

# **CBI Product Factsheet:**

# **Pumps in Poland**

# **Introduction**

Although Poland is a relatively small pump market in Europe, it is the largest market in the Central and Eastern European region. The country is also home to a small number of production facilities. The best opportunities for producers from developing countries lie in targeting specialised distributors. Another option for exporters from developing countries would be to supply parts to Polish manufacturers as subcontractors. In some cases, exporters from developing countries could also supply finished products to these manufacturers. In all cases, manufacturers from developing countries should focus on just a few specialised pumps within their range of products. Finally, the pricing strategy must be very competitive, particularly given the relatively low labour costs in Poland.

# **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 pumps	841350-20/30	29122210	hydraulic units, with pumps
	841350-40/50	29122230	dosing and proportioning reciprocating positive displacement pumps, power-driven
	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
	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 Polish buyers are detailed below. These specifications include requirements pertaining to the material used, the processing steps, documentation and packaging. Illustrations 1–5 display examples of pumps sold in Poland, as well as an example of a pump ready for transport.

# 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

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 printing 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**

Given that Poland is a relatively new member of the European Union, it is in the process of catching up to the European Union's standards. For now, the quality standards of individual Polish companies are considered to be among the lowest in 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 Poland is viable only for full container loads.

Illustration 1: Positive displacement pump Illustra



Illustration 2: Hydraulic piston pump



Illustration 3: Vane pump

Illustration 4: Single-screw pump



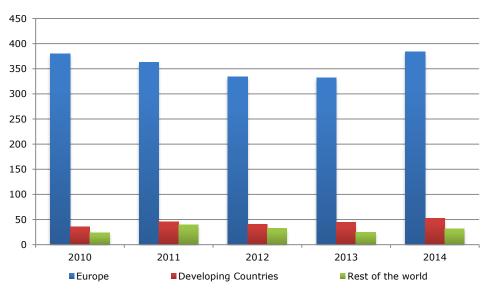


Illustration 5: Example of a pump ready for transport



# What is the demand for pumps in Poland?

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

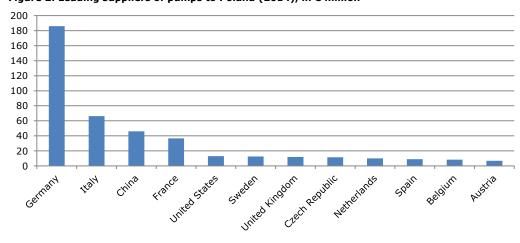


Source: Trade Map (2015)

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- Poland is the 10<sup>th</sup>-largest importer of pumps in Central and Eastern Europe, behind the Czech Republic. In 2014, it accounted for 4% of all European imports.
- Polish imports experienced a drop in 2009, but recovered strongly in 2010, after which they declined again in 2012–2013. The market saw strong recovery in 2014, leading to growth in imports in that year.
- Imports from developing countries as a share of total imports increased from 5.6% in 2009 to 11% in 2014. This is somewhat higher than the European average of 9.9%. This share is expected to grow to 12-13% in the next few years.
- On an individual basis, pump parts registered the highest share in total imports (accounting for 33% of the total imports of pumps). Pump parts were followed by 'other pumps' and centrifugal pumps.
- Overall, the highest share of all imports from developing countries was for centrifugal pumps (44%), followed by 'other pumps' (33%).
- Pump imports are expected to exhibit minor growth in the next few years, in the range of 0%-2%.

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



Source: Trade Map (2015)

- Most of the leading suppliers are from developed countries. Only one developing country exports pumps and pump parts to Poland: China, in third position, at €46 million.
- In addition to China, several other developing countries export pumps to Poland, including Ukraine (€3 million) and Turkey (€1 million).

- Germany is the leading supplier to Poland, as it is the leading pump manufacturer in Europe and it has strong trading ties with Poland.
- Polish buyers apparently focus on Chinese suppliers and are not very open to suppliers from other developing countries. This could pose an obstacle to exporters from developing 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. 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 <a href="ITC Trade Map">ITC Trade Map</a>.

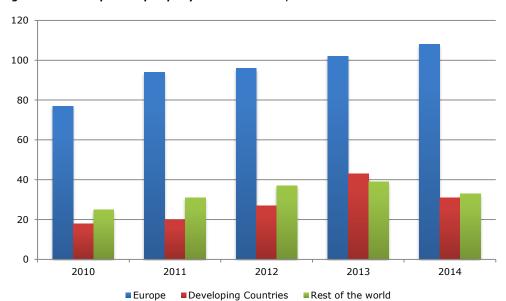


Figure 3: Polish exports of pumps by main destination, in € million

Source: Trade Map (2015)

- Polish exports have performed very well since the dip in 2009. Export values have followed the same pattern as
  production output, with Polish pump exports consisting exclusively of locally produced pumps. Exports reached a
  value of €184 million in 2013, declining slightly to €172 million in 2014. The average annual growth rate was 9.4%.
- Of all Polish exports, 31% are destined for developing countries. This could present an interesting opportunity for manufacturers of pumps and pump parts from developing countries, albeit less than in other European countries. Suppliers who are able to prove their ability to meet product specifications can also supply these pumps and pump parts.
- The leading developing-country destinations are Belarus and Ukraine, followed by Thailand, Kazakhstan and China.

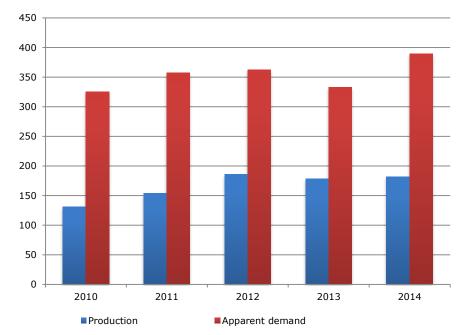


Figure 4: Production of and local demand for pumps in Poland (2010–2014), in € million

Source: Eurostat Prodcom (2015)

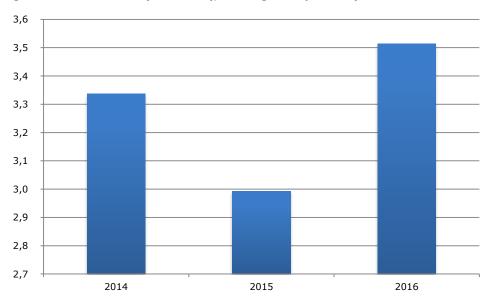
- Production output grew quickly, at an average of 20% per year in the 2009-2012 period, due to a combination of strong local demand and rapidly rising export levels. Since 2012, production has been relatively stable.
- Although Poland is home to a number of small and medium-sized local pump manufacturers, most of its production
  output comes from plants owned by the world's leading pump manufacturers. An overview of pump manufacturers is
  available on the website of the <u>Association of Pump Manufacturers</u>. The association has 45 member companies. Click
  on 'Producers of pumps' for a list of Polish pump producers.
- Poland is the ninth-largest market in terms of demand for pumps and pump parts in Europe, with a value of €389 million in 2014. Demand recovered from the dip caused by the financial crisis and remained stable in 2012. There was a drop in 2013, however, in response to the relatively low level of investments that year. Demand recovered again in 2014.
- The Polish market has an immature character, and it consists largely of new installations. In particular, the food and water industries are still developing. For example, in the water industry, several investments are still expected in the networks for the collection and distribution of water, as well as for sewer networks, in order to comply with the European Water Directives by 2015. Poland also has a relatively large gas market segment, given its large size and the fact that it is home to the sixth-largest natural gas pipeline network in Europe.
- The Polish demand for pumps is expected to remain cautious in 2015 and the near future. Investments in pumps and other process equipment in Poland are therefore not expected to register high growth in the coming years. Instead, the figures 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 2013/2014. This cautious market climate is expected to continue for the near future.

# Tips:

- Consider focussing on the water and sewerage treatment segment, as it offers the best opportunities due to its relatively low technical requirements.
- 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 Polish market. At the same time, producers from Poland 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 Poland (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 PLN:USD exchange rate, as many valves and valve parts that are sourced globally are paid for in USD. The dramatic decline in the PLN:USD exchange rate since the summer of 2014 (to a rate of 4 PLN to the USD) has led to considerable changes in the price level of pump (and pump-part) imports, making imports paid with USD relatively expensive.

# 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 Polish market for pumps?

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

- Environmental legislation: Pumps for water and wastewater applications represent about 30% of all pump sales. In this segment, environmental legislation has resulted in several investments in infrastructure and water-treatment equipment. One major threat to this market, however, involves increasing pressure on local government funding. Reduced budgets for water and waste-water treatment could lead to lower demand for pumps and pump parts in this segment.
- Life-cycle costs: Purchasing decisions for pumps are increasingly being made in the light of life-cycle costs instead of initial expenses. This makes the 'design to costs' concept all the more important for pump manufacturers. For this reason, pump manufacturers from developing countries should also focus on developing pumps that have low life-cycle costs, in addition to being simple and inexpensive to maintain.
- Energy efficiency: 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.
- Competitive pricing: In the last few years, price has become more important, due to decreases in demand caused by the economic recession, 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 Polish pump market.

# Tips:

- Although the pressure on budget spending is greater than ever before, the water and sewerage segment offers the best opportunities, as it has relatively low requirements that can be met by exporters from developing countries.
- There are good opportunities for manufacturers in developing countries who can supply pumps with low life-cycle costs, as this aspect has come to play a more important role in purchasing decisions in recent years.
- Competitive pricing is a basic requirement for exporters from developing countries planning to enter
  the Polish 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.
- 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 Polish 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 <u>ITC Market Access Map</u>.

#### 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>, which is aimed at eliminating any risk of
  accident by requiring that the mandatory essential health and safety requirements be satisfied before products can be
  marketed in the EU. Products 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:

- Wood packaging materials used for transport (including dunnage) (Directive 2005/15/EC). 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 valves, 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 ISO Catalogue 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 Poland?

Distributors are the most prominent targets in Poland, as they have good access to the local markets. Pump producers (subcontracting) can also be good targets.

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'.

#### **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 interesting players:

- AFT importer and distributor of pumps, in addition to manufacturing its own production line of dumper valves.
- <u>Dracon</u> distributor of pumps and other hydraulic and pneumatic equipment.
- Emet Impex distributor of industrial pumps and valves.
- <u>Saga</u> distributor of pumps and valves.

A few distributors are true pump specialists, as they are exclusively specialised in pumps. Two examples of such specialists are:

- Hydro importer and distributor of pumps and parts for pumps.
- Pompy i Systemy importer and distributor of industrial pumps.

Note that this list is not complete, and it is intended only as an illustration of a particular category of companies.

#### **Manufacturers**

There is some potential among Polish manufacturers in terms of supplying pump parts, and possibly for some finished pump providers. Subcontracting offers the best opportunities for specialised products, including specialist pumps like positive displacement pumps (or parts thereof). Examples include the following:

- Hydro Vacuum manufacturer of pumps and pumping systems.
- Meprozet manufacturer of centrifugal pumps and systems.
- Powen-Wafapomp Poland's largest manufacturer of pumps.
- Tapflo manufacturer of industrial pumps.
- Tofama manufacturer of pumps, valves and equipment for the chemical and food industries.

Note that this list is not complete, and it is intended only as an illustration of a particular category of companies.

# **Useful resources**

- Ekotech- green technology fair, including (waste)water and recycling, held annually (in March) in Kielce.
- <u>Eurostat</u> official statistical office of the European Union. Registration is free and provides access to large collections of data
- <u>Export Helpdesk</u> information on European trade statistics, tariffs and quotas for developing countries.
- <u>ITC International Trade Statistics</u> registration required.
- <u>Kwintessential</u> provides practical tips on business culture and etiquette.
- <u>Polagra Tech</u>- food-processing technology fair, held annually (in September) in Poznan.
- <u>Polish Association of Pump Manufacturers</u> comprises 45 member companies. Click on 'PolscyProducenci Pomp' for a list of Polish pump manufacturers.
- <u>Polish Chamber of the Exhibition Industry</u> search for trade fairs in Poland.
- <u>PompyPompownie</u> quarterly Polish magazine for pumps and valves. A good source for news on the Polish pump industry.
- Water and Sewage Industry TIWS water sector fair, held every year (September or October) in Kielce.

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