

CBI MARKET SURVEY

The castings and forgings market in Hungary

Publication date: May 2008

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 Hungary. 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

Hungarian production in the engineering industry increased 3.7% per year in the period 2002-2006, to almost €9 billion in 2006. Mechanical engineering was the leading consumer of steel, followed by the construction and automotive industries. The medium-sized Hungarian engineering industry ranked fourteenth in the EU, behind Belgium and Denmark, but ahead of Ireland and Slovakia. Of the main castings and forgings consuming engineering categories, "machine tools, woodworking machinery and welding equipment" (+20.6% per year), "electric motors, generators and transformers" (+19.2%), "valves and taps" (+14.2%), "pumps and compressors" (+12.7%) and "engines and turbines" (+10.3%) performed the best. Growth in these groups was partly caused by the shift of a considerable number of engineering operations from Western European countries to Hungary. In virtually all engineering segments, the increase in investments in production facilities from foreign companies is also the major cause of the growth of production output in recent years. The position of Hungary in the EU was relatively good in "pumps and compressors" (12th largest producer with 2% market share).

Because of the world, EU, and Hungarian economic growth forecasts for 2008 (+3.8%, +1.7% and +2.5% respectively) and 2009 (+3.9%, +1.8% and +3.6%), leading to a good demand for engineering products in the country, it is expected that the engineering industry output will continue to grow. As a result, the demand for steel for engineering for one will rise strongly in the next few years. Please also note that, although the EU is far from running the risk of recession, the EU and Hungarian economy is and will be clearly affected by the housing and credit crisis in the United States.

Construction industry

After a total growth of 19% in the period 2002-2005, the Hungarian construction industry amounted to €10.3 billion in 2005. The year 2006 showed a contraction, caused by a dramatic slowdown in government-sponsored road-building, and a stagnation in the housing market following the introduction of fiscal restriction measures. However, for the period 2006-2008 the industry was expected to grow fast (by 27% in total) to €13.1 billion in 2008. The small

Hungarian construction industry ranked sixteenth in the EU, behind Sweden and the Czech Republic, but ahead of Slovakia.

Production

Foundry industry

The small Hungarian foundry industry ranks tenth in the EU, behind Sweden and Austria, but ahead of Slovenia and Belgium. In 2005, light and ultra light castings accounted for 46% of total production, followed by iron castings (29%) and nodular iron castings (19%). The limited production of metal castings totalled 170,300 tonnes, an increase of more than 40% compared to 2001. Main cause was a good growth in production of nodular iron castings (+155% in this period; set off by the production increase of a new producer of automotive castings) and light and ultra light castings (+46%; mainly the foreign-owned companies increased their production and deliveries to the automotive industry, while many of the small and medium-sized aluminium foundries decreased their production). In 2006 the industry continued to grow (+6.7%), which was mainly due to strong growth recorded by light and ultra light castings.

Small and medium-sized foundries constitute the majority of Hungary's foundry industry. There are many foundries scattered across Hungary, which usually act as suppliers to larger manufacturing companies. In 2005, the country hosted about 70 ferrous metal foundries and 140 non-ferrous metal foundries. In the same year, the average turnover per employee amounted to almost €5,000 – an amount which is very small compared to other CEE countries. Probably the largest foundry is Magyarmet - http://magyarmet.t-online.hu/mm/mm_e.htm, a steel and heavy metal investment casting foundry, which was taken over by the German alloy steel producer Schmidt and Clemens. It is one of the leading investment foundries in Hungary, representing 21% of total Hungarian production and 34% of investment castings exported from the country. Other relatively large foundries in the country are Csepel - <http://www.csepelmetall.hu>, Rába Kispest - <http://www.rabakispest.hu>, Ferro Öntöde - <http://www.col.hu/ferro>, Foundry Szeged - <http://www.szegediontode.hu>, and Hydro Steel - <http://www.hydrosteel.hu>. Finally, Dunafer - <http://www.dunaferr.hu> is a large Hungarian steel company that also owns a foundry and a forge (<http://www.dfk.hu>), while Ganz Öntöde (<http://ganz-ontode.internettudakozo.hu>) is an example of a foundry that is part of a large engineering conglomerate.

Aluminium foundries accounted for the major share of non-ferrous metals output. Nine foundries produce more than 1,000 tonnes annually, while three of them produced more than 10,000 tonnes in 2005. The 9 foundries mentioned accounted 87% of the total Hungarian aluminium casting output. Probably the largest aluminium foundry in the country is the Nemak aluminium cylinder head foundry in Europe - <http://www.hydro.com>, which is the largest cylinder head foundry of Nemak in Europe (taken over from Hydro in 2006 - <http://www.nemak.com>). Prec-cast - <http://www.preccast.hu> (see textbox) is also one of the three largest aluminium foundries, while Ecseri - <http://www.ecserikft.hu> (aluminium die casting) is one of the six relatively large foundries.

Prec-cast started in 1989 as an affiliate of the German foundry company Wolf (<http://www.rdw-wolf.de>) and raised its sales value to more than €50 million in 2006. The company produces high-precision castings made from aluminium and zinc alloys – adding value by CNC machining – and also produces casting moulds and tools for the castings. Major customers are the automotive and electrical engineering industry. The foundry employs more than 500 people and produces around 750 part types. About 90% of production was exported to Western Europe. Continuous, homogenous and good quality is guaranteed by QS 9000, ISO 9002, ISO/TS 16949 and VDA 6.1 certificates issued by TÜV Bayern.

Forge industry

Unfortunately, data of Hungarian forging production are not available. However, as with the foundry industry, it can be assumed that the Hungarian forge industry is small.

Trends and characteristics

The future of the Hungarian foundry industry will be influenced by several factors. Output of ferrous foundries may decrease because of a lack of development resources, while the future of copper casting production will be determined by the production of fittings. The remaining foundries will be able to produce single pieces or medium runs, although one new and another modernised iron foundry have rapidly increased their production volume of grey and nodular iron castings in large series for the automotive sector.

Overall, the demand for castings and forgings will increase due to the growth of the construction and engineering industry. Moreover, the niche for products made in Central European countries will continue to grow as Western European foundries focus on more technologically sophisticated products. Also, Hungarian casting products are viewed as having good quality potential and Hungary has well-trained and experienced casting specialists.

However, the industry also faces some major challenges, which are:

- Efficiency improvement. Until now, there is a lack of efforts to increase productivity, probably caused by the low wage level which does not motivate the industry to improve efficiency.
- Risk of skilled labour shortage, as there is a reduced interest among youth and students to become foundry or forge specialists or metallurgic engineers.

Furthermore, a major trend that influences the castings and forgings demand and production in Hungary is the growing number of innovative applications of aluminium and magnesium castings, and the growing demand for light weight and energy-efficient applications.

Opportunities and threats

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

- + The growing economy is expected to drive a healthy demand for engineering products in the years to come, which will also stimulate local engineering production.
- + Growing construction output will lead to an increasing demand for castings and forgings in the next few years.
- + Light weight products and eco-friendly and energy-efficient technologies offer good opportunities for those DC exporters that are able to supply such products.
- + The strong increase of the Hungarian wage level in recent years (refer to Section 4) – which is expected to continue – in relation to the low average turnover per employee, gives the Hungarian industry a weak position. If no investments in efficiency improvement are made, other LCC countries such as India may take over Hungarian foundry production.
- Shift of engineering production towards Hungary, which could lead to a deceleration of demand growth for castings and forgings of the Hungarian engineering industry.

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.

In general, the manufacturing industry in Hungary is concentrated around Budapest. With expected improvements in motorway and airport connections in this decade, the Debrecen region may become an expanding area of manufacture by the end of this decade. Refer to the CBI market survey covering the EU market for a detailed explanation of relevant trade channels in this market.

Examples of potential trade partners

Some examples of prospects in Hungary are:

- Raba Automotive - <http://www.raba.hu> - drives and transmissions
- Excel Csepel - <http://www.excel-csepel.hu> - machine tools
- Kühne - <http://www.kuhne.hu> - agricultural machinery
- BoschRexroth - <http://www.boschrexroth.hu> - hydraulics, pneumatics, drives and transmissions
- Ganz Holding - <http://www.ganz-holding.hu> - conglomerate with several divisions and a wide range of products such as railway vehicles, engines, transmissions and other engineering products such as pumps, hydraulic equipment, valves, handling equipment and bearing houses.

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:

- Association of Hungarian Foundries - <http://www.foundry.matav.hu> - choose the English version and click on 'Members of AHF'.
- Association of the Hungarian Steel Industry – <http://www.mvae.hu> - choose the English version and click on 'Members'.
- Hungarian Copper Promotion Centre - <http://www.hcpcinfo.org> - choose the English language and click on 'Member companies'.
- Industria trade fair website - <http://www.industria.hu> - choose the English version and click on 'Exhibitors' list'.

3 Trade: imports and exports

Imports

In 2006, Hungary was a medium-sized importer of castings and forgings, ranking thirteenth in the EU, behind Sweden and Denmark, but ahead of Portugal and Romania. Between 2002 and 2006, the total import value annually increased by 15% to €4.8 billion (2.5 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:

- Iron and steel products: 26% of total. Annual increase in import value of 23%.
- Articles of iron, steel or base metal: 23% of total. Annual increase in import value of 10%.
- Parts of machinery, railway equipment and vehicles: 22% of total. Annual increase in import value of 12%.
- Plastic and rubber products: 11% of total. Annual increase in import value of 9%.
- Light and ultra light products: 9% of total. Annual increase in import value of 18%.
- Copper and zinc products: 9% of total. Annual increase in import value of 30%.

Between 2002 and 2006, imports from DCs annually increased by 15% in value. Compared to 2002, the total share of DCs in import value increased from 3% to 3% in 2006. The DCs' shares in imports of some product groups showed better growth compared to other product groups, as can be seen below:

- Copper and zinc products: growing from 1.5% to 2.8% in value.
- Articles of iron, steel or base metal: growing from 3.4% to 5.8% in value.
- Light and ultra light products: growing from 1.5% to 2.3% in value.

- Plastic and rubber products: growing from 2% to 2.6% in value.
- Parts of machinery, railway equipment and vehicles: declining from 5.1% to 3.2% in value.
- Iron and steel products: declining from 1.8% to 0.9% in value.

China accounted for 51% of all imports coming from DCs, followed by Turkey (22%), Malaysia (5%), Moldova (4%), Croatia (3%), and India (3%). The Chinese share of DC exports to Hungary did not grow as fast as in the EU on average (27% compared to 57%). The DCs that saw a larger increase of their share to the country were Moldova, the Philippines, Malaysia, Turkey, India, Brazil, Croatia and Mexico.

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, Hungary was a medium-sized exporter, ranking fifteenth in the EU, behind Denmark and Slovakia, but ahead of Luxembourg and Romania. The total export value of Hungary showed an annual increase of 17% in the period 2002-2006, totalling €4.2 billion in 2006. Exports consisted of:

- Parts of machinery, railway equipment and vehicles, accounting for 42% of total exports (€1.8 billion). Annual increase in export value of 18%.
- Light and ultra light products (17%; €715 million, +10%).
- Iron and steel products (16%; €674 million; +32%).
- Articles of iron, steel or base metal (15%; €615 million; +14%).
- Plastic and rubber products (9%; €373 million; +12%).
- Copper and zinc products (1%; €45 million; -3%).

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

- + The total import value of all product groups increased in the period 2002-2006.
- + In 2006, Hungary was a net-importer of castings and forgings, running trade deficits for iron and steel products (€353 million), copper and zinc products (€64 million), plastic and rubber products (€28 million), articles of iron, steel or base metal (€9 million).
- + The Chinese share of DCs' exports to Hungary did not increase as fast as in the EU on average (27% compared to 57%). Several DCs saw a larger increase of their share.
- Hungary ran trade surpluses for light and ultra light products (€97 million), parts of machinery, railway equipment and vehicles (€157 million).
- The DC share of total imports remained virtually stable, which was different from the growth in the EU on average (81%).
- The import share of DCs was 3% in 2006, far below the EU average (8.2%).
- China accounted for 51% of all imports coming from DCs. This was a higher share than in the EU on average (39%).

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

Price pressure in Hungary was not as fierce as in most Western European countries. This may be underlined by the fact that the average price level of engineering products industry increased almost 22% in the period 2000-2006, which is a much higher growth compared to Western European countries. As in other EU countries, the industry also had to deal with

increasing raw material and energy prices and wages. Although average wages in the industry increased 68% in the period 2000-2005, the Hungarian wage level was the third lowest in the EU (€4.88 per man-hour in 2005), only higher than in Slovakia and Poland. Industry specialists expect that wages will rise further in the next few years, which will lead to an increasing price level of Hungarian castings and forgings. Please refer to the CBI market survey covering the EU market for castings and forgings for more information on trends related to price developments.

Useful sources

- CAEF Eurofoundry - <http://www.caef-eurofoundry.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 Hungary, you should be aware of the market access requirements of your trading partners and the Hungarian 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 Hungary 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 Hungary are:

- Kwint Essential: for practical tips on business culture and etiquette in Hungary - <http://www.kwintessential.co.uk> - Click on 'Country Profiles' at Resources and 'Hungary'
 - Industria - <http://www.industria.hu> – technological trade fair, held annually in May, Budapest.
 - 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.
 - Association of Hungarian Construction Materials Industry – <http://www.measz.hu>
 - Association of Hungarian Engineering Industries – <http://www.magosz.hu>
 - National Federation of Hungarian Contractors - <http://www.evosz.hu>
 - Magyar Építéstechnika - <http://www.mediprint.hu/magazines/epitestechnika> - magazine
- In general, German trade magazines contain very good information, also for this country. One example is 'Giesserei', a foundry magazine (<http://www.giesserei-verlag.de>). 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
in collaboration with Effox Turbine and Gietech.

Disclaimer CBI market information tools: <http://www.cbi.eu/disclaimer>