

### **CBI MARKET SURVEY**

# THE CASTINGS AND FORGINGS MARKET IN SWEDEN

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## Introduction

This CBI market survey gives exporters in developing countries information on some main developments on the castings and forgings market in Sweden. 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 demand data for castings and forgings are available, it has been decided, in consultation with industry experts, to focus on two major end user industries in the EU that offer good opportunities for developing country (DC) exporters: the engineering and the construction industry. Since in both industries many cast and forged parts and products are used, the production output of both industries is a good indication for the demand for cast and forged parts in these industries.

## Engineering industry

Swedish production in the engineering industry increased 9% in the period 2001-2005, to more than €21 billion in 2005. The Swedish engineering industry ranked sixth in the EU, behind the UK and Spain, but ahead of Austria and the Netherlands. Of the main castings and forgings consuming engineering categories, "agricultural machinery" (+28%), "bearings, gears and other driving elements" (+11%), "valves and taps" (+10%) and "pumps and compressors" (+10%) performed well. The market position of Sweden in the EU was especially strong in "bearings, gears and other driving elements" (5<sup>th</sup> largest producer) and "machine tools, woodworking machinery and welding equipment" (6<sup>th</sup> with 4% market share). Despite positive global, EU, and Swedish economy forecasts for 2007 (+3.3%, +2.0% and +3.5% respectively) and 2008, leading to a good demand for engineering products in the country, it is difficult to predict to what extent the Swedish manufacturers will benefit from this.

#### Construction industry

After a growth of 4% in the period 2002-2005, the Swedish construction industry amounted to €20.8 billion in 2005. For the period 2005-2008 it is expected that the industry will grow 13% to €23.5 billion in 2008. The Swedish construction industry ranked fourteenth in the EU, behind Poland and Finland, but ahead of the Czech Republic and Hungary.

### **Production**

# Foundry industry

The Swedish foundry industry ranked ninth in the EU, behind Poland and Czech Republic, but ahead of Finland and Belgium. Iron castings accounted for 54% of total production, followed by nodular iron castings (20%) and light and ultra light castings (13%). In 2005, the mediumsized production of metal castings totalled 341,600 tons, an increase of 15% compared to 2001. While all product categories showed growth, the largest growth was observed in zinc casting (55%), steel and nodular iron casting (22%) and light and ultra light casting (19%). In 2005, the country was home to 50 large foundries, which was the same as in 2001. Of the largest ferrous-metal foundries in Sweden is only one independent foundry group: Arvika



Gjuteri - <a href="http://www.arvikagjuteri.se">http://www.arvikagjuteri.se</a>, with a production of 25,000 tons of castings in 2006. All other foundries are in-house foundries of engineering giants:

- Åkers Sweden <a href="http://www.akers.se">http://www.akers.se</a> is a in-house foundry of the ÅKERS Group, a world leading roll supplier
- Scania CV <a href="http://www.scania.se">http://www.scania.se</a>; in-house foundry of Scania (trucks)
- Volvo Powertrain Corporation <a href="http://www.volvo.com">http://www.volvo.com</a> (engineering, trucks)
- SKF Mekan <a href="http://www.skfmekan.se">http://www.skfmekan.se</a> (bearings)
- ITT Flygt castings division http://www.flygt.se (pumps and fluid handling equipment)

The large non-ferrous metal foundries in Sweden are all part of a large conglomerate:

- Finnveden Gjutal is a in-house foundry of Finnveden <a href="http://www.finnveden.com">http://www.finnveden.com</a>
- Husqvarna owns a large in-house foundry in Sweden <a href="http://www.husqvarna.com">http://www.husqvarna.com</a>
- Hydro Aluminium Fundo is a facility of Hydro <a href="http://www.hydro.com">http://www.hydro.com</a>
- Johnson Metall AB is Scandinavia's largest producer of plain bearings, bars, tubes and castings in bronze <a href="http://www.johnson-metall.com">http://www.johnson-metall.com</a>

## Forge industry

The Swedish forge industry ranked eighth in the EU, behind the Czech Republic and Poland, but ahead of Belgium and Slovenia. In 2005, the production of forgings totalled 89,000 tons, an increase of 16% compared to 2001. One of the largest companies with forges in Sweden is Componenta – <a href="http://www.componenta.com">http://www.componenta.com</a>. This Finnish conglomerate comprises 3 forges in Sweden next to 4 foundries in Finland and activities in other EU countries as well. Furthermore, the tube and ring division of the large steel company Ovako - <a href="http://www.ovako.com">http://www.ovako.com</a> is located in Sweden, as well as three forges of the large Norwegian forge company Scana - <a href="http://www.scana.no">http://www.scana.no</a>.

#### **Trends**

Some major trends that influence the castings and forgings demand in Sweden are:

- Many industries will benefit from a growing number of innovative applications of aluminium and magnesium castings.
- 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  $CO_2$  and  $NO_x$  emissions has led and should lead to the increased use of energy-efficient 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.
- In recent years, a lot of engineering production has been shifted to low cost countries (LCCs), especially Central and East European (CEE) countries. So far, it mostly concerns labour-intensive and series production of standard products and parts that can easily be made in LCCs.

## **Opportunities and threats**

- + Growing engineering and construction markets will lead to an increasing demand for castings and forgings in the next few years.
- Shift of engineering production towards LCCs, which may lead to a deceleration of demand growth for castings and forgings of the Swedish engineering industry.

# **Useful sources**

- Association of Swedish Engineering Industries <a href="http://www.branschgrupperna.se">http://www.branschgrupperna.se</a>
  Association of Swedish foundries (SweCast) <a href="http://www.gjuteriforeningen.se">http://www.gjuteriforeningen.se</a>
- Association of the Swedish Forging Industry (Swedeforge) http://www.branschgrupperna.se/smidesgruppen
- Hydraulics and Pneumatics Association (HPF) http://www.hpforening.org
- · Swedish Association for pumps <a href="http://www.swepump.org">http://www.swepump.org</a>
- Swedish Association of valves & fittings <a href="http://www.branschgrupperna.se/armatur">http://www.branschgrupperna.se/armatur</a>
- · Swedish Construction Federation / Sveriges Byggindustrier (BI) http://www.bygg.org
- Swedish Electronic and Electro Technical Network <a href="http://www.sweetnet.org">http://www.sweetnet.org</a>

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- Swedish Industrial Valves Association <a href="http://www.armaturforeningen.nu">http://www.armaturforeningen.nu</a>
- Swedish Machine Tool & Cutting Tool Manufacturers Association http://www.fvm.se
- Textile Machinery Association of Sweden <a href="http://www.branschgrupperna.se/tmas">http://www.branschgrupperna.se/tmas</a>

## 2. Trade: imports and exports

### **Imports**

In 2005, Sweden's imports of castings and forgings totalled €7.3 billion (4.3 million tons). The country was a medium-sized importer, ranking tenth in the EU behind the Netherlands, Austria and Poland, but ahead of the Czech Republic, Denmark and Hungary. In line with the market trend for most of the product groups, total Swedish imports showed a considerable increase in recent years: 29% in value (partly caused by the increasing raw material prices; refer to Section 4) and 23% in volume in the period 2001-2005. The product group shares were as follows:

- Iron and steel products (41%)
- Parts of machinery, railway equipment or vehicles (27%; second strongest growth in the period under review)
- Articles of iron, steel or base metal (16%; strongest growth in the period under review)
- Plastic and rubber products (8%)
- Light, ultra light, copper and zinc products (8%)

The DCs' share in imports in 2005 was 4%, with China being the most important DC supplier (2%), followed by South Africa, Brazil and Turkey. The DCs' share was the largest (9%) for articles of iron, steel or base metal, with China being the largest DC supplier (7%). This was also the product group that showed the best growth of the DC share compared to 2001. Among the DCs that saw the largest increase in exports to Sweden were Bosnia and Herzegovina, Oman, South Africa, Chile, Turkey and Vietnam.

## **Exports**

Total Sweden's exports increased both in value (30%) and in volume (5%) in the period 2001-2005. With a total export value of €10.6 billion (5 million tons) in 2005, Sweden was a medium-sized exporter in the EU, behind the Netherlands, Austria and Spain, but ahead of the Czech Republic, Poland and Finland. Unfortunately, the value of re-exports is unknown, as Eurostat does not allow such detailed analysis.

## Opportunities and threats

- + Sweden was the tenth largest importer of castings and forgings in the EU in 2005
- + Reasonable import share for DCs
- + Total import value increased in recent years
- + Increasing share of DCs in total imports, although it increased at a slower rate than in most other West European countries
- Imports from China represented a considerable share of DC imports

## **Useful sources**

- EU Expanding Exports Helpdesk <a href="http://export-help.cec.eu.int">http://export-help.cec.eu.int</a>
- Eurostat official statistical office of the EU http://epp.eurostat.cec.eu.int
- Trade associations mentioned in Section 1.

#### 3. Trade structure

The most common target groups for DC exporters are Original Equipment Manufacturers (OEMs), subcontractors of OEMs, agents, importers and foundries or forges. Although there are several options, supplying directly to OEMs and subcontractors of OEMs 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 supplier relationships with OEMs and subcontractors of OEMs in the EU. By working together, DC



exporters have the best chances in succeeding as they are able to offer more added value products to EU customers. Some examples of (subcontractors to) OEMs in Sweden are Bror Tonsjö (<a href="http://www.tonsjo.se">http://www.tonsjo.se</a>; machine parts subcontractor) and Volvo CE (<a href="http://www.volvo.com/constructionequipment">http://www.volvo.com/constructionequipment</a>), ABB (<a href="http://www.abb.se">http://www.abb.se</a>), Alfa Laval (<a href="http://www.alfalaval.com">http://www.alfalaval.com</a>), Husqvarna (<a href="http://www.husqvarna.se">http://www.scania.se</a>). Intermediaries in the engineering industry in Sweden can be found at the Swedish Agents Directory – <a href="http://www.agenturforetagen.se">http://www.agenturforetagen.se</a>. 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.

### 4. Prices

One of the major trends that affect the costs and revenues of Swedish castings and forgings production is price pressure, which results in importers/agents and OEMs as well as their suppliers continuing looking for opportunities to reduce cost prices of parts by 10-30%. This may be underlined by the fact that prices in the engineering industry increased only 8.3% in the period 2000-2005. In the meanwhile, the industry had to deal with increasing raw material and energy prices as well as with the fact that Sweden is the country with the seventh highest wage costs in the EU metal industry (€23.67 per man-hour in 2005), which is less than in Denmark and Finland, but more than in Austria, France and the UK. 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 <a href="http://www.caef-eurofoundry.org">http://www.caef-eurofoundry.org</a>
- European Engineering Industries Association (Orgalime) <a href="http://www.orgalime.org">http://www.orgalime.org</a>
- London Metal Exchange <a href="http://www.lme.co.uk">http://www.lme.co.uk</a>

## 5. Market access requirements

Manufacturers in developing countries should be aware of the market access requirements of their trading partners and the country government. Requirements are demanded through legislation and through labels, codes and management systems. These requirements are based on environmental, consumer health and safety and social concerns. For more information go to 'Search CBI database' at <a href="http://www.cbi.eu/marketinfo">http://www.cbi.eu/marketinfo</a>

# 6. Business practices

The subject of business practices is concerned with finding prospects and with sales promotion tools, like trade press and trade fairs.

### Finding prospects

There are many ways to find potential business partners in Sweden. Some examples of available sources, beside the ones already mentioned in Section 1:

- Direct Industry <a href="http://www.directindustry.com">http://www.directindustry.com</a>
- Europages <a href="http://www.europages.com">http://www.europages.com</a>
- Kellysearch <a href="http://www.kellysearch.com">http://www.kellysearch.com</a>
- Kompass <a href="http://www.kompass.com">http://www.kompass.com</a> (mostly fee based, but the free part is useful too)
- Swedish Agents Directory <a href="http://www.agenturforetagen.se">http://www.agenturforetagen.se</a>
- Thomas Global Register Europe <a href="http://www.trem.biz">http://www.trem.biz</a>

For more details about how to search some of these databases, please refer to the CBI Export Manual 'Digging for Gold'. Also refer to CBI's Export Planner (<a href="http://www.cbi.eu">http://www.cbi.eu</a>), an export manual that provides information on the different steps to be taken during the export process to the EU market.

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## Trade magazines

Some relevant Swedish magazines are the Scandinavian Journal of Metallurgy - <a href="http://www.business-magazines.com/prd551053.php?siteid=global\_BMS\_product">http://www.giuteriforeningen.se</a>.

## **Trade fairs**

Visiting and participating in a trade fair abroad can be an efficient tool to communicate with prospective customers. It provides more facilities for bringing across the message than any other trade promotional tool. It can also be an important source of information on market development, production techniques and interesting varieties. The most relevant trade fair in Sweden is "Elmia Subcontractor" (annually, November, Jonkoping) - <a href="http://www.elmia.se/subcontractor">http://www.elmia.se/subcontractor</a>

This survey was compiled for CBI by Facts Figures Future in collaboration with Kommanet.

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