1.5 million tonnes) in 2006. The increase in value was partly caused by the increasing prices of raw materials (refer to Section 4). The product group shares were as follows:

- Parts of machinery, railway equipment and vehicles: 27% of total. Annual increase in import value of 3%.
- Iron and steel products: 24% of total. Annual increase in import value of 15%.
- Articles of iron, steel or base metal: 21% of total. Annual increase in import value of 9%.
- Plastic and rubber products: 12% of total. Annual increase in import value of 2%.
- Light and ultra light products: 11% of total. Annual increase in import value of 6%.
- Copper and zinc products: 5% of total. Annual increase in import value of 10%.

Between 2002 and 2006, imports from DCs annually increased by 34% in value. Compared to 2002, the total share of DCs in import value increased from 2.8% to 6.7% in 2006. The DCs' shares in imports of some product groups showed better growth compared to other product groups, as can be seen below:

- Articles of iron, steel or base metal: growing from 3.7% to 10.8% in value.
- Copper and zinc products: growing from 1.6% to 4.5% in value.
- Iron and steel products: growing from 3.4% to 9% in value.
- Plastic and rubber products: growing from 2.1% to 4.2% in value.

- Parts of machinery, railway equipment and vehicles: growing from 2.6% to 4.8% in value.
- Light and ultra light products: growing from 2.4% to 2.4% in value.

Turkey accounted for 40% of all imports coming from DCs, followed by China (34%), India (9%), Malaysia (5%), Egypt (2%), and South Africa (2%). The Chinese share of DC exports to Ireland did not grow as fast as in the EU on average (56% compared to 57%). The DCs that saw a larger increase of their share to the country were the Philippines, Egypt, Brazil, Turkey and India.

Of all intra-EU imports a small part may be re-exports, but the exact value of re-exports is unknown because Eurostat does not allow for such detailed analysis.

Exports

In 2006, Ireland was a small exporter, ranking twenty second in the EU, behind Greece and Bulgaria, but ahead of Estonia and Latvia. The total export value of Ireland showed an annual increase of 2% in the period 2002-2006, totalling €867 million in 2006. Exports consisted of:

- Parts of machinery, railway equipment and vehicles, accounting for 37% of total exports (€325 million). Annual decrease in export value of 1%.
- Plastic and rubber products, accounting for 27% of total exports (€235 million). Annual increase in export value of 5%.
- Articles of iron, steel or base metal, accounting for 20% of total exports (€169 million). Annual increase in export value of 6%.
- Iron and steel products, accounting for 7% of total exports (€61 million). Annual increase in export value of 19%.
- Light and ultra light products, accounting for 7% of total exports (€59 million). Annual decrease in export value of 13%.
- Copper and zinc products, accounting for 2% of total exports (€17 million). Annual increase in export value of 6%.

Probably a small part of exports consists of re-exports to other EU countries, mainly to neighbouring countries, but the exact value of re-exports is unknown because Eurostat does not allow such a detailed analysis.

Opportunities and threats

- + In 2006, Ireland was a net-importer of castings and forgings, running trade deficits for all product groups.
- + The total import value of all product groups increased in the period 2002-2006.
- + The DC share of total imports grew by 140% in the period 2002-2006, which was faster than in the EU on average (81%).
- + The Chinese share of DCs' exports to Ireland did not increase as fast as in the EU on average (56% compared to 57%). Several DCs saw a larger increase of their share.
- + China accounted for 34% of all imports coming from DCs. This was a lower share than in the EU on average (39%).
- ± The import share of DCs was 6.7% in 2006, below the EU average (8.2%).

Useful sources

- EU Expanding Exports Helpdesk - <http://exporthelp.europa.eu> → go to: trade statistics
- Eurostat - official statistical office of the EU - <http://epp.eurostat.ec.europa.eu>
- Understanding Eurostat: Quick guide to EasyComext - http://epp.eurostat.ec.europa.eu/newxtweb/assets/User_guide_Easy_Comext_20080117.pdf

4 Price developments

One of the major trends that affect the costs and revenues of Irish castings and forgings production is price pressure, which results in importers/agents and OEMs as well as their suppliers continuing their search for opportunities to reduce cost prices of parts by 10-30%. In

the meantime, the industry had to deal with increasing raw material and energy prices as well as with the relatively high wage costs in the metal industry (€19.47 per man-hour in 2005), which is higher than in Italy, Eastern Germany and the South European and CEE countries. Irish producers have tried and will try to translate increasing production costs into surcharges as soon as possible, although success depends on the supplier relation and the kind of product. The larger a supplier or the smaller a customer, the larger the negotiation power of a supplier. Moreover, the less the product is a commodity product, the larger is the negotiation power. Please refer to the CBI market survey covering the EU market for castings and forgings for a detailed explanation on these major trends.

Useful sources

- CAEF Eurofoundry - <http://www.caef-eurofoundry.org>
- European Engineering Industries Association (Orgalime) – <http://www.orgalime.org>
- Eurostat – official statistical office of the EU – <http://epp.eurostat.ec.europa.eu> - by comparing import value and volume, it is possible to get an idea of import prices.
- London Metal Exchange – <http://www.lme.co.uk>

5 Market access requirements

As a manufacturer in a developing country preparing to access Ireland, you should be aware of the market access requirements of your trading partners and the Irish government. For information on legislative and non-legislative requirements, go to 'Search CBI database' at <http://www.cbi.eu/marketinfo>, select castings and forgings sector and Ireland in the category search, click on the search button and click on market access requirements.

Detailed information on packaging can be found on the ITC website on export packaging: <http://www.intracen.org/ep/packaging/packit.htm>. Information on tariffs and quota can be found at <http://exporthelp.europa.eu>.

6 Doing business

Information on doing business, such as approaching potential business partners, building up a relationship, drawing up an offer, handling the contract (methods of payment, and terms of delivery) and cultural differences can be found in CBI's export manuals 'Export Planner', 'Your image builder' and 'Exporting to the EU'. These can be downloaded from <http://www.cbi.eu/marketinfo> - go to search publications. Beside a number of sources already mentioned in previous sections, other useful sources that contain market information and information on doing business in Ireland are:

- Irish Engineering Enterprises Federation (IEEF) – <http://www.ibec.ie/ieef>
- Subcon - <http://www.subconshow.co.uk> - trade fair in the UK (there are no relevant trade fairs in Ireland)
- Hannover Messe - <http://www.hannovermesse.de> – the largest engineering trade fair in Europe, held in Hannover, Germany every year. This fair is also home to a large section on castings and forgings. Please refer to Auma (<http://www.auma.de>) and EventsEye (<http://www.eventseye.com>) to find more information on relevant fairs.
- Engineering News-Record - <http://www.magazines365.com/journals/engineering-newsrecord> - magazine
- Construction Engineer - <http://www.irishconstruction.com> - magazine

In general, British trade magazines also contain good information for Ireland. To find more relevant trade magazines consult the CBI market survey covering the castings and forgings market in Germany.

This survey was compiled for CBI by Facts Figures Future
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