CBI
Ministry of Foreign Affairs

CBI Product Factsheet:

Valves in Italy

Introduction

Italy is the leading producer of valves in Europe and offers the second-largest valve market (after Germany). The country is characterised by a relatively large number of domestic manufacturers. Manufacturers of valve parts can find very good short-term and medium-term subcontracting opportunities with Italian valve producers. In some cases, exporters from developing countries could also supply finished valves to these manufacturers. Another good option for exporters from developing countries would be to target specialised distributors. Valves produced for the European market must be designed and manufactured with an emphasis on low emissions, safety, simplicity of maintenance, ease of operation and, above all, long and reliable service life. In all cases, exporters from developing countries should focus on just a few specialised valves within their range of products. Finally, the pricing strategy should be very competitive.

Product description

Valves are applied in almost all industrial production processes in which liquids are used. The valves covered in this survey are industrial devices that regulate, direct or control the flow of fluids (gases, liquids, fluidised solids or slurries) by opening, closing or partially blocking various passages. The water and wastewater industry is the largest sector of application for valves, in addition to the chemical-processing industry, the food-processing industry (including beverages) and the oil and gas industries.

One chapter in the CN nomenclature refers to valves and valve parts: Chapter 8481. This chapter of codes was selected for this survey. The classifications are presented in Table 1. Note that several of the codes in Chapter 8481 have been excluded from the selection, as they relate to applications other than the process industry, including pneumatic (including tyres), hydraulic and sanitary applications. Table 1 also shows the Prodcom codes used for the production and demand statistics for valves and valve parts.

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

Subsector and product group	CN code	Prodcom code	Description
Valves			
check valves	848130-91/99	29131172	check valves
safety valves	848140-10/90	29131176	safety or relief valves
pressure-reducing valves	84811005	29131134	pressure-reducing valves combined with filters or lubricators
	84811019	29131135	pressure-reducing valves of cast iron or steel
	84811099	29131139	pressure-reducing valves of base metal
process control valves	84818051	29131313	thermostatically controlled process valves
	84818059	29131315	process control valves
gate valves	84818061	29131333	gate valves
	84818063	29131335	gate valves
	84818069	29131337	gate valves
globe valves	84818071	29131353	globe valves of cast iron
	84818073	29131355	globe valves of steel
	84818079	29131357	globe valves
diaphragm valves	84818087	29131377	diaphragm valves
other valves	84818099	29131380	valves not defined elsewhere
parts thereof	84819000	29132000	parts of valves
a range of valves (quarter turn)	84818081	29131373	ball and plug valves
	84818085	29131375	butterfly valves

Source: Globally Cool, based on CN and Prodcom Nomenclature (2013)

The valve specifications required by Italian buyers are described below. These specifications include requirements pertaining to the material used, processing steps, documentation and packaging. Illustrations 1–4 display examples of valves sold in Italy, and Illustration 5 provides an example of valve bodies packaged for transportation.

Material and design

The material used depends upon the valve’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

Valve 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

Valves are individually packed in crates or boxes, generally made of wood. The packaging depends upon the characteristics of the valve, its level of treatment (100% treated valves require high-protection packaging in order to prevent breakage) and its size. Plastics or coatings are also used for additional packaging purposes.
The standard of the valve should be imprinted on the rim, as well as the size, batch number and materials. Highly specialised valves have unique numbers, as they are tested individually.

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. In addition to general packaging requirements (see 'Requirements'), 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 Italian companies are regarded as being lower than those in Northern Europe, but higher than those in Central and Eastern 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 valve), the packaging requirements and the documentation of accessories.

Order volumes follow the customer's standards and requirements. As a general guideline, transportation of standard valves or valve parts from developing countries to Italy is viable only for full container loads.

Illustration 1: Full-bore valve

Illustration 2: Lubricator stop valve

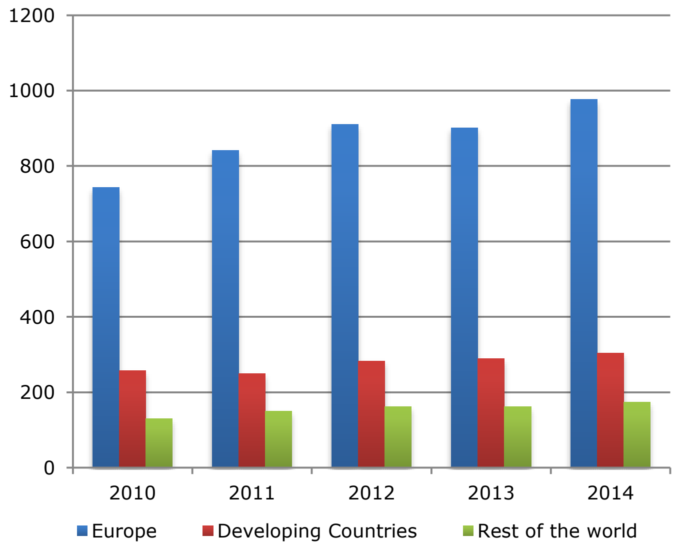
Illustration 3: Water-pressure reducing valve

Illustration 4: Thermostatic tempering valve

Illustration 5: Example of valve bodies ready for transport

What is the demand for valves in Italy?

Figure 1: Imports of valves to Italy by main origin (2010–2014), in € million

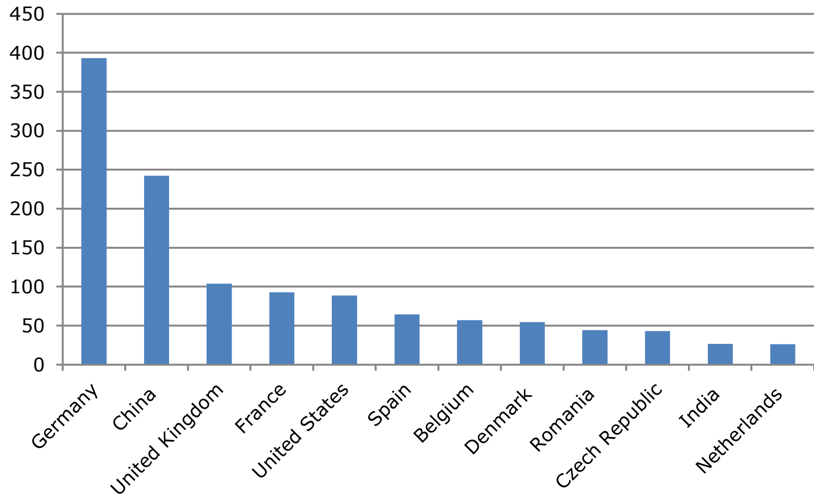


Source: Trade Map (2015)

- For some time, Italy has been in fourth place as an importer of valves in Europe, behind Germany, the United Kingdom and France. In 2014, it accounted for 8% of all imports into Europe.
- Import values have been growing steadily since 2010, with the exception of a slight dip in 2013.

- Imports increased between 2010 (€1.1 billion) and 2014 (€1.5 billion), with an average annual growth rate of 6.5%.
- From a product perspective, valve parts (€409 million) accounted for 28% of total imports.
- At 21%, imports from developing countries as a share of total imports are much higher than the European average (14%). Over the next few years, this share is expected to remain relatively stable.
- With regard to the share of imports from developing countries, the best-performing valve types are valve parts.
- The import of valves is expected to exhibit slight growth in the next few years, in the range of 0%–2%.

Figure 2: Leading suppliers of valves to Italy (2014), € million



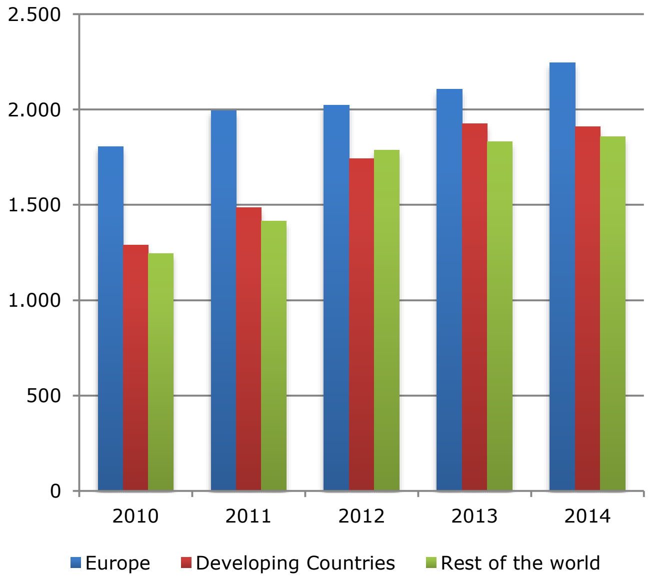
Source: Trade Map (2015)

- Although most of the leading suppliers are from developed countries, several developing countries appear among the 12 leading suppliers: China (2nd position at €242 million) and India (11th position at €27 million).
- The leading positions of Germany, France and the United Kingdom are the result of the presence of production facilities owned by the leading global and national valve manufacturers in these countries.
- Several other developing countries also export valves to Italy, including Tunisia (€9 million), Turkey (€6 million), Bosnia and Herzegovina, Mexico, Brazil, Thailand, Nigeria, Egypt and Angola, (between €1-4 million per country).
- The composition of suppliers from developing countries is not expected to change substantially in the next few years.

Tips:

- Benchmark your company against your peers from China and India, as well as against those from other countries that export to Italy. 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 valves by country is the ITC Trade Map.
- Italian buyers are evidently aware of and have found suppliers in developing countries other than China. Such perceived openness to other developing countries obviously implies the presence of opportunities for developing countries. Be sure that Italian prospects can find your website when searching the web for suppliers. In addition, be sure that you are listed in relevant databases, including the Valve World Buyers' Guide.

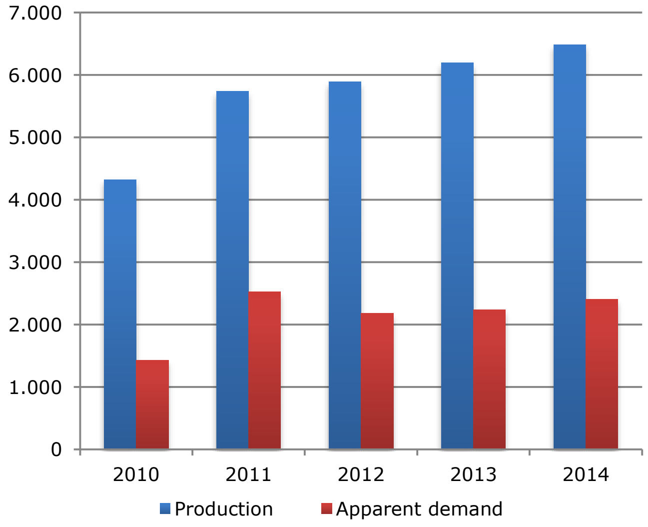
Figure 3: Exports of valves from Italy by main destination (2010–2014), in € million



Source: Trade Map (2015)

- Italy exports a great many valves, due to its dominant role as the largest producer of valves (and valve parts) in Europe.
- Italian exports exhibited strong growth in the 2010–2014 period. On average, exports have increased by 8.5% per year (€6.0 billion in 2014), particularly due to the strong performance of exports to the USA, Saudi Arabia, France and South Korea.
- Together, the pattern over the 2010–2014 period and the pattern of Italian imports (Figure 1) demonstrate Italy's participation in the global trade of valves and valve parts.
- Almost one-third of Italian exports are destined for developing countries. This presents an interesting opportunity for manufacturers of valves and valve parts in developing countries. Suppliers who are able to prove their ability to meet product specifications can also supply these valves and valve parts. China is the leading developing-country destination, followed at quite some distance by Turkey, Thailand, Iraq, India, Kazakhstan, Brazil, Algeria, Egypt and Mexico.

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



Source: Prodcom (2015)

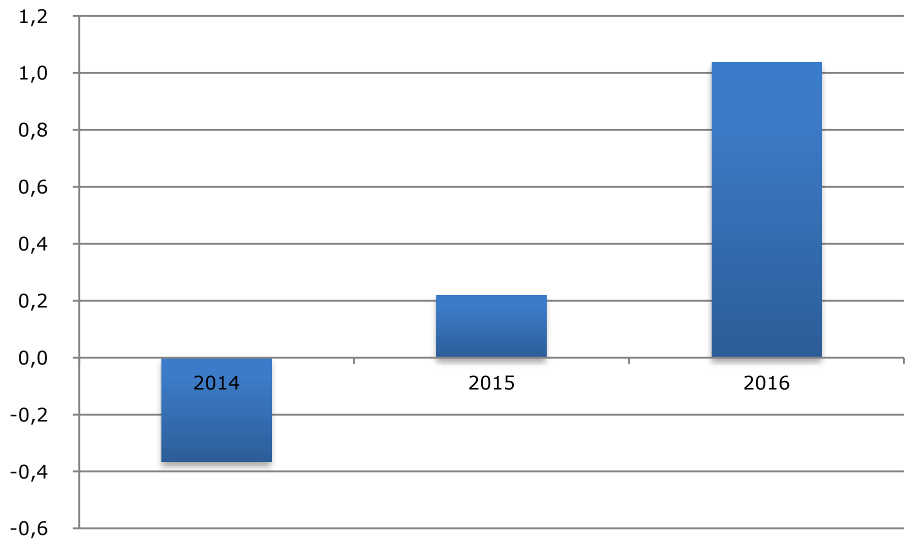
- Italy is Europe's leading producer of valves, ahead of Germany. The country represented 29% of the total European production output in 2014.
- Production increased by an average of 10.7% per year in the period under review, reaching €6.5 billion in 2014.
- As indicated in Figure 4, Italy is a net exporter of valves, as its production output exceeds its local demand. Nevertheless, it is the second-largest market for valves in Europe, with a value of €2.4 billion in 2014. Local demand had some difficult years (2009–2010), although 2011 proved to be a record year, with a year-on-year improvement of 76%. It should be noted that the market growth in 2011 was due in part to growth in demand for valve parts. This illustrates the fact that Italian valve manufacturers outsource a substantial amount of parts manufacturing to subcontractors.
- The Italian market is expected to remain stable or show a slight decline in the next few years, as the difficult situation in several segments, both in and outside Italy (most notably, the oil and gas sector), will offer only limited opportunities for market growth.
- Although large companies account for more than half of total output, the country has a relatively large number of small manufacturers. Pentair (formerly Tyco) has a few subsidiaries in Italy (Fasani, Raimondi Valvole and Vanessa), while other global market leaders with production facilities in Italy include Velan and Dresser. The leading Italian companies include Valvitalia (a conglomeration of a large number of small valve manufacturers) and the Bonomi Group (comprising Rubinetterie Breciane Bonomi, Valpres and Valbia).
- Italian valve manufacturers have a strong position in the global oil and gas industry. Approximately 200 Italian companies offer products, systems and services for the transport of fluids in the energy sector, with 50–70 of them specialising in valves. These companies are concentrated in a large area, stretching from Varese to Piacenza. Most are medium-sized and large companies. The centre of Italian valve production is Varezotta.

Tips:

- Manufacturers of valve parts can find very good short-term and medium-term subcontracting opportunities with Italian valve producers.
- For exporters of finished valves from developing countries, the cautious market climate is a threat, as European/Italian valve manufacturers will be making every effort to retain their customers in the Italian market.
- Considering the forecast for 2015 and beyond, pricing is and will continue to be one of the most important factors influencing competition. 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 valves.

Macro-economic indicators

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



Source: OECD Economic Outlook 96 database

- The major determinant of demand for valves 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, following a slight decline in 2014. 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. This would thus also 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 Italian market for valves?

The most important trends in the Italian valve sector include the following:

- Automated valves: Although Italian companies have specialised in expensive automated valves and actuators, exporters from developing countries find it difficult to enter this market. The expensive automated valves include technologically advanced automated valves with greater efficiency through advanced predictive and preventative maintenance abilities, as well as through improved controls involving pneumatic, solenoid, electric, hydraulic or digital mechanisms. These valves can be used in remote or hazardous environments, as in oil pipelines in the Arctic or within nuclear power plants. Such specialised products constitute a growing market segment for Italian valve makers, although they also incur costs in the form of materials research (e.g. plastics, ceramics), product design and testing, in addition to more sophisticated production methods.
- Clean water: In the water and sewerage industry, clean water shortages and environmental legislation will result in several investments in infrastructure and water-treatment equipment.
- Environment: A rising demand for certain types of valves can be seen as a result of the search for energy efficiency and the restriction of CO_2 and NOx emissions (following legislation from the European Union). This has led to the increased use of innovative production techniques, resulting in greater efficiency and less waste. One of the effects of this trend is that there has been an increase in demand for certain types of valves. For example, a range of valves has become more appealing as control valves for petrochemical companies. The main reason is that a range of valves has lower gland emissions than globe valves do. In addition, one specific range of valves, eccentric plug valves, is suitable for a very large number of applications. Eccentric plug valves have thus experienced relatively high growth in demand, especially for control-valve applications in the oil and gas industry.

Tips:

- Specialised valves provide opportunities for manufacturers from developing countries who are able to supply high-tech valves or parts for such valves.
- Consider focussing on the water and sewerage treatment segment, as it offers the best opportunities due to its relatively low technical requirements.
- The trend towards greater energy efficiency provides opportunities for producers from developing countries who are able to supply certain types of low-emission valves or parts for such valves.
- The CBI document on Trends for Pipes and Process Equipment provides a general overview of trends in the European industry.

With which requirements should valves comply in order to be allowed on the Italian 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 EU buyer requirements for pipes and process equipment is available on the CBI Market Intelligence Platform. Additional sources of information on gaining access to the European market include the EU Export Helpdesk and the ITC Market Access Map.

Musts

For industrial valves, the most important legal requirements are compliance with the Essential Safety Requirements of (1) the Pressure Equipment Directive (PED) 97/23/EC, and (2) the ATEX Directive 94/9/EC (which applies to valves in potentially explosive atmospheres).

Valve parts are not subject to any specific legal requirements for market access. For finished valves, the following legislation applies:

- The Product Liability Directive 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.
- Valves are subject to the PED directive.
- Valves intended for use in potentially explosive atmospheres must comply with the ATEX directive (Directive 94/9/EC).

Other general legislation that must be taken into account includes:

- Wood packaging materials used for transport (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 packaging and packaging waste, which prescribes the marking of the kind of packaging material used and maximum levels of heavy metals in the packaging material.

Tips:

- To obtain PED or ATEX certification, valves must be certified by a Notified Body. In some cases, these notified bodies also offer consultancy services to help manufacturers meet the requirements. Be aware that notified bodies are often notified for only a part of the conformity assessment procedure, or for only a specific sector (e.g. electrical equipment).
- Consult the European ATEX Guidelines for the Valve Industry published by the European Valves Committee.
- 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 technical aspects, many of which are covered in the CE or other standards. General standards (e.g. EN558 and EN12982) can serve as a starting point, while other standards apply to specific market segments (e.g. ISO 15761, 10434 and 17292 for gas and oil). Yet other standards apply to specific types of valves (e.g. EN 13709, 13789 and 1349 for globe and control valves and ISO 5996 for cast-iron gate valves).

For valve parts, material requirements are the most important customer requirement. The material that is used for valve parts must be covered by an international standard and certificated. 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) and section (UT or ultrasonic testing and RT or X-ray testing) tests.

Buyers may also have specific requirements relating to the dimension and surface of the valve 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 compliance with ISO 14001 (environmental) and OHSAS 18000 (labour standards).

Tips:

- Valves produced for the European market must be designed and manufactured with an emphasis on low emissions, safety, simplicity of maintenance, ease of operation and, above all, long and reliable service life.
- Additional details are available on the following websites:
  - ISO Catalogue - See 'TC 153' (Valves) for an overview of ISO standards.
  - Search EN norms in the online shop of the British Standards Institution.
  - CBI Buyers' Black Box offers further information on topics that are decisive for buyers when searching for new suppliers.

Import tariffs

For valves and valve parts, a 2.2% duty is levied on European imports from third countries. Several countries benefit from a preferential 0% tariff, including Indonesia, Pakistan, Vietnam, the Philippines, Bosnia-Herzegovina and Egypt. The TARIC database provides additional details relating to Chapter 8481. 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 valves look like in Italy?

Valve manufacturers are the most prominent targets in Italy. Producers from developing countries can supply parts to them as subcontractors, in addition to supplying finished products. Producers from developing countries can improve their opportunities by focussing on a few specialised products. Italian manufacturers are also the most important targets for 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) Market Channels and Segments for Pipes and Process Equipment and 2) Competition for Valves. Explanations of the types of prospects are provided below, including a few examples for 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 valve parts, and possibly for suppliers of some finished valves. Subcontracting offers the best opportunities for specialised products, including special valves or parts thereof (e.g. knife valves).

Examples of Italian producers include the following:

- Calzoni Hydro – manufacturer of a range of valves and pipe-related equipment.
- Dafram – manufacturer of an floating range of ball valves.
- Enolgas – producer of a wide range of ball valves.
- Fratelli Pettinaroli – maker of valves for water-supply, heating and sanitary applications.
- Ghipson – maker of butterfly and check valves.
- Magival – producer of ball valves.
- Orion Valves – manufacturer of three-way ball valves and other types of valves.

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

Distributors

Distributors are attractive targets for exporters from developing countries aiming to export large volumes of commodity-type products (e.g. common valves). 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.

Most distributors offer a range of valves and other pipe-related process equipment. Examples include the following:

- Ital Tecnica – distributor of valves and other pipes and process equipment.
- Steeltrade – stockholding distributor of a range of valves and pipe-related equipment.

- Varisco – stockholding distributor of a range of valves and pipe-related equipment.

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

Other distributors are true valve specialists, as they are exclusively specialised in valves. Examples of such specialists include Villa Valvole and MB Valves Service. Note that this list is not complete, and it is intended only as an illustration of a particular category of companies.

Useful resources

Associations, portals, magazines and trade fairs

- Federation of the Italian Associations of Mechanical and Engineering Industries – select English and click on 'members directory'.
- Geofluid – trade fair for technology and equipment for prospecting, extracting and conveying underground fluids, held in even-numbered year (in October), in Piacenza.
- H2O-Accadueo – trade fair for water distribution, treatment and equipment, held every even-numbered year (in May), in Bologna.
- Italian Association for Food Producing, Processing and Preservation Manufacturers – click on '*associati e produzione*' and '*Elenco Aziende*'.
- Italian Association of Valve and Fitting Manufacturers – the site offers news and a company database; click on '*Aziende associati*' for an overview of members.
- Italian Federation of Agents – several matchmaking services are offered; see here.
- Reti Idriche & Gas – bimonthly water and gas magazine.
- Subfornitura – subcontracting industrial processing fair, held annually (in March) in Parma.
- Valveworld – biennial trade fair dedicated to valves, held in December in even-numbered years, in Dusseldorf, Germany. This is Europe's annual meeting place for the valve industry.
- Water Gas – business portal for Italian gas and water companies, offering news, background information and a company database.

Miscellaneous

- Eurostat – 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.
- Kwintessential – provides practical tips on business culture and etiquette.

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