

CBI Product Factsheet:

Pumps in France

Introduction

One of the largest pump markets in Europe, France is home to many production facilities for both foreign and multinational companies, as well as to French pump-manufacturing groups and independent pump producers. The most important sectors in the French pumps market include water and sewerage treatment (25-30%), oil and gas (about 20%), the chemical industry (10-13%) and the food and beverage industry (about 10%). The best opportunities for exporters from developing countries are for parts subcontractors for French manufacturers. In some cases, exporters from developing countries could also supply finished pumps to these manufacturers. Another good option for exporters from developing countries would be to target specialised distributors. In all cases, exporters from developing countries should focus on just a few specialised pumps within their range of products. Finally, the pricing strategy should be very competitive.

Product description

Pumps are devices that are used to transport/move specific media (e.g. liquids or slurries). A pump moves a liquid or a gas from a lower pressure environment to one with higher pressure, overcoming this difference in pressure by adding energy (e.g. electrical energy) to the system. Pumps are used in a wide range of industries. Additional information on pumps is available at <u>Wikipedia Pumps</u>.

One chapter in the CN nomenclature refers to pumps and pump parts: Chapter 8413. This chapter of codes was selected for this survey. The classification is presented in Table 1. Note that several of the codes in Chapter 8413 have been excluded from the selection, as they relate to applications other than the process industry (e.g. fuel-dispensing pumps, hand pumps and pumps used in engines). Table 1 also shows the Prodcom codes used for the production and demand statistics for pumps and pump parts.

Table 1: Selected products, based on CN and Prodcom nomenclature

Subsector and	CN code	Prodcom code	Description
product group			
Pumps			
parts of pumps	841391-00/10/90, 841392	29124200	parts of pumps and liquid elevators
other pumps	841319-00/10/90	29122130	pumps for liquids, fitted with a measuring device
	841381-00/10/90, 841382	29122480	pumps for liquids, power-driven and liquid elevators
reciprocating positive	84135010	29122190	reciprocating positive displacement pumps
displacement	841350-20/30	29122210	hydraulic units, with pumps
pumps	841350-40/50	29122230	dosing and proportioning reciprocating positive displacement pumps, powerdriven
	84135061	29122250	hydraulic fluid power piston pumps
	841350-69/71/79	29122270	piston pumps
	841350-80/90	29122290	reciprocating positive displacement pumps
rotary positive displacement	84136010	29122290	rotary positive displacement pumps, power-driven
pumps	841360-20/30	29122310	hydraulic units, with pumps
	84136031	29122333	hydraulic fluid power gear pumps (excl. hydraulic units)
	841360- 39/41/49/51/59/60	29122335	gear, vane and screw pumps
	84136061	29122353	hydraulic fluid power vane pumps
	84136069	29122355	vane pumps, power-driven
	84136070	29122373	screw pumps, power-driven
	841360-80/90	29122375	rotary positive displacement pumps, power-driven
centrifugal	84137010		centrifugal pumps, power-driven
pumps	84137021	29122413	submersible pumps, single-stage
	84137029	29122415	submersible pumps, multi-stage
	84137030	29122417	glandless impeller pumps for heating systems and warm water supply (circulator pumps)
	841370-35/40	29122420	pumps, power-driven, with an outlet diameter <15 mm

	841370-45/50	29122430	channel impeller and side channel pumps
	0.41.27051	20122451	
	84137051	29122451	radial flow centrifugal pumps
	841370-59/61	29122453	radial flow centrifugal pumps
	841370-65/69/70	29122455	radial flow centrifugal pumps, single-
			stage
	841370-75/80	29122460	radial flow centrifugal pumps, multi-
			stage
	84137081	29122471	single-stage centrifugal pumps, power- driven, with a discharge outlet
			diameter > 15 mm
	841370-89/91/99	29122475	centrifugal pumps, power-driven, with a discharge outlet diameter > 15 mm

Source: Globally Cool, based on CN and Prodcom Nomenclature

The pump specifications required by French buyers are detailed below. These specifications include requirements pertaining to the material used, the processing steps, documentation and packaging.

Illustrations 1–3 display examples of pumps sold in France, as well as an example of a pump ready for transport (Illustration 4).

Material and design

The material used depends on the pump's application. Materials range from nodular cast iron or alloy nodular cast iron for use in water and wastewater processes to stainless and heat-resistant steel in the chemical and power-generation industries. Designs are in line with customer specifications.

Documentation

Pump importers require associated reports about the quality and specification of the material used, registration of critical process parameters and test reports, along with traceability reports for the batches of products manufactured.

Labelling and packaging

Illustrations 1–3: Examples of pumps sold in Illustration 4: Example of a pump ready for transport France









Pumps and pump parts are packed individually in crates or boxes, which are usually made of wood. The packaging obviously depends upon the size of the pump or part. Plastics or coatings are also used for additional packaging purposes. The type or number of the pump (or pump part) should be printed on the packaging. In addition to general packaging requirements (see 'Requirements'), customers are likely to have their own additional packaging and labelling requirements and preferences.

Packaging is always labelled, not only for the purposes of identification during transport, but also to indicate the quantity, weight, the products themselves and the producer's name. Customers are likely to have their own (additional) packaging requirements and preferences. In most cases, the packaging and labelling requirements are included in the customer's specifications.

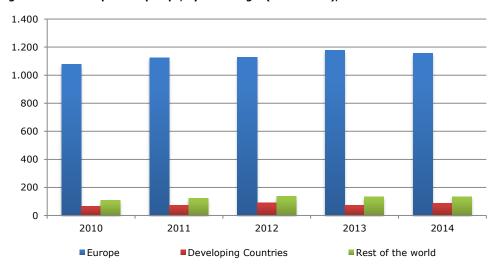
Quality and quantity

The quality standards of individual French companies are considered lower than those in Germany, Austria, the Netherlands and elsewhere in Northern Europe. These quality standards have an impact on many aspects, including the finishing and painting of the product (the visual-optical qualities or the appearance of the pump), the packaging requirements and the documentation of accessories.

Order volumes follow the customer's standards and requirements. As a general guideline, transportation of standard pumps or pump parts from overseas countries to France is viable only for full container loads.

What is the demand for pumps in France?

Figure 1: French imports of pumps, by main origin (2010-2014), in € million



Source: Trade Map (2015)

France is the second-largest importer of pumps in Europe. In 2014, it accounted for 12% of all European imports. French imports experienced a drop in 2009 (the import value in 2008 was \le 1.3 billion), but recovered in the 2010–2014 period. In 2014, pump parts accounted for 38% of the total import value of \le 1.4 billion.

Imports from developing countries as a share of total imports increased slightly, from 5.3% in 2010 to 6.2% in 2014. This is much lower than the European average of 9.9%. This share is not expected to increase in the next few years.

Centrifugal pumps from developing countries experienced high growth in the 2010–2014 period. On an individual basis, they registered the highest share in total imports (accounting for 36% of imports of pumps from developing countries).

Pump imports are expected to exhibit slight growth in the next few years, in the range of 1%-3%.

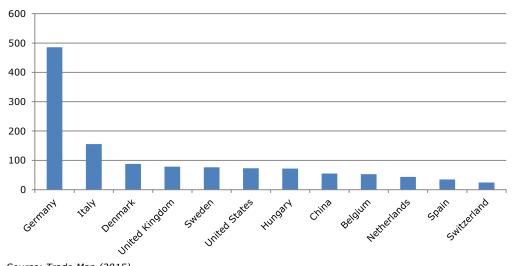


Figure 2: Leading suppliers of pumps to France (2014), in € million

Source: Trade Map (2015)

Although most of the leading suppliers are from developed countries, one developing country appears among the 10 leading suppliers: China, in eighth position with a supply value of €55 million.

Aside from China, a few other developing countries export pumps and pump parts to France: Serbia (\in 11 million), India (\in 7 million), Turkey (\in 5 million) and Mexico (\in 1 million).

Germany's leading position is a result of the following factors: 1) Germany is the leading pump manufacturer in Europe, 2) it borders on France and 3) KSB Pumps, a German company, has a strong network (including production facilities) in France, thus generating considerable trading activity between the two countries.

The composition of suppliers from developing countries is not expected to change substantially in the next few years.

Tip:

Benchmark your company against your peers from China, Serbia and India. Several factors should be
considered, including market segments served, perceived price and quality levels and countries served.
 One source that can be used to find exporters of pumps by country is the ITC Trade Map.

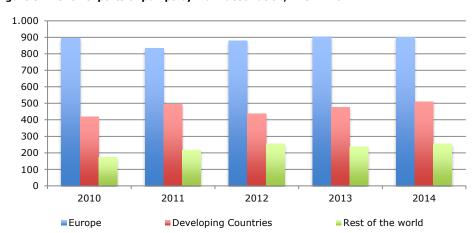


Figure 3: French exports of pumps by main destination, in € million

Source: Trade Map (2015)

• France exports a great many pumps (Figure 3), and it is one of the four leading pump manufacturers in Europe.

• French exports have performed quite well since the dip in 2010. In 2015, French exports reached a value of €1.7 billion. Of all French exports, 30% go to developing countries, predominantly China, followed by Algeria, Turkey and Morocco. This presents an interesting opportunity for manufacturers of pumps and pump parts in developing countries. Suppliers who are able to prove their ability to meet product specifications can also supply these pumps and/or pump parts.

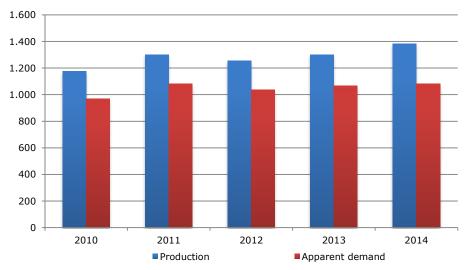


Figure 4: Production of and local demand for pumps in France (2010–2014), in € million

Source: Eurostat Prodcom (2015)

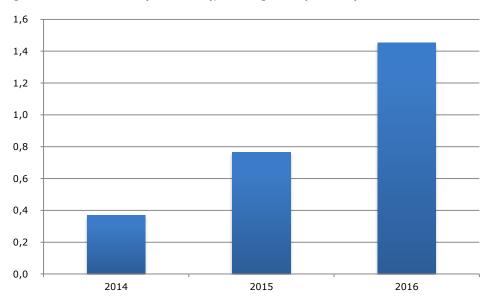
- French production has grown by an average of 4.2% per year since 2010, reaching a value of €1.4 billion in 2014. The strong performance in production has been driven by the growth in both exports and local demand.
- France is the fourth-largest market for pumps and pump parts in Europe, with a value of €1.1 billion in 2014 and an average annual growth of 2.8%.
- The French market has a mature character, consisting primarily of replacements and the maintenance of existing equipment.
- Water and sewerage treatment account for some 25%-30% of the French pump market, followed by oil and gas (about 20%), the chemical industry (10%-13%), the food and beverage industry (about 10%) and other industries.
- There are around 50 pump companies in France, employing around 10,000 people in 2011. Several of these companies serve as facilities for the world's leading pump manufacturers, but there are also many pump manufacturers of French origin. A list of these manufacturers is available on the website of the French Pump Compressor and Valve Association.
- French manufacturers will continue to implement new technologies in order to reduce production costs and to secure their competitive edge.
- Growth in the French demand for pumps is expected to remain limited in 2015 and into the foreseeable future. Investments in pumps and other process equipment in France are therefore not expected to register high growth in the coming years. Instead, they are likely to remain stable or exhibit a slight decline.
- As a consequence, the demand for pumps is not expected to improve significantly as compared to 2012/2014. This cautious market climate is expected to continue in the near future.

Tips:

- The water and sewerage industry offers the best opportunities, as it has relatively low requirements, which can be met by exporters from developing countries.
- Considering the economic situation and forecast for 2015 and beyond, pricing is and will continue to be one of the most important factors influencing competition.
- For exporters of finished pumps from developing countries, this cautious market climate is a threat, as Western European pump manufacturers will be making every effort to retain their customers in the French market. At the same time, producers from France will be increasingly seeking to establish a foothold abroad for several reasons, including lower costs and improved market access. This provides producers from developing countries with opportunities for cooperation.

Macro-economic indicators

Figure 5: Real GDP France (2014–2016), % change from previous year



Source: OECD Economic Outlook 96 database

- The major determinant of demand for pumps and pump parts is industrial spending activity, which is stimulated by economic growth. As indicated in Figure 5, the GDP is expected to exhibit continued growth year on year. For the longer term, it will provide a significant base for continued import growth.
- The profitability of imports of valves is affected by the €:USD exchange rate, as many valves and valve parts that are sourced globally are paid for in USD. While the €:USD exchange rate was not expected to surpass 0.80 until 2020, this occurred in 2015, with the exchange rate even rising above 0.90. This is having a major effect on the price level of imports. This situation is likely to have a negative impact on the level playing field of European imports paid in USD relative to local European production, especially if it persists for several years. It is thus also likely to have a negative impact on the competitive position of exporters from developing countries.

Tip:

 Although GDP growth forecasts are improving, pricing is and will continue to be one of the most important factors influencing competition. Competitive pricing is essential for exporters from developing countries planning to enter the European market.

What trends offer opportunities on the French market for pumps?

The most important trends in the pump market include the following:

- Environmental legislation: In the water and sewerage industry, environmental legislation will result in several investments in infrastructure and water-treatment equipment.
- Life-cycle costs: French buyers are also increasingly considering their investments in light of life-cycle costs. It is therefore essential to offer pumps that are characterised by low maintenance costs and low energy consumption. To date, French buyers have relied heavily on European (brand) manufacturers for these types of advanced pumps.
- Energy efficiency: Energy efficiency is expected to become more important in terms of purchasing decisions in the coming years. The prospects for energy-efficient pumps in France can therefore be regarded as bright. European directives for energy efficiency and emissions are likely to become even more stringent in the future. It is expected that pump suppliers to the European market will face difficulties in complying with them.
- Intelligent systems: The demand for intelligent pump systems will continue to flourish. These systems combine the pump function with a control function, thereby preventing pump damage. The life-cycle costs of such systems are relatively low. The prices of sophisticated pumps that meet regulatory requirements are generally higher than those of standard pumps.
- Competitive pricing: In the past few years, the reduced demand caused by the economic recession has increased the
 importance of price, especially with regard to standard pumps. Increased competition among European suppliers
 (resulting from ongoing rationalisation) and from suppliers in low-cost countries (e.g. China, Turkey, India and Brazil)

have caused price levels to decline. In the next 5–10 years, suppliers from these countries are expected to become even stronger competitors in the French pump market.

Tips:

- Consider focussing on the water and sewerage treatment segment, as it offers the best opportunities, due to its relatively low technical requirements.
- There are good opportunities for suppliers of energy-efficient pumps from developing countries, as only a limited share of all installed pumps in France are energy efficient.
- Competitive pricing is a basic requirement for exporters from developing countries planning to enter
 the French market. Exporters from developing countries who have difficulty achieving competitive
 pricing should consider specialising, as competition tends to be less intense in the market for
 specialised pumps.
- Some good opportunities in the pump market are available to exporters from developing countries, provided the quality they can supply will meet the demands of French buyers. The greatest advantage has to do with labour costs, provided that European labour standards are met. Given that wages in developing countries are much lower than those in Europe, these countries have a strategic advantage over European manufacturers. From a technical point of view, it is estimated that 80% of all pumps (the standard pumps) can be produced in developing countries. The rest can be manufactured only in Europe, as they require advanced skills and expertise (e.g. pumps for the chemical and power generation industries).
- Although there are opportunities for exporters from developing countries to supply pumps to the
 French market, it is not as easy as it may seem. Industry specialists share the opinion that
 manufacturers from developing countries who supply pumps to the French market can be successful
 only if they hire technological expertise from Europe, or at least make use of technologically competent
 importers.
- The <u>CBI document on Trends for Pipes and Process Equipment</u> provides a general overview of trends in the European market.

With which requirements should pumps comply in order to be allowed on the French market?

Requirements can be divided into the following categories: (1) musts, which are legal requirements that you must meet in order to enter the market, and (2) additional requirements, which consist of the relatively common requirements that most competitors have already implemented (in other words, requirements that you should meet in order to stay abreast of the market).

A general overview of <u>EU buyer requirements for pipes and process equipment</u> is available on the CBI Market Intelligence Platform. Additional sources of information on gaining access to the European market include the <u>EU Export Helpdesk</u> and the ITC Market Access Map

Musts

Pump parts are not subject to any specific legal requirements for market access. The following legislation applies to pumps and/or pump units:

- The <u>Product Liability Directive</u> states that the European importer is liable for the products put on the European market. In theory, however, European importers can pass claims along to their producers/exporters.
- Pumps and pump units are subject to the <u>Machinery Directive 2006/42/EC</u>, and they must have a 'Declaration by the manufacturer' and/or an 'EC Declaration of conformity' in addition to the CE marking, as defined by the Machinery Directive. This also encompasses conformity with the Low Voltage Directive.
- Specific directives may apply to pumps with very specific applications (e.g. those used in potentially explosive atmospheres). These directives often require extensive product testing. In the case of the above example, the pump must comply with the <u>ATEX directive (Directive 94/9/EC)</u>.

Other general legislation that must be taken into account includes:

- <u>Wood packaging materials used for transport (including dunnage) (Directive 2005/15/EC).</u> The European Union sets requirements for wood packaging materials (WPM), including packing cases, boxes, crates, drums, pallets, box pallets and dunnage (i.e. wood used to wedge and support non-wood cargo).
- Another packaging-related directive is the general directive for <u>packaging and packaging waste</u>, which prescribes the marking of the kind of packaging material used and maximum levels of heavy metals in the packaging material.

Tips:

- Further details are available on the website of the <u>Association of European Pump Constructors</u>, which offers a list of PDF documents on European directives applicable to pumps.
- Make sure that your wood packaging material (WPM) qualifies for the European market. If you are not certain, ask your WPM supplier to confirm and explain this to you. Your WPM supplier should undertake any further actions required to comply with the Directive. If the supplier is not able to do so, it would be advisable to select another supplier.
- A Certificate of Origin is obligatory; note that it must be validated by a local Chamber of Commerce.
 Additional information is available here.

Additional requirements

For finished pumps, the customer's main requirements will be related to the technical aspects of the pumps. The pump standards in Europe are used to create unity in design and dimensional specifications. The standards apply predominantly to specific types of pumps (e.g. centrifugal pumps and rotary positive displacement pumps). Standards that European buyers may request can be obtained from several organisations, including the ISO – International Organisation for Standardisation, API – American Petroleum Institute, ANSI – American National Standards Institute, DIN – Deutsches Institut für Normung, and the BSI – the British Standards Institution.

The following are examples of standards that are commonly used for centrifugal pumps: ISO 2858:1975 – Designation, nominal duty point and dimensions of end-suction centrifugal pumps (rating 16 bar); ANSI/API 610-1995 – Centrifugal Pumps for General Refinery Service; DIN EN ISO 5199 – Technical specifications for centrifugal pumps; and BS 5257:1975 – Specification for horizontal end-suction centrifugal pumps (16 bar).

For pump parts, material requirements are the most important customer requirement. The material that is used for pump parts must be covered by an international standard and approved with a certificate. The metal used must meet the material standard, which can be stated in an EN10204 Type 3 certificate. This type of certificate is internationally accepted.

While the American ASTM standards link material requirements with applications, this is not the case for the European EN standards. Instead, European customers have their own specific requirements, in addition to the EN standards. Such additional requirements from customers can be NDT (non-destructive testing), surface (MT or magnetic testing, PT or penetrant testing) or section (UT or ultrasonic testing and RT of X-ray testing) tests.

Buyers may also have specific requirements relating to the dimension and surface of the pump parts. In practice, these requirements are highly dependent upon the customer and application. In some cases, buyers ask their suppliers to adhere to the EN ISO 8062 standard and, in other cases, they include their specific dimensional and surface requirements in the technical drawing.

Finally, many customers are likely to demand that you work according to such general organisational quality systems as ISO 9001 (version 2008) and process control. Some may also demand ISO 14001 (environmental) and OHSAS 18000 (labour standards) compliance.

Tips:

- Additional details are available on the following websites:
 - o <u>ISO Catalogue</u> Click on 'TC 115' (Pumps) for an overview of ISO standards.
 - o Search EN norms in the online shop of the British Standards Institution.
- <u>CBI Buyers' Black Box</u> offers further information on topics that are decisive for buyers when searching for new suppliers.

Import tariffs

For pumps and pump parts, \underline{a} 1.7% duty is levied on European imports from third-party countries. Several countries benefit from a preferential 0% tariff for exports to Europe, including Indonesia, Pakistan, Vietnam, the Philippines, Bosnia and Egypt. The <u>TARIC database</u> contains further details under Chapter 8413. Note that a Certificate of Origin is required in order to claim a preferential tariff.

Tip:

 Exporters from countries subject to a preferential 0% tariff have a slight competitive advantage over competitors from countries without such preferential tariffs.

What do the trade channels and interesting market segments for pumps look like in France?

Pump manufacturers are the most prominent targets in France. Producers from developing countries can supply parts to them as subcontractors, in addition to supplying finished products. The best opportunities for producers from developing countries lie in focusing on a few specialised products. French manufacturers are also the most important targets for such specialised products, and some may be interested in subcontracting a part of their production to low-cost countries. Distributors are also good targets, as they have excellent access to the local market.

Additional information is available in the CBI documents on 1) <u>Market Channels and Segments for Pipes and Process Equipment</u>, and 2) <u>Competition for Pipes and Process Equipment</u>. Explanations of the types of prospects are provided below, including a few examples of each type. Resources that can be used for finding prospects are included in the section 'Useful resources'.

Manufacturers

These companies offer good potential for suppliers of pump parts, and possibly for suppliers of some finished pumps. Subcontracting offers the best opportunities for specialised products, including specialist pumps like positive displacement pumps (or parts thereof). France is home to the production facilities of both global players and local manufacturers.

The following are examples of global pump manufacturers in France:

- <u>Iwaki France</u> manufacturer of centrifugal pumps. Part of a Japanese pump manufacturing group.
- KSB the largest pump group in Europe. Although their headquarters are in Germany, France is also an important base for KSB.
- Pompes Grundfos pump production facility of the Danish Grundfos Group.
- <u>Sulzer Pumps</u> Swiss-based pump manufacturer with a factory in France.
- Wilo Intec the second-largest pump group in Europe, behind KSB.
- The following are examples of French pump manufacturers:
- Pompes Guinard manufacturer of various types of industrial pumps. Part of the 'Espa' group.
- Pompes Japy manufacturer of pumps for the industry, construction, chemicals and energy markets.
- Pompes Rutschi manufacturer of centrifugal industrial pumps.
- <u>Salmson</u> probably the largest French pump manufacturer.

Note that the above lists are not complete, and they are intended only as an illustration of particular categories of companies.

Distributors

Distributors are attractive targets for exporters from developing countries aiming to export large volumes of commodity-type products (e.g. common pumps). This is because distributors often buy and/or import commodities in relatively large volumes on a scheduled basis. In most cases, the distributor is also the importer. Distributors often have their own stock, thus explaining why they are also called 'stockists'. Products must be kept in stock, as they need to be available for urgent deliveries to end-users.

The following are examples of distributors:

- <u>CEMO France</u> importer of pumps and other equipment. Importer of the brand CEMO.
- <u>Dipra</u> importer and distributor of pumps, valves and sanitary plumbing. Part of the Thermador Group.
- Several distributors are true pump specialists, as they are exclusively specialised in pumps. Examples of such specialists include the following:
- Moirez Industrie distributor of pumps. Exclusive distributor of the 'Dickow' brand of pumps.
- P.H.A. importer and distributor of pumping equipment and spare parts for industrial pumps.
- <u>Techniques des Fluides</u> importer and distributor of industrial and sanitary pumps.

Useful resources

- ABC Business Directories business directory; enter a keyword and search for companies. There is an option to filter
 your search (e.g. by country) on the left of the page.
- · Axes Industries industry portal with information on industries, trends, new products and other matters
- <u>CFIA</u> food processing fair, held annually in Rennes (in March).
- <u>ESOPE</u> (Chaudronnerie) pressure equipment fair, held triennially (September/October) in Paris. The last event was held in October 2013.
- <u>Hydroplus</u> water and wastewater magazine; 8 issues a year.
- <u>Industrie Paris</u> industrial design and production fair held annually in March; even-numbered years in Paris, odd-numbered years in Lyon.
- <u>Industrie & Technnologies</u> online industry magazine covering trends and industry news.

- <u>Magazine Liquides</u> bimonthly liquids-processing magazine.
- Midest annual subcontracting fair held in November in Paris.
- <u>Pollutec</u> environmental technology fair, held annually in November; even-numbered years in Lyon, odd-numbered years in Paris.
- Profluid French association for pumps, mixers, compressors and valves. Click on 'members' for a member database.
- Sepem Industries- process and maintenance fair, held annually in multiple locations in France.
- <u>Usine Nouvelle</u> weekly industrial magazine covering the latest technology news and trends.

Miscellaneous

- <u>Eurostat</u> official statistics office of the European Union. Registration is free and provides access to large collections of data.
- Export Helpdesk information on European trade statistics, tariffs and quotas for developing countries.
- ITC International Trade Statistics registration required.
- <u>Kwintessential</u> provides practical tips on business culture and etiquette.

CBI Market Intelligence

P.O. Box 93144 2509 AC The Hague The Netherlands

www.cbi.eu/market-information

marketintel@cbi.eu

This survey was compiled for CBI by Globally Cool :: creative solutions for sustainable business, in collaboration with CBI sector expert Luc Govaerts

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