

CASTINGS AND FORGINGS:

The EU market for selected sheet and stamped metal parts

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Report summary

This CBI market survey discusses the following highlights for the EU market for selected sheet and stamped metal parts:

- EU demand for selected sheet and stamped metal parts showed an average growth of 4.5% in value per year in the period 2002-2006. Radiators and heaters accounted for 45% (€3.3 billion) of total demand, followed by cabinet boards (38%; €2.8 billion) and gas tanks (16%; €1.2 billion). Demand for the latter products grew the fastest (+8.2% per year), followed by radiators and heaters at 5.5% per year. On average, growth is expected to be 5-10% per year for the period 2007-2009. Demand is expected to grow especially in Central and Eastern European (CEE) countries.
- EU production of selected sheet and stamped metal parts showed an average growth of 4.6% per year in the period 2002-2006. Italy played a leading role for two of the three products: radiators and heaters (37% of EU production), and gas tanks (34%). With 39% of total EU production Germany took the lead in cabinet boards.
- Production is being relocated to low cost countries, especially where standardised products are concerned. EU manufacturers will focus on higher value products.
- Developing country (DC) exporters only have opportunities in value added products. For DC exporters to be successful, some challenges have to be met, of which transportation costs is a very important one. Furthermore, quality- and communication demands in the EU are very high.
- The most important target groups for DC exporters differ per product group. These are system suppliers (for cabinet boards and gas tanks) and manufacturers (for radiators and heaters) that are willing to outsource part of their production.
- EU imports of total selected sheet and stamped metal parts have increased fast. Since 2002, the value went up 7.8% per year. The largest importing countries were the UK and Germany, both representing 14% of total imports. The EU has been a net-exporter for years. In 2006, the total exports value was €3.9 billion.
- The share of DCs in imports increased for all three products. The share was the highest for radiators and heaters (18%), followed by gas tanks (6.5%) and cabinet boards (2.7%).

This survey aims to provide developing-country exporters of selected sheet and stamped metal parts with product-specific market information related to gaining access to the EU market(s). By focusing on the EU market(s) for one product(group), this document provides additional in-depth information, complementary to the more general information and data provided in the CBI market survey 'The castings and forgings market in the EU', which can be downloaded from <http://www.cbi.eu/marketinfo>. Detailed information on the selected product(group) is given in appendix A. This survey discusses the EU in general and the following markets in particular: France, Germany, Italy, the Netherlands, the UK and Ireland.

1 Market description: industrial demand and production

First of all, opportunities for DC exporters in this sector are generally limited, because transport costs are rather high compared to the volume. Therefore some products have been chosen that offer the best opportunities for DC exporters. These products primarily consist of selected sheet and stamped metal parts and add relatively much value for EU buyers. It concerns gas tanks, radiators and heaters and cabinet boards, also refer to Appendix A. When selected sheet and stamped metal parts are referred to, it is the aggregate of these products, unless stated otherwise. The best opportunities for DC exporters lie in subcontracting. This

means that EU producers of the three products mentioned are potential buyers for DC suppliers.

Industrial demand

The aggregated European demand value for selected sheet and stamped metal parts showed an average growth of 4.5% per year in the period 2002-2006. Please note that reliable volume data are not available. Table 1.1 shows details on the demand for the three selected products. Radiators and heaters accounted for 45% (€3.3 billion) of total demand, followed by cabinet boards (38%; €2.8 billion) and gas tanks (16%; €1.2 billion). Demand for the latter products grew the fastest (+8.2% per year), followed by radiators and heaters at 5.5% per year. The Italian market plays a leading role for two of the three products: radiators and heaters (28% of the EU market), and gas tanks (32%). With 30% of the EU market Germany took the lead in cabinet boards. Beside Italy and Germany, the UK and France were the other leading markets in the EU for the three products. The shares of Central and Eastern European countries in the EU total were still at a low level. The shares varied from 7% (gas tanks), 10% (cabinet boards), to 12% for radiators and heaters. However, the demand in these countries grew fast: both the market for radiators and heaters and for cabinet boards grew by more than 13% per year. The exception was gas tanks, remaining stable at only about €80 million.

Table 1.1 Apparent EU demand for radiators and heaters, cabinet boards, and gas tanks, by country, 2002-2006, € million

	2002	2003	2004	2005	2006	Change '02-'06 (CAGR*)
Radiators and heaters						
EU27	2,663	2,721	3,028	3,009	3,298	5.5%
Italy	479	539	682	720	907	17.3%
UK	483	485	554	530	598	5.5%
Germany	655	608	607	542	532	-5.1%
France	241	235	220	255	232	-1.0%
Netherlands	158	160	163	148	186	4.1%
Ireland	3	19	10	23	15	44.3%
Cabinet boards						
EU27	2,533	2,397	2,463	2,835	2,758	2.1%
Germany	688	594	714	761	822	4.5%
UK	586	500	458	502	422	-7.9%
Italy	410	339	331	488	301	-7.4%
France	321	337	338	369	388	4.8%
Netherlands	27	31	38	68	73	28.7%
Ireland	7	65	59	57	54	69.2%
Gas tanks						
EU27	868	877	891	930	1,188	8.2%
Italy	274	270	248	263	375	8.1%
France	124	147	153	169	174	8.8%
Germany	123	121	130	153	144	3.9%
UK	68	49	55	37	27	-20.8%
Netherlands	7	8	13	0	15	19.9%
Ireland	3	4	2	9	7	25.2%

Source: Eurostat (2008)

* Compound Annual Growth Rate

In addition to the data shown above, imports statistics are also very useful to get an indication of the market development. Refer to Section 3 for more information on EU imports.

Outlook

For the period 2007-2009, EU demand is expected to continue its growth trend, given the economic outlook in the major EU countries. Each product has its own characteristics with regard to demand drivers:

- Demand for radiators and heaters depends on the output of both residential construction as non-residential construction, both new construction and renovation.
- Demand for cabinet boards depends on investments in machinery, equipment and installations, by several industries such as the machinery and equipment industry, food industry, manufacturing industry and the process industry.
- Demand for gas tanks depends on the number of cars and other vehicles produced, equipped with a gas tank. It is also common practice that a gas tank is installed after delivery, in the country of end-use. Furthermore, investments by the liquefied gasses process industry are major drivers of growth.

On average, growth is expected to be 5-10% per year for the period 2007-2009. Demand is expected to grow especially in Central and Eastern European (CEE) countries.

Production

The aggregated European production of selected sheet and stamped metal parts showed an average growth of 4.6% per year in the period 2002-2006. Table 1.1 shows details on the production of the three products under review. Radiators and heaters and cabinet boards took an equal share of total EU production (41%; €3.3 billion and €3.2 billion respectively). The balance was left for gas tanks (18%; €1.5 billion). Demand for the latter products grew the fastest (+7.4% per year), followed by radiators and heaters at 5.1% per year. Again, Italy played a leading role for two of the three products: radiators and heaters (37% of EU production), and gas tanks (34%). With 39% of total EU production Germany took the lead in cabinet boards. Beside Italy and Germany, the UK, France and the Netherlands were the major producers of the three products under review. The shares of Central and Eastern European (CEE) countries in total EU production were higher than the shares in demand. They varied from 9% (cabinet boards), 13% (radiators and heaters), to 16% for gas tanks. It is expected that these shares will only increase in the period 2007-2009, as production in CEE countries will continue to grow faster than in other EU countries. In the period 2002-2006, for example, production in CEE countries grew by between 11-19% per year. Production of gas tanks grew the fastest, but also production of the other two products grew fast.

Table 1.2 Indication of EU production value of selected sheet and stamped metal parts, by country, 2002-2006, € million

	2002	2003	2004	2005	2006	Change '02-'06 (CAGR)
Radiators and heaters						
EU27	2,697	2,735	3,014	3,006	3,292	5.1%
Italy	691	777	968	1,007	1,206	14.9%
Germany	597	553	565	525	550	-2.0%
UK	303	258	292	288	336	2.6%
Netherlands	163	178	174	171	191	4.0%
France	144	116	93	113	105	-7.6%
Ireland	11	26	9	14	4	-24.6%
Cabinet boards						
EU27	2,885	2,804	2,950	3,239	3,241	2.9%
Germany	948	852	1,044	1,130	1,247	7.1%
UK	610	578	512	524	444	-7.6%
Italy	385	313	322	486	313	-5.0%
France	405	429	430	450	470	3.8%
Ireland	-	70	63	53	52	-9.7%*
Netherlands	-	-	-	-	-	-
Liquefied gas tanks						
EU27	1,091	1,079	1,129	1,206	1,453	7.4%
Italy	354	328	317	333	492	8.6%

	2002	2003	2004	2005	2006	Change '02-'06 (CAGR)
Germany	156	149	158	163	185	4.5%
France	136	158	155	167	166	5.0%
UK	69	49	52	40	37	-14.5%
Netherlands	-	-	16	-	17	-
Ireland	-	-	-	-	-	-

Source: Eurostat (2008)

*2003-2006

In Europe, raw materials for the selected sheet and stamped metal parts, iron and steel, are mostly produced by giants, such as Corus (Netherlands and UK, <http://www.corusgroup.com>, taken over by Tata), Outokumpu (Finland, <http://www.outokumpu.com>) and Arcelor (<http://www.arcelormittal.com>, merged with Mittal Steel).

Trends

There are four main trends which apply to the three selected products:

- **Relocation of production to Low-Cost Countries (LCCs)**. There is a clear trend towards relocation of production to LCCs. It especially concerns standardised products that can no longer be produced rationally in the EU. Labour cost is one of the major reasons, but also EU legislation plays a role here. Under this legislation, CO2 emissions need to be reduced. This means that industries need to produce in a cleaner manner in order to meet this legislation. Obviously, major investments are needed to comply with these rules. In some cases, relocation of production is then a serious option for EU producers. Only production of (highly) specialised products will remain in the EU. At the moment, the EU is still larger in production of selected sheet and stamped metal parts compared to Asia, but this may change for the medium long period.
- **Fierce competition** - competition is fierce in the selected sheet and stamped metals industry. On a global level, the number of companies that offer selected sheet and stamped metal parts is still increasing, especially in Asia. This is because it is not a very difficult product to produce. At the same time, the demand is growing at a lower rate, leading to severe competition and price pressure. China is a large producer of selected sheet and stamped metal parts, followed by India. Vietnam may also become a big supplier in the near future. Furthermore, the market for raw materials has become a global one, in which prices are the same for any buyer all over the world. Only in few cases, suppliers are able to charge these increased raw material prices fully to their customers. All this leads to a pressure on margins, especially for standard products.
- **Thinner products** - selected sheet and stamped metal parts become increasingly thinner in the EU. Some heaters and cabinet boards are already equipped with selected sheet and stamped metal parts which are only 1-2 millimetre thick, without losing their strength. This could be the result of optimised design and more sophisticated manufacturing techniques. For example, some selected sheet and stamped metal is currently processed with laser techniques instead of milling and cutting. One more factor that may influence this process, is EU legislation. The care for the environment has become a strategic political issue in the EU. As a result, in order to reduce CO2 emissions, lighter materials (such as magnesium and aluminium) may replace heavy steel in some applications in the future.
- **Standardisation of product specifications** - selected sheet and stamped metal parts are increasingly standardised in the EU, due to harmonised legislation. In the past, many EU countries had their own individual legislation. For example, each EU country had its own standards for gas tanks, in order to protect their national markets. These national legislations have disappeared, due to EU Directives that apply in all EU countries. The Central and Eastern European countries are currently in the process of changing their legislation. At the same time, EN standards are developed for selected sheet and stamped metal parts; these replace the former DIN industry standards. All this leads to uniform products that can be sold all over the world. Manufacturers can now more easily increase

production volumes, which is necessary to cut costs (see first trend). Also refer to Section 5.

The CBI market surveys covering the EU markets of pipes and process equipment and of castings and forgings show some more important trends in the industry. They are available at <http://www.cbi.eu>.

Opportunities and threats

The major opportunities for DC exporters include:

- **Labour-intensive production** - the most important advantage that DC exporters have in the selected sheet and stamped metal parts industry is the lower labour costs. The cost price of selected sheet and stamped metal parts primarily consists of labour and raw materials. Although the price of the latter has been increasing (refer to Section 4), this applies to everyone in the business. Labour, therefore, can make the difference in the price. The DC exporter can gain quite some advantage here, because they sometimes operate in several shifts six days a week, instead of the usual five in Europe. The savings can generally amount to 30-40%.
- **Added value products** - For DC exporters, especially good opportunities exist in added value products with a significant share of labour. Otherwise they are not competitive, as the value of regular selected sheet and stamped metal parts is too low to export to the EU in a profitable manner. DC exporters could perform the full production process of the selected products for a European manufacturer, preferably by adding as much value as possible. They should for example not only produce the loose parts, but also take care of assembly. Each of the three selected products offers good opportunities, as they are labour intensive to produce. This goes especially for gas tanks and radiators and heaters, and to some lesser extent for cabinet boards:
 - Gas tanks - the DC exporter could already do a significant part (at least 50%) of the assembly of all necessary meters and instruments to the tanks. These meters and instruments are often complex products and are manufactured in the EU. They can be shipped to the DC exporter, who fits all parts together on the tank. Obviously, the final assembly (on e.g. the car or truck) is done in the EU.
 - Radiators and heaters - DC exporters could produce these completely in their countries, including the finishing or coating. The EU buyer should only have to connect them to the heating system of the designated building by mounting some bolts and/or hoses. Testing procedures and certification is done by the EU buyer.
 - Cabinet boards - most cabinet boards are produced according to specifications provided by the customer. Beside manufacturing them, DC exporters could therefore also do the assembly of attached parts and pieces. This involves a relatively high share of manual labour, certainly as electronic equipment, hoses, meters and other instruments are also fitted to the cabinet already. This saves the EU buyer a significant amount of work.
- **Buyer demands** - one of the major success factors for DC exporters is a consistent quality. EU buyers expect every shipment to have exactly the same quality. For them this is more important than just the price. Having a good client reference in the EU is also an asset. Moreover, DC exporters should be aware that EU buyers have high demands when it comes to e.g. finishing (coating) and communication (quick response to inquiries). Price is certainly not the most important criterion! Once an EU buyer places an order, DC exporters should communicate well during the process. They could even invite the EU buyer to visit the factory. The past has also shown that a key success factor is that European companies that work with DC suppliers share their experiences and expertise with these suppliers. Mistakes from earlier experiences with foreign suppliers can be used to learn from. By exporting successfully to the EU, DC exporters will also enlarge their domestic markets. Using the knowledge and know how that is gained by cooperating with EU-companies, DC exporters can raise the quality of the products on the domestic markets as well.

The major threat to DC exporters is product liability. One of the reasons that the final assembly is done in the EU is product liability. Products must meet severe requirements. If a mistake occurs, the supplier can be held liable for the error. In the USA, for example, this sometimes leads to extreme damage claims. In the EU as well, manufacturers want to prevent this from happening and want to control the final assembly process to make sure their products are 100% good and safe. If full assembly were done in DCs, no control would be possible. This is in fact a barrier for DCs.

Useful sources

- Dutch Association of Subcontracting Industries - <http://www.nevat.nl>
- French association for selected sheet and stamped metal parts - <http://www.gimef-france.com>
- German sheet metal association - <http://www.ibu.wsu.de>
- International Council of Sheet Metal Presswork Associations - <http://www.icospa.com>
- Italian machine tool, robotics, and automation manufacturing industry - <http://www.ucimu.it>
- National Metalforming Centre - <http://www.britishmetalforming.com>

Sources to find manufacturers have been included in Section 2.

2 Trade channels for market entry

Trade channels

The distribution patterns for the selected products are not the same. Therefore it is not possible to give a general scheme that applies to all of them. This is also due to the nature of the products, as gas tanks and heaters are mostly end products and cabinet boards are intermediate, often tailor-made, products. The most common and also most suitable patterns for DC exporters are:

- **Gas tanks** - gas tanks are mostly used in passenger cars and trucks. Car manufacturers usually buy these tanks through their regular (system) suppliers or importers, who as such form a target group for DC exporters. Gas tank installation companies could also be a possible trade channel.
- **Radiators and heaters** - for radiators and heaters, the most logical target group for DC exporters would be EU manufacturers of heaters, air conditioners and radiators. Importers and Do-It-Yourself chains could also be an option, but obviously this puts pressure on the margin of the DC exporter.
- **Cabinet boards** - cabinet and thus cabinet boards are usually part of a machine or system, or of a production or assembly line. These machines, systems or production or assembly lines are part of the production process in the process and manufacturing industries in Europe. Machinery and equipment producers are therefore major end-users of cabinets. In addition, the system suppliers that supply and equip the factories and assembly lines of the EU manufacturers are also main end-users. Importers or other intermediaries are not an option, as most cabinet boards are tailor made.

Summarising, it can be said that supplying directly to the EU buyer is preferred, as this keeps the price as low as possible. This increases the chances of DC exporters the most. On the other hand, many EU buyers are not yet familiar with DC exporters. Therefore, intermediaries like importers or 'supply agents' and 'sourcing agents' (matching DC exporters and EU buyers) are sometimes very useful. As a summary, Table 2.1 gives an overview of the most common target groups for DC exporters, for each product.

Table 2.1 Most common target groups for DC exporters

	Gas tanks	Radiators and heaters	Cabinet boards
Most common target group for DC exporters	<ul style="list-style-type: none"> • System suppliers • Importers 	<ul style="list-style-type: none"> • Manufacturers of heaters, air conditioners, radiators • Importers • Do-It-Yourself chains with own import function 	<ul style="list-style-type: none"> • Machinery producers • System suppliers

Typical end-users in EU	<ul style="list-style-type: none"> • Gas tank installation companies • Companies storing gases • Car- and truck manufacturers 	<ul style="list-style-type: none"> • Installation companies • Construction companies 	<ul style="list-style-type: none"> • System suppliers • Installation companies
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Source: Gietech and Facts Figures Future (2008)

Please refer to the CBI market survey 'The castings and forgings market in the EU' for more information on trade channels.

Examples of interesting players for DC exporters

Some examples of European companies that are active in the selected sheet and stamped metal parts industry are listed below. They are producers and system suppliers of the three selected products and are as such potential target groups for DC exporters, since subcontracting is a major opportunity for DC exporters in the selected sheet and stamped metal parts industry. Most of the company websites offer details on their product range (including specs and other technical details), press releases and other relevant information. More companies can usually be found by accessing the trade associations of each country, which are given at the end of this section.

Gas tanks

- Autogastechiek Holland (the Netherlands) – <http://www.auto-lpg.com>
- Automotive tanks (UK) – <http://www.automotivetanks.ltd.uk>
- CPV (Ireland) – <http://www.cpv.ie>
- CTMI (France) – http://www.chaudronnerie-maintenance.fr/chaudronnerie_tuyauterie.htm
- Ermert Tankbau (Germany) – <http://www.ermert.de>
- HEAT wärmetechnische Anlagen (Austria) – <http://www.heat.at>
- UBH International (UK) – <http://www.ubh.co.uk>

Radiators and heaters

- Airelec Industries – <http://www.airelec.fr> – France; electric heaters
- Biddle – <http://www.biddle.nl> – the Netherlands; climate control equipment
- Bronpi – <http://www.bronpi.com> – Spain; heating stoves
- Esa-Pyronics – <http://www.esacombustion.it> – Italy; industrial thermal processes
- Kampmann – <http://www.kampmann.de> – Germany; heating-, cooling-, ventilating equipment
- Myson – <http://www.myson.co.uk> – UK; fan convectors
- Schwank – <http://www.schwank.co.uk> – UK; air heaters

Cabinet boards

- ABB – <http://www.abb.de> – Germany; control systems
- APW Electronic Solutions – <http://www.apw.com> – Italy; electronic packaging, racks
- Ciltron – <http://www.ciltron.nl> – the Netherlands; cabinets and control panels
- Hispano Mecano Eléctrica – <http://www.himel.es> – Spain; system supplier, cabinet boards.
- Pentair – <http://www.pentair-ep.com> – UK; electronic enclosure solutions
- Ripleg – <http://www.ripleg.com> – Spain; cabinet boards
- Rittal – <http://www.rittal.com> – Germany; electronic packaging, enclosure systems
- Weidmuller – <http://www.weidmuller.com> – France; fieldbus components, terminals, power distribution blocks

Although much of the volume for the selected products is still realised by intermediaries, it is expected that their share will decrease in the future. This is because direct sourcing is expected to become more popular among EU buyers. First, EU buyers will look for higher margins, by excluding the intermediary channel. Second, the importance of product liability will only increase (refer Section 1), therefore EU buyers are expected to want to keep as much

control as possible. Third, experiences with doing business in Low-Cost Countries (LCCs) will only increase, resulting in more direct sourcing.

Trend: Internet gains in importance

The Internet is playing an increasingly important role in trade. First, exporters can present themselves to prospects with a high-quality and professional website. Second, the number of trade leads and marketplaces where buyers and sellers meet virtually is increasing. Some European buyers already purchase their products via these digital platforms. The website <http://www.emarketservices.com> gives an overview of marketplaces, by region and by sector. Select 'E-market directory' and then for example 'Industrial Machinery & Equipment' for some examples. The CBI Export Manual 'How to promote your website to the EU' gives exporters some excellent suggestions for marketing their website (<http://www.cbi.eu/marketinfo>).

Price structure

Generally speaking, margins of producers of selected sheet and stamped metal products are low to medium (maximum 10%). Margins will be higher when more value is added. The following links in the chain generally earn more than the producer. System suppliers in the EU, for example, charge at least 20-25% to their clients. Importers generally work with margins between 10 and 15%. The mark up of agents varies between 1 and 8%, depending on, for example, the character of the product and the size of the order.

Selecting a suitable trading partner

The Internet is an excellent source to identify potential buyers in the EU. Some examples follow below:

- Buyers Guide Metalforming - <http://www.metalforming.com/buyers1/Intl.asp> - international members of Precision Metalforming Association.
- Sheet Metal World Database - <http://search.sheetmetalworld.com> - directory of suppliers of steel industry goods and services. Select country and then 'materials' for sheet metal.
- Wer Liefert Was – <http://www.wlwonline.de> - database with over 300,000 companies from a number of EU-countries. First select 'English', then search by product (for example 'cabinets'), then mark the activity of the company (manufacturer, wholesaler, distributor). At the bottom, choose an EU country.
- ABC - <http://www.abcdirect.nl> - type a keyword (for example 'heaters') and select the desired sub-sector to find –among others- importers/distributors. Available for France (<http://www.abc-d.fr>) and Belgium (<http://www.abc-d.be>) as well.
- Direct Industry - <http://www.directindustry.com> - you can search by product, company ('exhibitors') or catalogues and technical brochures. Here it possible to get an idea of products made by West European end-users.
- Europages – <http://www.europages.com> - extensive company database. Search for your specific product. The main benefit of Europages is that searching by type of activity (such as manufacturer or distributor) is also possible.
- Kellysearch - <http://www.kellysearch.com> - extensive company database. Search for your specific product, such as 'radiators'.
- Kompass – <http://www.kompass.com> – extensive company database that has a member version (fee based) and a less detailed non-member version. Select a country under 'region' and then search by keyword (e.g. 'Tanks, metal, for liquefied gases').
- Thomas Global Register Europe - <http://www.trem.biz> - you can search by product (e.g. 'heat exchangers' or 'metal pressing'); the results are sorted by country.

For more details on how to search some of these databases, please refer to the CBI Export Manual 'Digging for Gold'. Additionally, the websites of trade fairs usually contain a list of exhibitors. They also enable a search for exhibitors per country, like for example <http://www.hannovermesse.de> (go to 'exhibitors and products'). Also refer to the websites of trade associations mentioned in Section 1, which often contain a list of members. One example is the website of the German sheet metal association - <http://www.ibu.wsu.de>, where you can look for examples of producers by hitting 'mitglieder'. The CBI publication 'Your Image Builder'

gives practical suggestions on e.g. presenting yourself and your company and how to approach potential clients. It is available at <http://www.cbi.eu>.

3 Trade: imports and exports

Imports

EU imports of selected sheet and stamped metal parts (defined here as the sum of the three selected products) have increased fast. Since 2002, the value went up 7.8% per year. The volume increase over the same period was lower, 6.1%. Obviously, this was caused by fast growing prices of raw materials in this period (also refer to Section 4). The largest importing countries were the UK and Germany, both representing 14% of total imports. Turkey is an important DC supplier of selected sheet and stamped metal parts products to the EU. It is located much closer to the EU market than e.g. China. Therefore, delivery times are much shorter (5 days versus 4-5 weeks). Table 3.1 has more details. Below follows more detailed information, per product group. 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.

Radiators and heaters

In 2006, radiators and heaters accounted for more than 45% of the total import value of selected sheet and stamped metal parts. Imports have been rising since 2000 and peaked in 2004 at €1.7 billion. Import value went down slightly in 2005, but dropped in 2006 (-12.1%). In 2006, the total value was €1.5 billion, which was still 11% higher than in 2002. The import volume was up by 24% compared to 2002, to 763 thousand tonnes. Clearly, import prices have been under pressure due to strong competition, as import values did not increase at the same rate as import volumes.

The UK is the largest importer with a value of €284 million, while number two, Germany, saw a decrease in imports of 3.9% per year to €222 million. This may have to do with the fact that in Germany higher quality and buyers' demands apply than in the UK. France ranked third (€140 million) and the Netherlands was fourth (€103 million). The DCs saw their share in imports increase from 7% in 2002 to 18% in 2006. Of these countries, especially Turkey is an important supplier of radiators and heaters. The DC countries that saw a quick rise in exports to the EU were South Africa, Iran, India, China and Albania. Also refer to Table 3.1.

Table 3.1 Imports and leading suppliers of radiators and heaters, 2002 – 2006, share in % of value

Product	2002 € mln	2004 € mln	2006 € mln	Leading suppliers in 2006 (share in %)	Share (%)
EU27	937	1,343	1,137	Intra EU : Italy (15), Belgium (15), Germany (12), Poland (7), Czech Rep. (6)	77
	306	158	80	Extra EU ex. DC : Switzerland (4), South Korea (<0.5), Canada (<0.5), Norway (<0.5), UAE (<0.5)	5
	93	196	268	DC : Turkey (16), China (1), India (<0.5), Iran (<0.5), Albania (<0.5), South Africa (<0.5), Morocco (<0.5), Croatia (<0.5), Brazil (<0.5), Thailand (<0.5)	18
United Kingdom	155	194	164	Intra EU : Italy (19), Belgium (10), Poland (7), Germany (7), Ireland (5)	58
	43	25	13	Extra EU ex. DC : Switzerland (4), Canada (<0.5), U.A.Emirates (<0.5), Taiwan (<0.5), Norway (<0.5)	5
	35	96	107	DC : Turkey (35), China (2), South Africa (<0.5), India (<0.5), Mexico (<0.5)	38
Germany	141	215	184	Intra EU : Czech Rep. (23), Poland (14), Italy (13), Belgium (8), France (7)	83
	112	53	23	Extra EU ex. DC : Switzerland (10), Hong Kong (<0.5), Japan (<0.5), Australia (<0.5), USA (<0.5)	11
	8	12	15	DC : Turkey (5), India (1), China (1), Brazil (<0.5), Croatia (<0.5), Peru (<0.5)	7

Product	2002 € mln	2004 € mln	2006 € mln	Leading suppliers in 2006 (share in %)	Share (%)
France	128	164	133	Intra EU : Belgium (35), Italy (27), Germany (15), Poland (5), Netherlands (4)	95
	8	5	1	Extra EU ex. DC : Switzerland (<0.5), USA (<0.5), Canada (<0.5), NI Antilles (<0.5), Hong Kong (<0.5)	1
	1	4	6	DC : Turkey (5), China (<0.5), Croatia (<0.5)	5
The Netherlands	95	118	101	Intra EU : Belgium (75), Germany (12), Italy (5), Poland (2), Hungary (1)	98
	7	2	0.2	Extra EU ex. DC : Hong Kong (<0.5), USA (<0.5), Norway (<0.5), Switzerland (<0.5), Taiwan (<0.5)	0
	4	1	2	DC : Turkey (1), China (1), Mexico (<0.5), Malaysia (<0.5)	2
Italy	30	42	45	Intra EU : Germany (33), Austria (13), Romania (10), France (4), Belgium (2)	54
	26	14	13	Extra EU ex. DC : Switzerland (5), Hong Kong (<0.5), USA (<0.5), Russia (<0.5), Taiwan (<0.5)	15
	9	13	26	DC : Turkey (24), China (5), Albania (2), Morocco (<0.5), Croatia (<0.5), Bangladesh (<0.5), Tunisia (<0.5)	31
Ireland	19	23	19	Intra EU : UK (48), Belgium (11), France (3), Italy (3), Netherlands (2)	72
	1	1	0.0	Extra EU ex. DC : Norway (<0.5), USA (<0.5), Japan (<0.5), Switzerland (<0.5), Canary (<0.5)	0
	2	4	7	DC : Turkey (27), China (1), Croatia (<0.5), South Africa (<0.5), Bosnia and Herz. (<0.5)	28

Source: Eurostat (2007)

Cabinet boards

After an import dip in 2003 (€683 million), imports of cabinet boards showed robust growth to €1.1 billion in 2006. This was an increase of almost 12% per year on average since 2002. The volume went up by 10.3%. This indicates an increased pressure on prices, as the cost prices of raw materials increased much faster in the period mentioned. There is indeed full competition within this product group. Low cost countries offer very low prices, compared to Western European countries. Furthermore, China is able to compensate the increased steel prices due to its considerable stock of steel.

France was the largest importer (€135 million). It was followed by Germany (€127 million), the Netherlands (€113 million) and the UK (€83 million). The role of the DCs is increasing. In 2006, they supplied €30 million to the EU, which represents a share of 2.7% in imports, up from 1.7% in 2002. China and Turkey are the two main DC suppliers. Beside China and Turkey, other DC countries that saw a quick rise in exports to the EU were Morocco and India.

Table 3.2 Imports and leading suppliers of cabinet boards, 2002 – 2006, share in % of value

Product	2002 € mln	2004 € mln	2006 € mln	Leading suppliers in 2006 (share in %)	Share (%)
EU27	534	708	989	Intra EU : Germany (36), France (10), Italy (6), Spain (6), Finland (5)	91
	150	91	70	Extra EU ex. DC : USA (2), Switzerland (2), Norway (<0.5), Hong Kong (<0.5), Japan (<0.5)	6
	12	17	30	DC : China (1), Turkey (1), India (<0.5), Tunisia (<0.5), Sri Lanka (<0.5), Morocco (<0.5), Thailand (<0.5), Philippines (<0.5), Malaysia (<0.5), Brazil (<0.5)	3
France	58	81	117	Intra EU : Germany (27), Italy (22), Spain (16), Hungary (7), Czech Rep. (6)	86
	17	16	11	Extra EU ex. DC : Switzerland (5), USA (1), Israel (<0.5), Japan (<0.5), Taiwan (<0.5)	8
	2	3	8	DC : China (2), Tunisia (1), Morocco (1), Turkey (<0.5), India (<0.5), Thailand (<0.5), Colombia (<0.5), Mauritius (<0.5), Mexico (<0.5), Malaysia (<0.5)	6

Product	2002 € mln	2004 € mln	2006 € mln	Leading suppliers in 2006 (share in %)	Share (%)
Germany	48	81	112	Intra EU : Czech Rep. (17), Austria (9), Italy (9), Hungary (9), UK (8)	88
	71	29	12	Extra EU ex. DC : Switzerland (6), USA (1), Israel (<0.5), Japan (<0.5), Norway (<0.5)	10
	2	1	2	DC : China (1), Turkey (1), India (<0.5), Indonesia (<0.5), Egypt (<0.5), Malaysia (<0.5), Sri Lanka (<0.5), Brazil (<0.5), Mexico (<0.5), Thailand (<0.5)	2
The Netherlands	49	70	106	Intra EU : Germany (43), Finland (30), France (8), UK (4), Spain (4)	94
	4	5	6	Extra EU ex. DC : USA (4), Switzerland (1), Hong Kong (<0.5), Norway (<0.5), Japan (<0.5)	5
	0.2	0.2	0.4	DC : China (<0.5), Turkey (<0.5), Sri Lanka (<0.5), Saudi Arabia (<0.5), India (<0.5), Yemen (<0.5), Surinam (<0.5), South Africa (<0.5), Malaysia (<0.5)	0
United Kingdom	53	54	57	Intra EU : Germany (36), Netherlands (6), Finland (5), Denmark (5), Spain (5)	69
	15	13	19	Extra EU ex. DC : USA (14), Hong Kong (2), Norway (2), Japan (2), Switzerland (1)	22
	4	6	7	DC : China (5), India (1), Sri Lanka (1), Turkey (1), Thailand (<0.5), South Africa (<0.5), Mexico (<0.5), Indonesia (<0.5), Egypt (<0.5), Malaysia (<0.5)	9
Italy	51	57	56	Intra EU : Germany (73), France (11), Romania (2), UK (2), Netherlands (2)	92
	9	6	4	Extra EU ex. DC : Taiwan (1), USA (1), Switzerland (1), Japan (1), Israel (<0.5)	6
	0.1	0.3	1	DC : India (1), China (1), Turkey (<0.5), Brazil (<0.5), Croatia (<0.5), Trinidad,Tob (<0.5), South Africa (<0.5), Mexico (<0.5), Tunisia (<0.5)	2
Ireland	11	18	18	Intra EU : Netherlands (46), UK (17), Belgium (7), Denmark (6), Germany (5)	91
	5	1	1	Extra EU ex. DC : USA (3), Switzerland (1), Israel (<0.5), Canada (<0.5), Japan (<0.5)	5
	0.3	0.3	1	DC : Philippines (2), Sri Lanka (1), less than 0.5%: Egypt, India, China, Malaysia, Dominican R., Brazil, South Africa, Oman	4

Source: Eurostat (2007)

Gas tanks

Imports of gas tanks amounted to €628 million in 2006, which means an annual growth of 16.8% since 2002. Imports grew year after year, but growth was the highest in 2006. This was caused by very strong growth of imports by Spain, up from €30.6 million in 2005 to €172 million in 2006. It can be seen from Table 3.3 that this increase was caused by imports from the USA to Spain, but a clear cause for this growth can not be given, even industry experts are not sure. The import volume has shown a different trend: import volume declined to 162,000 tons in 2004, but regained growth in 2005 and 2006, reaching 186,000 tonnes.

The top four importers in 2006, Spain (€172 million), Germany (€85 million), the UK (€72 million), France (€55 million) and Italy (€34 million) all increased their imports since 2002. The Netherlands accounted for a value of €14 million (-3.5% per year). DCs increased their role considerably. In 2006 they accounted for 6.5% of imports, against 4% in 2002. Turkey, China and Thailand are the largest DC suppliers. Beside Turkey, China and Thailand, other DC countries that saw a quick rise in exports to the EU were Tunisia and Malaysia.

Table 3.3 Imports and leading suppliers of gas tanks, 2002 – 2006, share in % of value

Product	2002 € mln	2004 € mln	2006 € mln	Leading suppliers in 2006 (share in %)	Share (%)
EU27	218	320	398	Intra EU : Germany (12), Austria (9), Czech Rep. (8), Italy (7), Portugal (6)	63
	106	63	190	Extra EU ex. DC : USA (25), Norway (3), Switzerland (<0.5), South Korea (<0.5), UAE (<0.5)	30
	13	21	41	DC : Turkey (2), China (2), Thailand (1), Saudi Arabia (<0.5), Tunisia (<0.5), Croatia (<0.5), India (<0.5), Azerbaijan (<0.5), Malaysia (<0.5), Oman (<0.5)	7
Germany	27	61	74	Intra EU : Austria (37), Czech Rep. (15), Poland (9), Hungary (7), Italy (5)	87
	28	15	5	Extra EU ex. DC : USA (4), Switzerland (1), South Korea (1), Norway (<0.5), Russia (<0.5)	6
	2	3	6	DC : China (4), Turkey (2), Malaysia (<0.5), India (<0.5), Croatia (<0.5), Bahrain (<0.5), South Africa (<0.5), Brazil (<0.5), Yemen (<0.5), Mexico (<0.5)	7
United Kingdom	34	41	48	Intra EU : Portugal (19), Italy (13), Germany (10), Austria (8), France (6)	66
	15	11	14	Extra EU ex. DC : Norway (10), USA (7), U.A.Emirates (1), Japan (<0.5), Israel (<0.5)	19
	4	8	11	DC : Thailand (5), Saudi Arabia (3), Turkey (2), Azerbaijan (1), China (1), Oman (1), South Africa (<0.5), India (<0.5), Tunisia (<0.5), Equat.Guinea (<0.5)	15
France	28	41	49	Intra EU : Germany (25), Belgium (16), Spain (12), Portugal (10), Italy (8)	90
	7	6	4	Extra EU ex. DC : USA (5), Switzerland (1), U.A.Emirates (<0.5), Japan (<0.5), Russia (<0.5)	7
	2	1	2	DC : Thailand (1), China (1), Turkey (1), Mauritius (<0.5), Mayotte (<0.5), Oman (<0.5), Morocco (<0.5), Madagascar (<0.5), Iran (<0.5), Venezuela (<0.5)	3
Italy	10	13	23	Intra EU : Germany (17), Poland (12), Austria (11), France (10), Romania (5)	66
	8	4	4	Extra EU ex. DC : USA (2), U.A.Emirates (2), South Korea (1), Ukraine (1)	11
	1	2	8	DC : Turkey (11), China (7), Tunisia (2), Macedonia (1), Argentina (<0.5), Brazil (<0.5), Thailand (<0.5), Iran (<0.5), Pakistan (<0.5), India (<0.5), Nigeria (<0.5)	23
The Netherlands	9	10	12	Intra EU : Germany (30), UK (12), Poland (9), France (9), Austria (7)	85
	6	3	1	Extra EU ex. DC : USA (4), Singapore (<0.5), Switzerland (<0.5), Israel (<0.5), Norway (<0.5)	7
	1	0.3	1	DC : China (4), Thailand (2), India (1), Turkey (1), Pakistan (<0.5), Saudi Arabia (<0.5), Panama (<0.5), Algeria (<0.5), Mongolia (<0.5), Iraq (<0.5)	8
Ireland	4	5	7	Intra EU : UK (74), Portugal (12), France (3), Italy (1), Germany (1)	94
	0.2	0.2	0.1	Extra EU ex. DC : Norway (1), USA (<0.5), Japan (<0.5), Switzerland (<0.5)	1
	0.0	0.0	0.4	DC : Thailand (5), China (<0.5)	5

Source: Eurostat (2007)

Exports

The EU has been a net-exporter of selected sheet and stamped metal parts for years. In 2006, the total exports value was €3.9 billion (1.3 million tonnes), compared to €2.9 billion in 2002. It is not known how much of this value consists of re-exports. Details per product are listed below:

- Exports of cabinet boards amounted to €1.6 billion in 2006 (295 thousand tonnes), of which €551 million (35%) was realised by Germany. France was second at quite some distance (€218 million), followed by the UK (€106 million). Exports from Western European countries increased by 8.4% per year, but exports from the CEE countries grew even faster, at almost 30% per year. Clearly, production was relocated or outsourced to these countries, due to low labour costs. Moreover, these countries are closer to Western Europe than e.g. Asian countries, as a result of which they have much lower delivery times than countries such as India or China.

- The total EU exports value of radiators and heaters was €1.4 billion in 2006 (677 thousand tonnes). Belgium was the largest exporting country with €278 million (re-exports of imports that entered Belgium by the harbour of Antwerp), Italy was second (€248 million) and Germany was third (€226 million). Exports of Western Europe were down by 2% per year, while exports of the CEE countries were up by 20% per year. For this kind of product, the role of CEE countries has been growing, but less strong if compared to the other two products. Apparently, this has to do with the strong role of Turkish exports (to the UK, Italy and Ireland).
- Exports of gas tanks were worth €889 million in 2006 (279 thousand tonnes). Italy (€152 million), Germany (€126 million) and the Czech Republic (€123 million) were the largest exporters. Again, exports from CEE countries grew very fast (+34% per year), caused by the rising production output in these countries. Exports from Western European countries also increased (+8.1% per year).

Opportunities and threats

- + The total import value of selected sheet and stamped metal parts and all individual products increased.
- + The (value) share of DCs in total imports increased for all products.
- + DCs are best represented in radiators and heaters (share of 18% in EU imports).
- + Several DCs saw a quick rise in exports to the EU.
- Imports from Turkey and China represented a considerable share of DC imports. Turkey has a major advantage: it is located near the EU market, leading to shorter delivery times.

Please note that an opportunity for one exporter may be a threat for another exporter, depending on individual situations. Therefore, please analyse if the developments and trends discussed in the previous sections provide opportunities or threats. Refer to Section 7 of the CBI market survey covering the EU market for an example of such an analysis.

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> → go to 'themes' on the left side of the home page → go to 'external trade' → go to 'data – full view' → go to 'external trade - detailed data'.
- Understanding Eurostat: Quick guide to easy comext → http://epp.eurostat.ec.europa.eu/newxtweb/assets/User_guide_Easy_Comext_20080117.pdf

4 Price developments

As discussed in Section 1 and Section 3, competition is fierce and, as a result, prices are generally under pressure. Furthermore, raw material prices (steel, oil) have increased fast in the last few years. This has negative consequences for margins of selected sheet and stamped metal parts products. However, expectations for the economic situation in most EU countries are positive, which gives the market and prices some positive effects. Chinese prices of selected sheet and stamped metal parts could also increase, as the Chinese government has to abolish export subsidies (refer Section 1). This may have an upward influence on the price of selected sheet and stamped metal parts on the world market.

Useful sources

For prices of selected sheet and stamped metal parts, no general sources are available. Websites of EU players could give an idea (refer to Section 2). The following websites contain information on raw material prices:

- Eurofer – <http://www.eurofer.org/statistics/scrap.htm>
- London Metal Exchange – <http://www.lme.co.uk>

Please refer to the CBI market surveys covering the castings and forgings market in individual EU countries for trade associations, trade press, internet sources, e-commerce websites, names of prospects and trade fairs. All of these sources may give exporters access to price information.

5 Market access requirements

As a manufacturer in a DC preparing to access the EU, you should be aware of the market access requirements of your trading partners. 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. You need to comply with EU legislation and have to be aware of the additional non-legislative requirements that your trading partners in the EU might request.

For information on legislative and non-legislative requirements, go to 'Search CBI database' at <http://www.cbi.eu/marketinfo>, select castings and forgings and the EU in the category search, click on the search button and click on market access requirements.

Packaging

As discussed in Section 1, transport costs for selected sheet and stamped metal parts are relatively high compared to the value. Only products that offer a high added value have a chance of being successful in the EU. In order to reduce transport costs per shipment, it could be lucrative to be creative and to optimise container load. For example, a Southern African exporter of gas tanks once filled them with wine! Or, exporters could consider packing other products in the same container.

In order to avoid damaging during transport, selected sheet and stamped metal parts are individually packed in carton or foam. Some gas tanks and heaters that have been coated are automatically protected. Furthermore the packaging depends on the characteristics of the product and the size. Moreover, it could very well be the case that the customer has his own (additional) packaging requirements and preferences. For packaging design the following should be taken into account:

- Proper storage and transport;
- Standard packaging sizes and
- Recyclable materials or two-way systems.

Where sizes of the packaging are concerned, the general standards should be taken into account. Packaging should be adapted to the generally accepted sizes:

- Boxes: 600 x 400 mm (ISO module), or 300 x 400 mm (half ISO module)
- Pallets: 1,000 x 1,200 mm (industrial pallets), or 800 x 1,200 mm (Europallets)

Additional information on packaging can be found at the website of ITC 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

General information on doing business like approaching potential business partners, building up a relationship, drawing up an offer, handling the contract (methods of payment, and terms of delivery) can be found in CBI's export manuals 'Export Planner' and 'Your image builder'. Moreover, the CBI market survey covering the castings and forgings market in the EU may be used. Furthermore, cultural awareness is a critical skill in securing success as an exporter. Information on cultural differences in the EU can be found in Section 3 of CBI's export manual 'Exporting to the EU'. These manuals can be downloaded from <http://www.cbi.eu/marketinfo> - go to search publications.

Sales promotion

As discussed in Section 2, the target groups for DC exporters in the EU consist of manufacturers willing to outsource their production and/or intermediaries like importers or sourcing agents. However, it is very hard to get access, especially to manufacturers. They have their own regular suppliers, most of which are long-term relations. A price difference of, for example, 5% would not persuade them to switch suppliers. The only reason to switch would be quality problems or major price differences. One of the most important instruments for sales promotion remains visiting trade fairs. Some others are also discussed, among which conventions.

Trade fairs

There are some major trade fairs in the industry, of which EuroBlech and the Hannover Messe are among the most relevant:

- Euroblech - <http://www.euroblech.com> - Germany, Hannover, October, even years.
- Hannover Messe - <http://www.hannovermesse.de> - Hannover, Germany, April, annually.
- Midest - <http://www.midest.com> - Paris, France, November, annually.

Refer to Auma (<http://www.auma.de>) and EventsEye (<http://www.eventseye.com>) to find more information on relevant fairs. These websites can be used to find detailed statistics, profiles and venues for many industries and countries.

Tip - for additional information on trade fair participation, please refer to CBI's Export Manual 'Your Expo Coach', which can be downloaded from <http://www.cbi.eu/marketinfo>, click 'search CBI publications' and then choose 'Your Expo Coach'. Depending on your situation, you can choose the exporter version or the Business Support Organisation (BSO) edition.

Conventions/congresses

Conventions are getting more and more popular in the industry. Experts and representatives from the selected sheet and stamped metal parts industry meet and discuss market developments. An example is the International Congress on Sheet Metal Work, which will be held in California, USA from 14-17 September 2008. DC exporters could try to present themselves there and act as a speaker. Furthermore, companies exhibit at these conventions. Obviously, it is not very easy to be asked as a speaker, so it will certainly take some time and investment. It will, in most cases, certainly pay off in the long run. Check the website <http://www.icospa.com> for more conventions in the future.

Professional presentation a must

A brief scan of the presentation of selected sheet and stamped metal parts manufacturers and their suppliers shows that their presentation is (very) proficient. All of them have a professional website. This is considered as a 'must have' in the industry.

Trade press

Building up contacts with the trade press could be helpful, as an interesting story on your company or new product introduction will boost the company's image and increase user awareness. Press releases to the editors of trade magazines (and website portals) are common practice in the EU. Exporters to the EU mostly underutilise this promotional instrument. An important trade magazine in the industry is 'International Sheet Metal Review'. It covers the entire selected sheet and stamped metal and coil processing industry and is read by those involved in metal forming and fabrication. Go to <http://www.sheetmetalplus.com> for more information. An overview of trade press in the selected sheet and stamped metal parts industry, divided by EU country, can be found here: <http://search.sheetmetalworld.com/mags.cfm>.

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

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APPENDIX A GENERAL PRODUCT DESCRIPTION

This survey covers selected sheet and stamped metal parts. They can be both end- and intermediate products, used for a very wide range of purposes. In cooperation with industry specialists, a few products have been selected that are of interest for DC exporters. It concerns gas tanks, radiators and heaters and cabinet boards:

- **Gas tanks** - Gas tanks can be used in passenger cars, to carry Liquefied Petrol Gas (LPG). This is one of the most important applications. Trucks also carry gas tanks, which are used to store and transport chemicals and/or liquefied gases. Furthermore, companies use gas tanks on their premises to store liquefied gases.
- **Radiators and heaters** - Radiators and heaters are heat-exchangers, designed to transfer thermal energy from one medium to another for the purpose of cooling and heating. One major application is buildings.
- **Cabinet boards** - Cabinet boards are the metal frames which are the bases for cabinets. Cabinets are used as control panels in all kinds of machinery and installations, applied in for example the processing and manufacturing industries. They can also be found in electric power stations. There was a trend in the EU to use plastics as raw material for cabinet boards, but the industry quickly returned to iron and steel, as plastics were too friable.

Virtually all these products are mainly made of iron or steel. The products are treated separately in this survey. Also refer to Table A.1 below.

Table A.1 Product classification, based on CN and Prodcom nomenclature

CN description	CN	Prodcom	Prodcom description
Gas tanks, of iron			
Containers of iron or steel, seamless, for compressed or liquefied gas	7311	28211230	Iron or steel containers for compressed or liquefied gas
Radiators and heaters			
(Parts of) radiators for central heating, not electrically heated, of iron or steel	7322-11/19	282211-30/50	Radiators, not electrically heated, and parts thereof, of cast iron, iron or steel
Air heaters and hot air distributors	732290-10/90	29721300	Air heaters and hot air distributors
Bases for electric cabinets			
Boards, panels, consoles, desks, cabinets and other bases, for apparatus for electric control or the distribution of electricity, without apparatus	85381000	31204030	Boards, panels, consoles, desks, cabinets and other bases for apparatus for electric control or the distribution of electricity, not equipped with their apparatus

Source: Eurostat (2007)

Eurostat has been chosen as the main source for trade, production and apparent consumption data. Although it is the most reliable statistical source available, and covers all EU-members, please take into account some considerations when interpreting data from this source. First, data from Eurostat are in fact as reliable as the companies that report them. The terminology used by official bodies will differ to a great extent from that used in daily business. As a consequence, there is a risk of reporting data under the wrong terminology. Moreover, some companies may report products under the most favourable import tariff that applies. For example, sheet and metal parts may be reported under 'radiators', as stated in table A.1. But they could also be reported under 'parts of industrial plant'. For decision making these figures are therefore not accurate enough and they should be used in conjunction to further market research.

Therefore, exporters are advised to always use their experience and market knowledge in order to make estimations regarding market sizes for their specific products. Nevertheless, data in this survey could be used to get an indication of the market.