



ITALIAN TRADE AGENCY

**ICE - Agenzia per la promozione all'estero e
l'internazionalizzazione delle imprese italiane**

意大利对外贸易委员会

Market Research on China Hydraulic, Pneumatic, and Sealing Industry

EXECUTIVE SUMMARY

2016 Edition

October 17, 2016

INTRODUCTION

Objectives

This research report was conducted with two key objectives:

1. Provide an update on a high-level overview of the overall *hydraulic, pneumatic and sealing* industry with clear distinction between the three sectors, concerning supply, demand, and import & export analysis
2. Identify key market trends, potential barriers and opportunities for Italian manufacturers interested in approaching and/or entering the Chinese market

Conducting market research in China and our methodology

- Generally speaking, conducting market research in China is different and significantly more challenging than it is in developed countries because of 1) the size and diversity of the country; 2) lack of fully reliable centralized/official information databases; 3) constant and extremely rapid change – the whole Chinese economic system is far from being in equilibrium
- Therefore, solid market research work must be based on multiple resources and activities
- Our methodology leverages a combination of resources/activities such as:
 - All relevant background information (client data, existing available information, etc.)
 - Secondary research (in Chinese and English), such as several different resources, from proprietary databases to access to associations or magazines, etc.
 - Primary research, e.g. access to external business network, interviews with experts and key insiders, possible visits to trade show or selected companies, etc.
 - Collective China knowledge/sector expertise/market research expertise with hundreds of research projects executed in and outside China

Format of this report

- The report is organized in such a way as to provide various level of details in different places – executive summary, overviews, and paragraphs in the body of the report, summaries, and appendices; bullet points are used throughout the entire report to make reading easier

Information Sources

- Key sources of information for this report include:
 - All background information
 - Various secondary sources (including the *China Hydraulics Pneumatics & Seals Association*, and various websites of major industry players)

- Interviews with industry insiders and experts
- Ongoing Sovereign analysis of all key facts and data collected
- In the report, sources are mentioned for charts, tables and key data; secondary sources include dozens of Chinese sources (news reports, magazines, publications, government statistics, etc.) as well as all companies' websites, press releases from various magazines, etc.
- We mention "Sovereign Analysis" as a key reference; this refers to our elaboration and analysis of qualitative and quantitative data collected throughout the project
- Ongoing analysis and re-elaboration of all data collected is key to cross-check data and information and identify key trends and industry dynamics

Note for 2016 Edition

- There are several key changes in the 2016 Edition of this report relative to the 2013 and 2014 Editions, especially in regards to market situation and imports, which is primarily a result of the slower pace in economic recovery in the past few years, improving domestic technologies, etc.
- This update is a line-by-line review of the original research, focusing on:
 - Refreshing all general statistics and information with most up-to-date information
 - Capturing the latest key trends and market dynamics; and updating the latest import & export statistics and market position of Italy

MARKET SUMMARY

China Hydraulic, Pneumatic and Sealing Industry

- In 2015, the market size of China's hydraulic, pneumatic and sealing machinery industry reached US\$ 16.7 billion (RMB 11.6 billion); and industrial output reached about US\$ 15.2 billion (RMB 102 billion).
- Hydraulic, pneumatic, and sealing machinery sectors account for 54%, 20%, and 27% of the market respectively
- Industrial outputs made a CAGR of 6% from 2011 to 2015, whereas market value decreased by 2% compared with 2011
- Imports had a dramatic drop while exports grew slightly in 2015; China's total imports of hydraulic, pneumatic, and sealing products was US\$ 3.5 billion and exports were US\$ 2 billion
- Between January – August 2016, imports and exports reached US\$ 2.1 billion and US\$ 1.3 billion respectively; the total imports and exports of the year are estimated to be US\$ 3.2 billion and US\$ ~2 billion
- The decrease of imports in 2015 was primarily a result of improved domestic production and technology levels, as well as the slowdown in the economy
- Increasing infrastructure investment (e.g. high-speed rail) and demand from key customer industries (e.g. *construction*, *agricultural machinery*, and *automotive* etc.) are key factors to drive the industry development
- There are about 2,500¹ manufacturers of hydraulic, pneumatic and sealing products in China; ~90% market is dominated by ~300 key players
- Of the 300 key manufacturers, over 30% are foreign-invested (i.e., WFOE² or JV³), taking up one-third of the total domestic production and dominating the high-end market
- In general, there is still a large technology gap existing between foreign and domestic products, especially in terms of quality and durability
- However, local Chinese manufacturers are improving their technology and design manufacturing techniques, allowing them to move up the value chain
- The central government has continued to issue plans and incentive policies to improve the industry's development and production level; key points include cluster and innovation promotion, and industrial structure adjustment (including encouraging M&A between companies)
- In addition, major projects will be launched in key areas, a collaborative work platform has been established to support the industry development together with financial incentives

¹ Usually a large company can have multiple subsidiaries and production bases located in different regions, this figure 2,500 does not include these subsidiaries but only their holding companies; if all subsidiaries are included, there might be 6,000+ across China

² WFOE – Wholly Foreign Owned Enterprise

³ JV – Joint Venture

Government's Incentive Policies

- China's *13th Five-Year Plan* (2016-2020) together with *Made in China 2025* initiatives have set development principles and goals for ten key sector including aerospace and aeronautical equipment, maritime equipment, rail transport equipment, new-energy vehicle and equipment, power equipment, agricultural equipment, automated machine tools, etc.
- From 2016 to 2020, China plans to invest above US\$ 418 trillion to build over 23,000km new railroads across China
- During the same period of time, China will have 50+ cities building urban rail transit which is expected to drive a demand of 5,000 urban rail vehicles every year in the coming decade
- Moreover, China aims to continue lowering the percentage of coal power installed capacity from the current 63% to 58% by 2020, while increasing nuclear power 4%, natural gas 6%, hydropower 17.5%, and wind power 10%
- These policies aim to stimulate the industry development and improve domestic production technology and level and will likely drive the demand for hydraulic, pneumatic and sealing products in the coming years
- The Belt and Road initiative⁴ sets the goals of improving port infrastructure, maritime logistics, aviation infrastructure, energy infrastructure connectivity, cross-border power and tele-communication infrastructure, intercontinental submarine cable and satellite infrastructure across Asian, European, and some African countries
- This will likely drive the growth of various downstream industries and demand for fundamental components including hydraulic, pneumatic and sealing products in the coming decades
- Meanwhile, China also has publicized the sector plan – *Hydraulic, Pneumatic and Sealing Industry 13th Five-Year Plan* (2016-2020) to set development goals including a year-on-year growth of 6% from 2016 to 2020, promoting industry optimization and upgrade, improving high-end hydraulic, pneumatic and sealing production, improving product quality and durability, etc.
- The plan also aims to increase domestic manufacturing capabilities to fulfil 60% of market demand of high-end hydraulic, pneumatic and sealing products; this will likely further challenge imports
- The plan focuses on developing high-end intelligent products, promoting industrial clusters and to encouraging to form some large enterprises through M&A, especially encourage domestic large enterprises to merge foreign ones, cross industries, regions and types of ownership
- 2016 is the first year of the 13th Five-Year Plan, and more changes to the market dynamics are expected in the near future

⁴ It refers to the Silk Road Economic Belt and the 21st-Century Maritime Silk Road, also referred to as *One Belt, One Road* initiative

Key Sectors Overview

Hydraulic Machinery Sector

- In 2015, the market size of hydraulic machinery reached US\$ ~9 billion (RMB 60 B); industrial output reached US\$ 7.8 billion (RMB 52 B)
- The high end of the market is dominated by foreign brands; while domestic Chinese companies primarily compete in the mid-low end of the market
- Construction machinery is the primary driver for *hydraulics*, accounting for 35% of current market demand; the percentage dropped significantly compared with the 50% around 2012, mainly due to the glowing economy especially lack of investment in infrastructure and decreasing demand for construction machinery in the past few years
- In 2015, the imports of China *hydraulic machinery* reached US\$ 2.4 billion, accounting for 27% of domestic market; exports reached US\$ 1.2 billion, 16% of domestic production
- *Hydraulic cylinders, hydraulic power engines and motors, hydraulic pumps, and valves for oleo hydraulic transmissions* were the major imported product segments
- Key foreign players include *Bosch Rexroth, Eaton, and Parker*, and large domestic manufacturers include *Beijing Huade Hydraulic Industrial Group* and *Yuci Hydraulics*

Pneumatic Machinery Sector

- In 2015, market size of *pneumatic* machinery reached US\$ 3.3 billion (RMB 22 B); industrial output was US\$ 3 billion (RMB 20 B)
- Key customer industries for pneumatics are primarily in *oil and petrochemical machinery*, as well as in *metallurgical machinery* and *construction machinery* etc.
- In 2015, the imports of China pneumatics was US\$ ~800 million, accounting for 24% of the market; exports increased slightly to US\$ 550 million over 2014 and accounted for 18% of domestic production
- Key foreign manufacturers include *SMC, CKD (Japan), FESTO, Bosch Rexroth (Germany), and Camozzi (Italy)*; key domestic manufacturers include *Guangdong Zhaoqing Fangda Pneumatic Company* and *Wuxi Huatong Pneumatic Company*

Sealing Components Sector

- In 2015, the market size and industrial outputs of *sealing* machinery both reached US\$ 4.4 billion (RMB 30 B)
- Seals are a key component in all Hydraulics and Pneumatics and thus demand is directly affected by these industries
- Total exports of reached US\$ 280 million, accounting for 6% of total industrial output; imports was US\$ 270 million in 2015, accounting for 6% of the domestic market



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- Key foreign manufacturers include *John Crane (UK)*, *NOK (Japan)*, *Freudenberg (Germany)*, *Burgmann* (owned by *Freudenberg* since 2004)
- Key domestic manufacturers include *AIG Industrial Group*, *Colossus Group*, *Anhui Zhongding Sealing Group Company*, and *Qingdao TKS Sealing Industry Co., Ltd.*

IMPORT AND EXPORT ANALYSIS

This section analyzes the imports and exports of china's hydraulics, pneumatics, and gaskets & seals, with a focus on Italy's trade position. The import export analysis for hydraulics, pneumatics, and gaskets & seals is based on the following list of HS codes used to define the industry:

Categorization of Wire Machinery HS Codes

HS Code	Description
8412.2100	Hydraulic Cylinders
8412.2910	Hydraulic Motors
8412.2990	Other Hydraulic Systems
8412.3100	Linear Acting Cylinders
8412.3900	Other Pneumatic Motors
8413.5031	Hydraulic Piston Pumps
8413.6022	Hydraulic Gear Pumps
8413.6032	Hydraulic Vane Pumps
8481.1000	Pressure Reducing Valves
8481.2010	Valves for Oleohydraulic Transmissions
8481.2020	Valves for Pneumatic Transmissions
8484.1000	Gaskets and Similar Joints of Metal
9032.8100	Hydraulic and Pneumatic Instrumentation

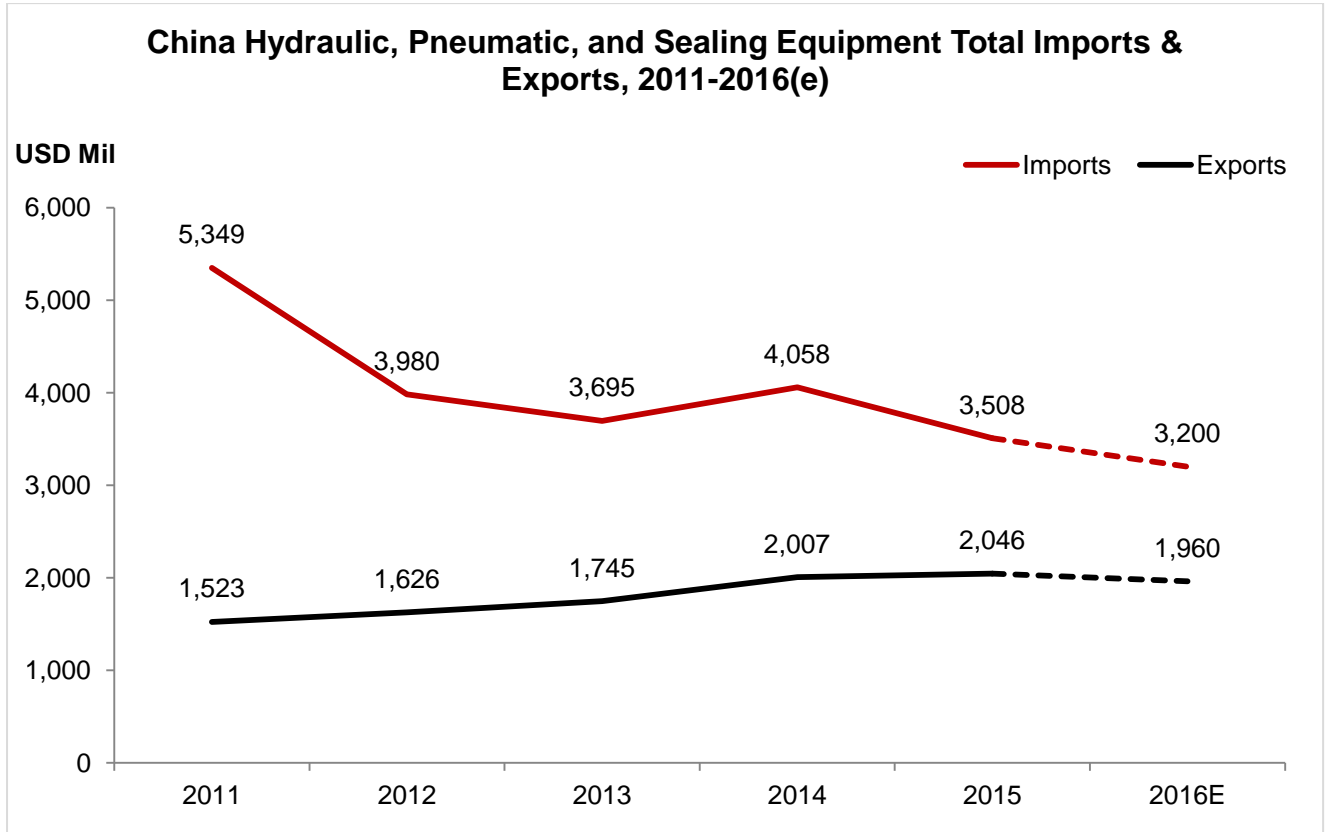
Source: Sovereign-China Analysis on multiple sources including China Customs and World Trade Atlas

Note: Some HS codes are only harmonized up to six digits between different countries. Because of this, there are some differences in the 8 digit Italian and China HS codes. For the purposes of this report, the Chinese equivalent 8-digit HS codes are being used.

Overview

- In 2015, China's total imports of hydraulics, pneumatics, and gaskets & seals exceeded US\$ 3.2 billion and exports exceeded US\$ 1.9 billion.
- From 2011 to 2015, the imports declined at -10% CAGR (Compound Annual Growth Rate) from over US\$ 5.3 billion to US\$ 3.2 billion; decline in the market is mainly attributed to a slowdown in the overall economy and a slowdown in downstream industries.
- As the Chinese economy continues to slow and the quality of domestically produced equipment increases, imports of pneumatic, hydraulic and sealing equipment are expected to continue to decline.
- From January to August 2016, imports and exports reached US\$ 2.1 billion and US\$ 1.3 billion respectively; the total imports and exports for 2016 is estimated to be US\$ 3.2 billion and US\$ 1.9 billion respectively

- The following chart shows the overall imports and exports from 2011 to 2016:

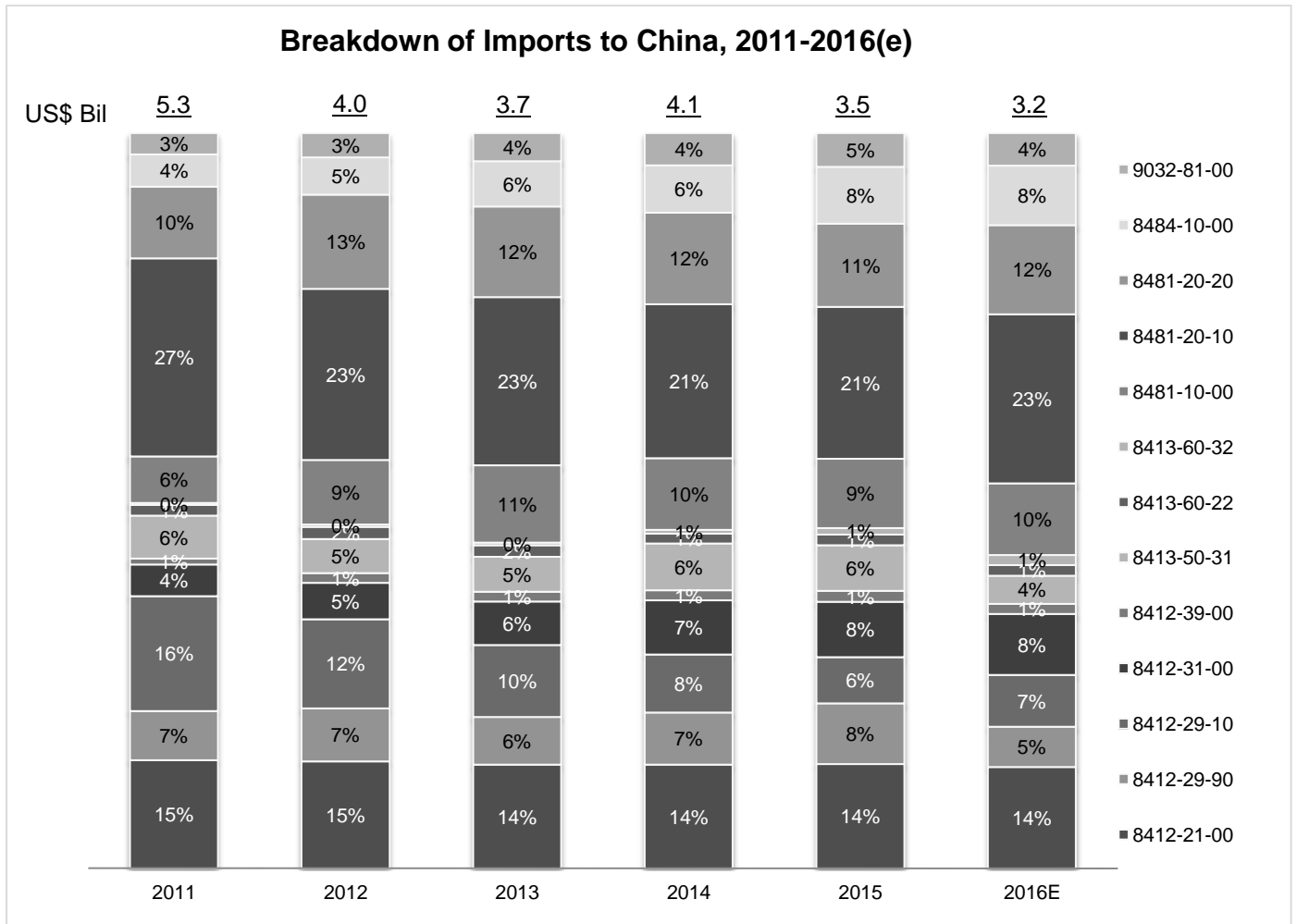


Note: 2011-2015 are full year data; 2016 is estimated based on actual data for January-August 2016
 Source: Sovereign Analysis on China Customs and World Trade Atlas

- Italy ranked **#5** in overall imports of pneumatic, hydraulic, and sealing equipment to China in 2015; Japan, the United States, and Germany are ranked #1, #2, and #3 respectively.

Imports of Hydraulics, Pneumatics and Sealing Products into China

- In 2015, imports of hydraulics, pneumatics, and gaskets & seals reached US\$ 3.2 billion in 2015 and are expected to drop to US\$ 3.2 billion by the end of 2016.
- The chart below illustrates the growth in imports from 2011-2016 and a breakdown of each category in terms of percent of the total imports:



Source: Sovereign Analysis on China Customs and World Trade Atlas; 2016 figures are estimates based on real imports from January to August 2016

- The top 3 exports to China include Germany, Italy and Japan; the table below shows the top 10 exporting countries of hydraulics, pneumatics, and gaskets & seals to China from 2014 to 2016:

Table: China's Pneumatics, Hydraulics, and Seals Import by Country during 2014-2016

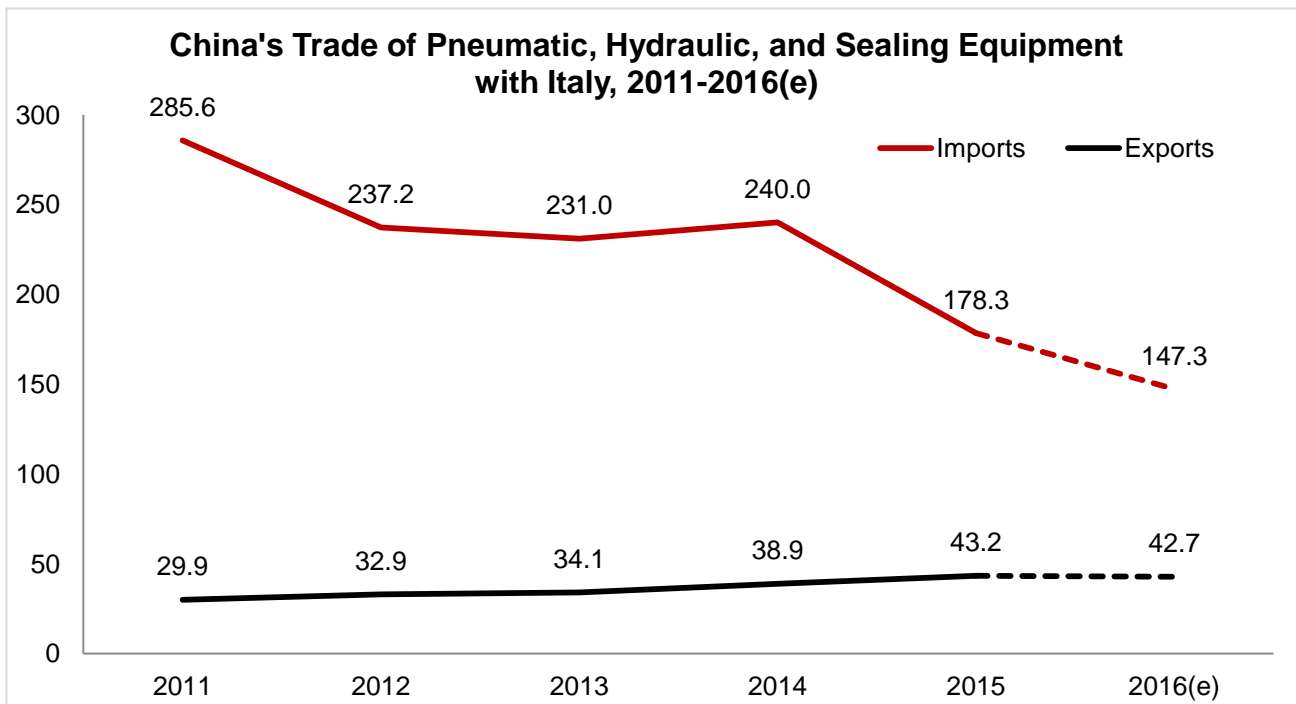
Rank (2016)	Country	Import Value (US\$ M)			%Share vs. Total			% Change 15/16
		2014	2015	2016(e)	2014	2015	2016(e)	
-	World	4,058	3,508	3,200	100%	100%	100%	-9%
1	Japan	900	716	797	22%	20%	25%	11%
2	Germany	648	703	616	16%	20%	19%	-12%
3	United States	931	662	556	23%	19%	17%	-16%
4	South Korea	310	249	227	8%	7%	7%	-9%
5	Italy	240	178	147	6%	5%	5%	-17%
6	France	133	117	86	3%	3%	3%	-26%
7	Belgium	100	85	85	2%	2%	3%	0%
8	United Kingdom	73	72	84	2%	2%	3%	17%
9	Taiwan	37	70	69	1%	2%	2%	-2%
10	Vietnam	63	66	59	2%	2%	2%	-11%

Source: Sovereign analysis on World Trade Atlas and China Customs; 2016 figures are based on estimates from real imports from January to August 2016

- In 2015, Italy remained #5 in total imports of pneumatic, hydraulic and sealing equipment, with an import value of US\$ 178 million (5% of the total imports for the respective HS codes); although Italy will likely remain in the #5 spot, imports are expected to drop to US \$147 million in 2016
- The major competing countries for pneumatic, hydraulic, and sealing equipment are Japan (20%), Germany (20%), and the United States (19%), in 2015; these countries along with South Korea and Italy account for the top five countries in terms of import market share value
- The market positions of the top five countries are not expected to change in 2016, although market share changes slightly; for example, Japan's market share increased by 5% and overall value increased by 11%.
- Imports from the top 5 countries accounts for more than 70% of imports in 2015.
- Overall, imports are declining, and except for Japan, imports to China from the top five countries fell sharply.

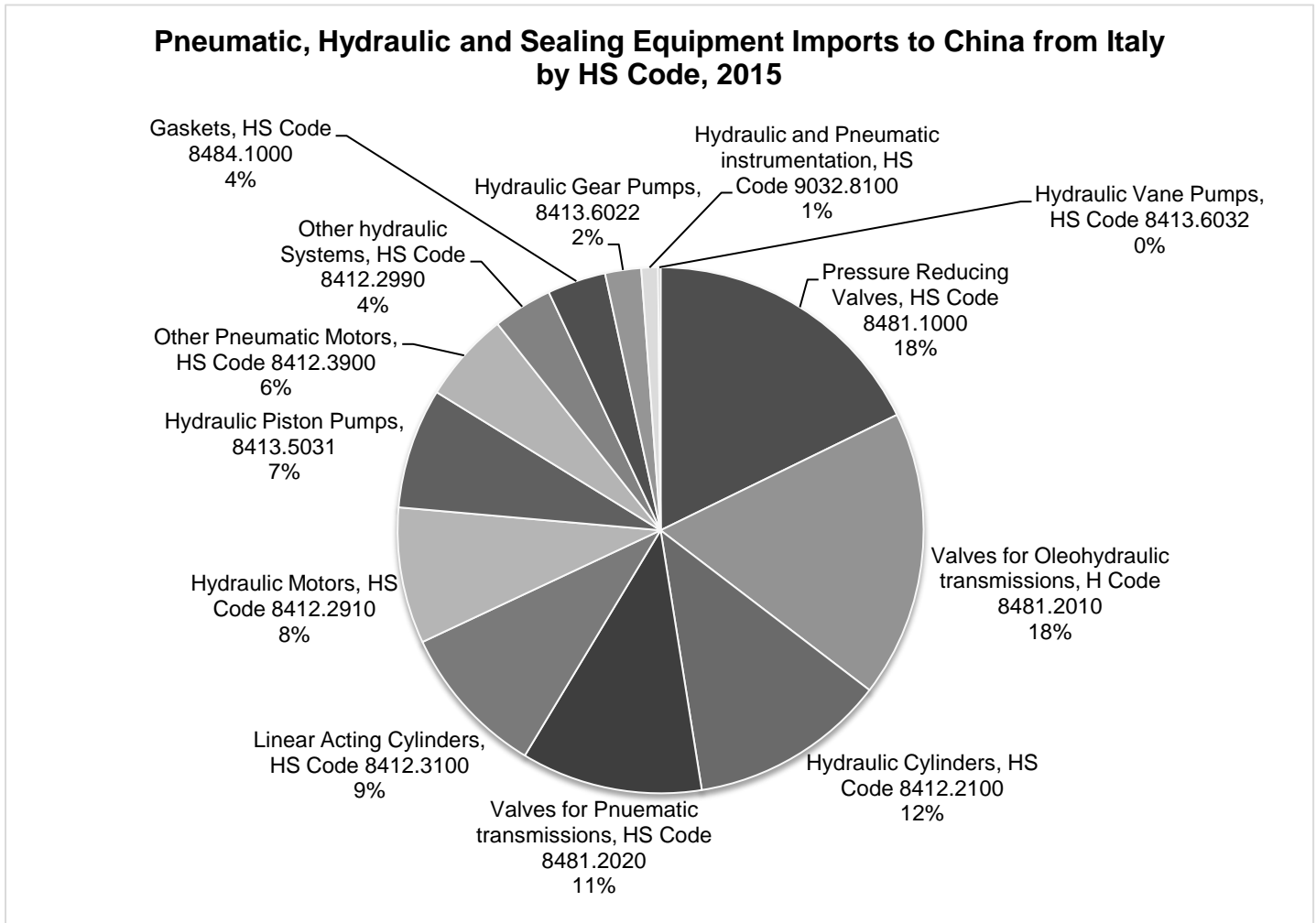
Italy's Position

- China's imports from *Italy* have declined sharply from 2014 to 2015, dropping by 26%, which is greater than the drop in overall China imports and outpaces the drop in the other five top countries from which China imports.
- Based on the trade data in 2016, which covers January through August, imports to China from Italy have reached only US\$ 98 million, and are not expected to exceed US\$ 147 million by the end of the year; an expected 17% drop over 2015.
- Italy still maintains the number 5 ranking at the end of 2015 for countries from which China imports pneumatic, hydraulic, and sealing equipment from; if the import trend continues Italy should remain in the number 5 position.
- The following chart shows the imports and exports of pneumatic, hydraulic, and sealing equipment with *Italy* from 2011-2016 Est.



Note: 2016 full year data is forecast based on actual imports/exports between January-August 2016
 Source: Sovereign Analysis on China Customs and World Trade Atlas

- The chart below provides a breakdown of pneumatic, hydraulic, and sealing equipment imports from *Italy* to China in 2015:



Source: Sovereign-China Analysis on China Customs and World Trade Atlas

- The table below shows *Italy's* market position and major competitors for segments of pneumatic, hydraulic, and sealing equipment in 2015.

Table: *Italy's* Market Position of Pneumatic, Hydraulic, and Sealing Equipment in 2015

Product Category	HS Code	Italy's Position	Value [US\$ Mil]	% Share	Major Competitors		
					Country	% Share	%Change 14/15
Hydraulic Cylinders	8412.2100	#6	\$21.5	4%	Germany	23%	-36%
					United States	20%	21%
					Japan	14%	-18%
					Japan	24%	-38%
Hydraulic Motors	8412.2910	#6	\$14.9	7%	Germany	21%	-45%
					United States	10%	3%
					United States	27%	63%
Other hydraulic Systems	8412.2990	#12	\$6.5	2%	Germany	13%	-26%
					Norway	12%	23%
					Japan	41%	-17%
Linear Acting Cylinders	8412.3100	#4	\$16.7	6%	Germany	21%	-10%
					United States	8%	-17%
					United States	24%	18%
Other Pneumatic Motors	8412.3900	#2	\$9.9	19%	Denmark	15%	92%
					Japan	11%	-29%
					United States	54%	40%
Hydraulic Piston Pumps	8413.5031	#4	\$13.2	6%	Germany	16%	-55%
					Japan	10%	-51%
					Germany	36%	-19%
Hydraulic Gear Pump	8413.6022	#5	\$3.9	8%	Japan	13%	-16%
					United States	13%	68%
					Japan	58%	531%
Hydraulic Vane Pump	8413.6032	#8	\$0.27	1%	Germany	20%	24%
					Taiwan	6%	36%
					Germany	24%	-26%
Pressure Reducing Valves	8481.1000	#4	\$31.7	10%	United States	18%	-10%
					Japan	13%	-19%
					Japan	26%	-27%
Valves for Oleohydraulic transmissions	8481.2010	#7	\$31.4	4%	United States	17%	-5%
					Germany	16%	-23%
					Japan	28%	-13%
Valves for Pneumatic Transmissions	8481.2020	#4	\$19.9	5%	German	23%	-25%
					United States	15%	-19%
					United States	23%	11%
Gaskets	8484.1000	#11	\$6.4	2%	Japan	17%	-16%
					Germany	14%	-10%
					Japan	22%	16%
Hydraulic and Pneumatic instrumentation	9032.8100	#13	\$1.8	1%	United States	21%	2%
					Germany	14%	-7%
					Japan	20%	-20%
Total imports of pneumatic, hydraulic, and seal equipment from Italy to China		#5	\$178.3	5%	United States	20%	8%
					States	19%	-29%
					Germany		

(*) Note: Total import may not tally with sum of all import categories due to rounding.

Source: Sovereign analysis on World Trade Atlas and China Customs

- Overall, *Italy* ranked #5 in 2015 and its main competitors are *Japan*, *the United States*, and *Germany*.

KEY MARKET DYNAMICS AND TRENDS

Domestic manufacturers will increasingly fulfill demand for medium and high-end markets

- Hydraulic, pneumatic and sealing industry had an increasing industrial output value, with a CAGR of 6% from 2011 to 2015, while imports dropped by 34% compared with 2011
- The trend of decreasing imports of hydraulics, pneumatics, and seals is expected to continue in 2016
- Domestic production of medium and high-end products replacing imports will also continue during the 13th Five-Year Plan period
- Domestic manufacturers are aware of the importance of R&D and are making efforts to improve the designs and manufacturing methods of hydraulics, pneumatics and seals; some large companies such as *Hengli Hydraulic* has recently merged some German counterparties to further strengthen its capabilities of manufacturing high-end products
- Demand will be mainly driven by downstream industries such as rail transit, agricultural machinery, construction machinery, automobiles and machine tool

Cooperation, vertical & horizontal integration / M&A among large players expected to continue

- Hydraulic, pneumatic and seals manufacturers are involved in M&A activities; typically targeting medium sized players
- M&A activities will be continued in the next few years due to industrial structure adjustment supported by government; cooperation between companies will also increase to strength their competitiveness
- Downstream customer companies also entered into upstream hydraulic, pneumatic and sealing industry through M&A

Government incentive policies will continue support the hydraulic, pneumatic and sealing industry during the 13th Five-Year Plan period

- In line with the 13th Five-Year Plan and *Made in China 2025* initiatives, hydraulic, pneumatic and sealing industry as the fundamental industries for many manufacturing sectors will continue to be considered as core development segments, which means continuous government funding in related segments
- The government has been pushing and providing financial support to domestic manufacturers for upgrading and improving technology levels, and this will continue in the coming five years
- Moreover, government's incentives on developing various downstream industries including rail transit, infrastructure, renewable energy machinery, agricultural machinery, aerospace and maritime equipment, military machinery, new energy automobiles, etc. will ultimately drive the demand for hydraulic, pneumatic and sealing market in China

HOWEVER, THESE POLICIES WILL GENERALLY BENEFIT DOMESTIC MANUFACTURERS MORE THAN OTHERS CONSIDERATIONS FOR ITALIAN COMPANIES

The following section introduces potential opportunities and barriers, and possible market entry options for Italian players in hydraulic, pneumatic and sealing industry sectors

Potential Opportunities for Italian Companies

There are already a number of Italian companies have been active in the China market since the early 1990's; such as Atos, which has established a Representative office and then a manufactory to manufacture series of hydraulic products; Camozzi, which has established the largest Joint Venture in the pneumatics sector; as well as a number of other Italian companies

Support by government through incentive policies

- Hydraulic, pneumatic and sealing components are very important products to all kinds of machineries which used in all different industries
- Both *Made in China 2025* initiatives and the 13th Five-Year Plan (2016-2020) set goals of developing hydraulic, pneumatic and sealing industry as one of the core development areas, where incentive policies such as potential tax preferential treatment and government funding might apply
- Hydraulic, pneumatic and sealing industry 13th Five-Year Plan (2016-2020) was finalized in 2016 to continue promoting industry transformation and upgrade, technology innovation and quality improvement, capability of high-end product manufacture

Stable demand from downstream industries in the coming years

- Despite the slowing economy and downturn in construction machinery especially after 2012, the market demand for fundamental components including hydraulics, pneumatics and seals maintained relatively stable
- Moreover, the Chinese government still aims to invest largely into infrastructure such as railroads and urban rail transit during the 13th Five-Year Plan period, which will drive the demand for construction machinery and rail transit machinery
- The Belt and Road initiative sets the aims of improving infrastructure networks around Asia, Europe, and part of Africa in areas including port, maritime, aviation, energy, cross-border power and tele-communication, intercontinental submarine and satellite infrastructure
- This in the long run will drive demand from these downstream industries benefiting from the Belt and Road initiative

Positive perception of foreign brands

- In general, foreign brands (including those manufactured domestically) are still considered to be of higher quality than domestic brands, which are considered to be unreliable

- Especially in high-end market that still dominated by foreign brands and imported products although which have dropped in the past few years, mainly due to the improving technologies
- Italy is one of the leading hydraulics, pneumatics and seals exporter to China; it remained the same position (#5) in 2015 as before
- Italy is especially strong in *hydraulic pumps and pressure reducing valves, and pneumatic power engines & motors and pumps*

Currently still rely on high-end imported components despite of the drop in imports

- Although China is becoming increasingly strong in hydraulics, pneumatics and seals production, high-end components and equipment still relies heavily on imports currently
- Although domestic companies also tried to improve their technology with government's support, it will not change the situation that domestic market relies on import in a short time
- As government will continue adjusting industrial structure in the next few years and focus more on quality instead of quantity, demand for high-end components and equipment is expected to increase

Setting up a direct (sales) presence in China

- Although China's labor and production costs are increasing, they are still relatively lower than costs in European countries, which still can provide opportunities for foreign companies to produce products in China
- Setting up a direct presence in China would better serve domestic machinery & equipment manufacturers as well as establish relationships with downstream companies
- It is important for any Italian company considering a direct presence to consider the pros and cons of each option: Representative Office (RO), Joint Venture (JV), and Wholly Foreign Owned Enterprise⁵ (WFOE) etc.

Potential Barriers for Italian Companies

Chinese companies improving quality & government's supports on domestic companies, and imports continuously dropping in the past few years

- The Chinese government, through several different plans, is making more efforts to help Chinese companies improve problems with inconsistent quality, short lifecycles and poor performance
- Additionally, Chinese companies understand the need for improved quality and are working to improve manufacturing techniques, R&D and product mixes
- By improving quality, Chinese manufacturers will be able to more effectively compete in the mid-end and even high-end of the hydraulic, pneumatic and sealing industry

⁵ Note: several types of WFOE exist; a Foreign Invested Commercial Enterprise (FICE) would allow the Italian company to import and sell products in China

- With government promoting domestically manufactured parts, there will be more competition to foreign products, especially imported products

Fierce competition from other countries

- Although Italian products are expected to rank #5 in total hydraulics, pneumatics and seals imports of China, the market share only represented 5% in 2015 and possibly the same in 2016, which has dropped from the level of 6-7% in the last few years
- Fierce competition come from Major competing countries mainly came from Japan (20%), Germany (20%), US (19%) and South Korea (7%) in 2015
- Japan and Germany are both strong in most of the imports categories, and Japan in particular, is expected to occupy 25% of the market share in 2016

Practical Options for Italian Players Approaching the Market

Possible market entry strategies

- There are several possible market entry options for Italian hydraulic, pneumatic and sealing manufacturers, and can be seen by Italian companies already present in the market
- Entry mode would depend on the company's business objectives, and it is often the case that there is no perfect solution to a specific company's objectives
- The four (plus one) main entry options for entry into the China market (more details provided later) include:
 1. *Use of distributors / agents* – simplest of all methods, if the company sells products
 2. *Representative Office (RO)* – the simplest legal setup format; it requires minimal capital investment but is also limited in business scope
 3. *Joint Venture (JV)* – cooperative or equity Joint Ventures with either a local company or a foreign company
 4. *Wholly Foreign Owned Enterprise (WFOE)* – multiple types exist and is determined by business scope
 5. *[Acquisition of local company* – generally not suitable for Small and Medium Enterprises as it requires significant resources and M&A experience to conduct proper due diligence]
- Examples of companies adopting these four entry methods include:

Table: Examples for each entry mode

Entry Models	Examples
Distributors/agents (if sell in China)	<ul style="list-style-type: none"> • SKF entered into China in 1912 through a local distributor in <i>Shanghai</i> • <i>Air Torque</i> still sell products through distributor today without any presence
Rep. Office (RO)	<ul style="list-style-type: none"> • <i>Atos</i> firstly entered China by setting up RO in <i>Shanghai</i> • <i>Bosch Rexroth</i> entered China mainland by setting up RO in <i>Shanghai</i> at 1992
Joint Venture (JV) with a local partner	<ul style="list-style-type: none"> • <i>Camozzi</i> firstly entered China in 1993 through establishing Joint Venture with <i>Shanghai Automation Instrumentation Corp.</i> - the largest JV in China's <i>pneumatic</i> industry • <i>Eaton</i> entered China in 1993 firstly through setting up JV with <i>Shandong Hydraulic Co., Ltd.</i>; the JV mainly produced hydraulics for equipments used for agriculture and construction • <i>Parker</i> entered China in 1980's through JV with a Hubei local company
WFOE	<ul style="list-style-type: none"> • <i>FESTO</i>, firstly setup a manufacturing WFOE in <i>Shanghai</i> in 1993 • <i>Manuli Hydraulics (Suzhou) Co., Ltd.</i> (headquarter in Italy) set up a manufacturing company in Suzhou of Jiangsu in 2004

Source: Sovereign analysis based on multiple sources including companies' websites

- It is essential that Italian players considering entering the market seek advice from a professional service provider before establishing a presence in China as the regulatory environment and

registration process can be complex

- The table below gives a broader description of entry options for Italian players:⁶

Table: Description of entry options for Italian players

Entry Option		Reason for Choosing Option	Description/Activities	Pros	Cons
1. Use distributors / agents		Sell / Distribute products in China through agent	<ul style="list-style-type: none"> Use distributor to import and sell components or product in China; need one with strong network No legal entity needed 	<ul style="list-style-type: none"> Requires no direct investment in China Relatively low risk Use distributors' network to develop brand awareness 	<ul style="list-style-type: none"> May be challenging to identify a committed distributor Results may be uncertain
2. Set up a Rep. Office (RO)		Manage distributors, conduct market research and business development activities	<ul style="list-style-type: none"> Manage distributors Network, conduct business development and support activities Note: Rep. Office cannot issue Fapiao (invoices) or directly receive payment for goods or services 	<ul style="list-style-type: none"> Simplest way of establishing direct China presence Low investment Allows company to learn local market conditions May develop business / client network first 	<ul style="list-style-type: none"> Still a "light" presence (RO cannot conduct commercial transaction or issue invoice) RO mainly limited to marketing function
3. Establish a Joint Venture (JV) with a local partner – Equity or Cooperative JV		Can be several: time to market, technology fit, sales channels, local network, etc	<ul style="list-style-type: none"> Joint venture with a local machinery or product manufacturer Equity or cooperative JV Must check if product category is restricted or prohibited 	<ul style="list-style-type: none"> May provide cost advantage from manufacturing or assembling locally Faster time-to-market Leverage China knowledge and distribution network of local partner Low initial investment than WFOE Be able to offer better after-sales service and technical support 	<ul style="list-style-type: none"> May be risky; takes time and effort to find an appropriate partner Chinese partner may have little to offer in terms of technology, but may provide market access Potential IP issues Need to manage relationship with JV partner - conflicts not uncommon, difficult to maintain control
4. Set up a Wholly Foreign Owned Enterprise (WFOE)	Manufacturing WFOE⁷	Manufacture products in China	<ul style="list-style-type: none"> Set up factory and manufacture <i>hydraulic, pneumatic and sealing</i> products May use distributors to sell within China 	<ul style="list-style-type: none"> Full control and ownership of the company Be able to offer better after-sales service and technical support Highest return and most sustainable in the long run Increasingly popular choice for many foreign players committed to China Greater control of IP 	<ul style="list-style-type: none"> Higher investment and commitment required Significant time to setup / develop the business
	FICE⁸	Sell / distribute products in China	<ul style="list-style-type: none"> Trade and sell/distribute <i>hydraulic, pneumatic and sealing</i> products within China 		
5. [Acquisition of local company]		Reasons for acquisition may vary	<ul style="list-style-type: none"> Alternative to WFOE or JV 	<ul style="list-style-type: none"> May acquire local channels / knowledge quickly Mitigate issues associated with having JV partner 	<ul style="list-style-type: none"> Potentially highest investment required Difficult to conduct proper due diligence Existing distribution network may not be suitable for distributing high-end products

Source: Sovereign Analysis

- Important note:** while the table provides a general framework for market entry, these are not prescriptive strategies as each individual company's situation differs and may require a customized strategy

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⁷ The feasibility of setting up a Manufacturing WFOE depends on the specific sector and the individual company's situation

⁸ FICE – Foreign Invested Commercial Enterprise

Use distributors/ agents or set up Rep. Office

- Using distributors or setting up representative offices are ways of entering the Chinese market with relatively low levels of risk and capital involved
- This is a potentially viable option for machinery exporters, due to high product value, and low volume
- On the other hand, there are still disadvantages over domestically manufactured machinery and components in terms of price and lead time
- Establishing a RO, however, is a good way to test the market and gauge opportunity
- RO allows foreign companies to offer better, although still limited, after-sales service and control over distributors than just a pure import strategy

Establish a JV with a local partner

- Establishing a joint venture with a local partner, if successful, can represent a faster time to market; and the foreign company can benefit from the local knowledge of the Chinese partner
- There is also an existing customer base and sales network and provides good start to tap into the domestic market
- However, when looking for JV partners, Italian companies should be very cautious and conduct proper due diligence on potential partners – JVs are in general considered risky and as many as 50% may fail over time
- It is notable that this has been a relatively popular strategy in hydraulic, pneumatic and sealing industry sectors

Set up a Wholly Foreign-Owned Enterprise (WFOE)

- WFOEs are the increasingly popular entity of choice for many foreign companies, including hydraulic, pneumatic and sealing product manufacturers
- A WFOE can take many forms; the two most common in this case are Manufacturing WFOE or FICE (Foreign Invested Commercial Enterprise)
- A Manufacturing WFOE allows the foreign company to manufacture and sell its manufactured products locally, while FICE⁹ allows the foreign company to import machinery and products, sell it locally and also offer after-sales service
- Companies establishing WFOE have full control over the development strategies and business processes, however the risk and investment required is potentially higher than having a JV partner
- As a result, this option is largely taken by some international players who already have significant China experience through setting up JV with Chinese counterparts in the previous stage

⁹ Note there are many forms of FICE with different types of business scope, e.g. wholesale, retail, etc

Merger & Acquisition of a local company

- In practice, acquisition of a local company usually requires a large commitment of capital and time, and the results may be influenced by some key factors such as the background of the target company and transaction value
- M&A activity typically do not apply to Italian SME's entering China, but it is worth mentioning as one of the options theoretically viable for companies approaching the market as there have been several recent cases of M&A's in the industry

SUMMARY AND CONCLUSIONS

- Overall, the hydraulic, pneumatic and sealing industry size in 2015 maintained the same level of 2014; domestic output and exports increased slightly (4% and 2% respectively over 2014), while imports continued the decreasing trend since 2011 (except the slight recovery in 2013)
- The reason for decreased imports is due to several factors: slowdown in economy and local technology improvement
- Development and investment in infrastructure (e.g. high-speed railway) and construction projects had become a major driver for key customer segments of hydraulics, pneumatics and seals (e.g. construction machinery)
- Up to now, domestically manufactured products have had trouble meeting the high-end downstream machinery's needs; therefore, the high-end market still relies on imports; however, this is changing slowly and it has also been reflected in imports that some domestically manufactured products are replacing certain market demand
- Hydraulic, pneumatic and sealing industry is one of the key industries that China aims to focus on for development in next decade; especially in terms of technology level and product quality
- Domestic Chinese players are improving their technology to narrow the gap with foreign products; therefore, it is expected that Chinese players will become more competitive in the future
- Government policies are also in favor of local manufacturers in order to boost domestic production and consumption, with industrial output value continuously growing
- With China's central government's support on downstream equipment manufacturing, hydraulic, pneumatic and sealing industry is expected to have a great potential market
- Italian players should continue to focus on the mid to high-end segments and continue to exploit the quality and technology gap while it is still prominent
- Opportunities do exist in the market (moving to more high-end products or categories); for Italian companies considering entering the China market, it is important to understand the specific risks and opportunities
- It is also important that Italian companies consider the various entry options as well as geographic location; e.g. near suppliers, customers, etc.
- Regardless of entry option, identifying and working with qualified sales agents and distributors is crucial for success in the China market
- Entering the China market may be more difficult for Italian companies that do not already have a track record or a presence in China as they will be competing with well-established and well known foreign brands
- However, it is important that Italian hydraulic, pneumatic, and seals manufacturers closely monitor their customer segments and try and "follow" their current customer to China if already present