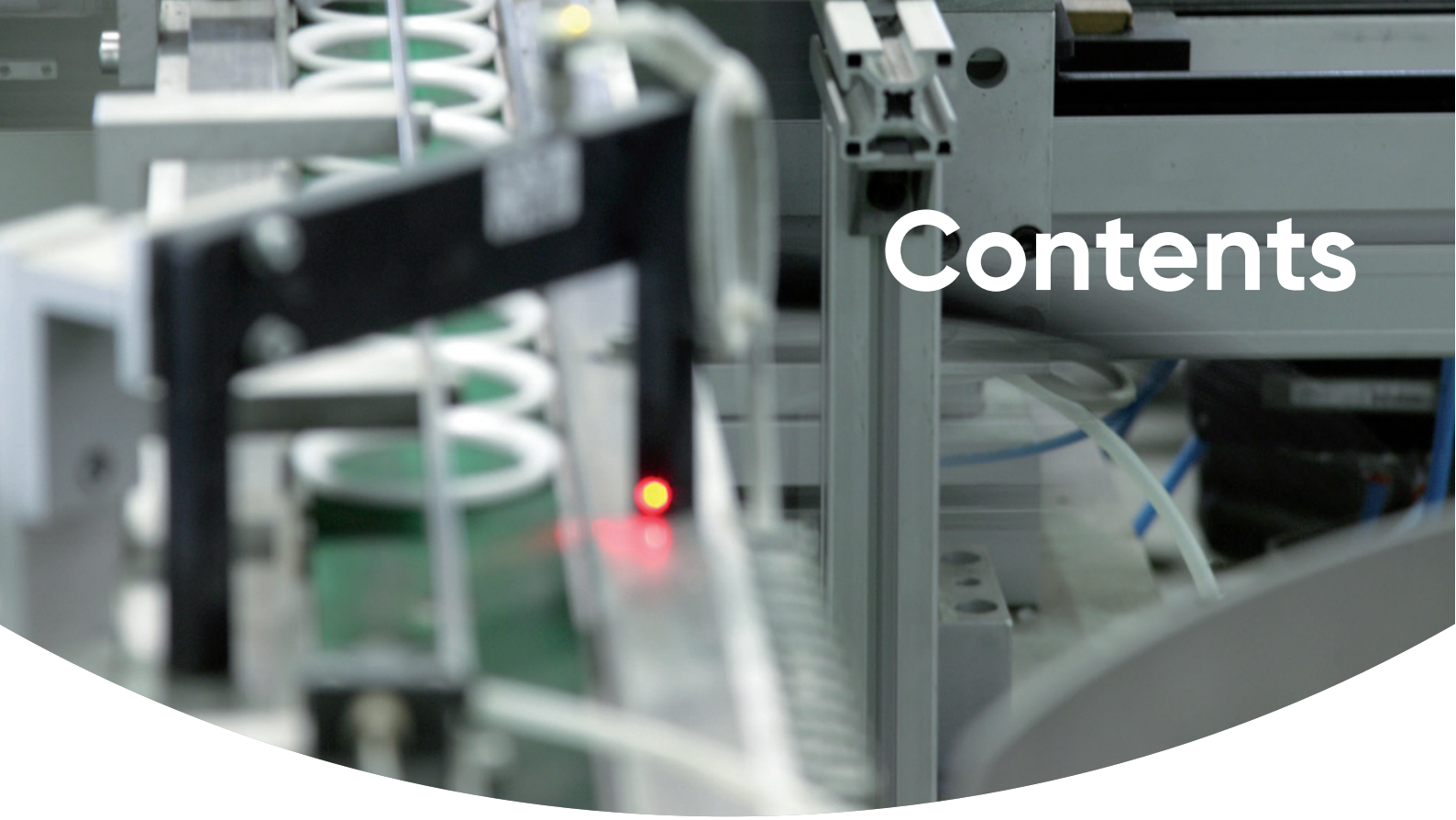
Silicone & Lubricant Free

aliaxis



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Valves and fittings
Manufacturer since 1954

Molded in FIP products are over 70 years of experience as well as a strong quest for innovation

know-how

Since 1954 FIP produces injection molded valves and fittings in thermoplastic materials for pressure pipeline systems, becoming nowadays a leading European valves manufacturer.

Solutions

FIP is a provider of proper solutions for industrial systems in chemical, textile, pharmaceutical, electronic, food, mining and other fields. Producing highly efficient products operating in environments where high temperatures and aggression of fluids demand for reliable and long lasting products.

Versatility

Global market challenge is to provide versatile products to be turned into reliable solutions, simple to install and use but effective to the needs of each application.
FIP develops products able to adapt to different conditions use; valves and fittings featuring design, innovation, functionality, reliability and safety.

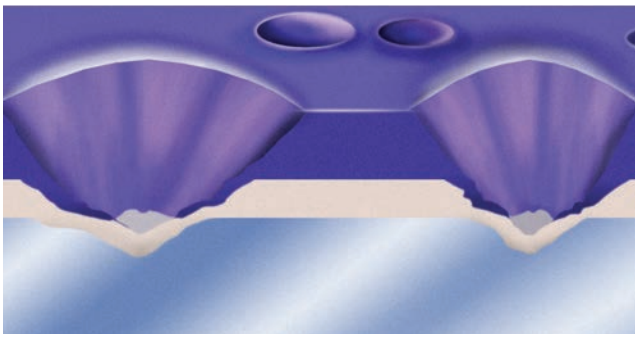
Everywhere

We are constantly investing in R&D and process technologies to improve the products offer as well as the production efficiency. FIP products, available in PVC-U, PVC-C, PP-H and PVDF, are able to adapt to different conditions of use and are always providing additional smart features such as the customization system to clearly identify each valve of the plant!

Responsibility

FIP products are manufactured in EU production sites, operating in compliance with the Quality Assurance System ISO 9001 and with the Environmental Management System ISO 14001 standards requirements. We believe that environmental sustainability must be an important component of business practices at all stages of the product life cycle; since its foundation FIP takes care of people health and safety and it is committed to a sustainable use of natural resources and environment respect.

"Why Silicone & Lubricant Free"?



The contamination by silicone or lubricants impairs the adhesion of the coating during painting operations.

Only the use of free from silicone and lubricants components can guarantee the highest quality of surface finishing.

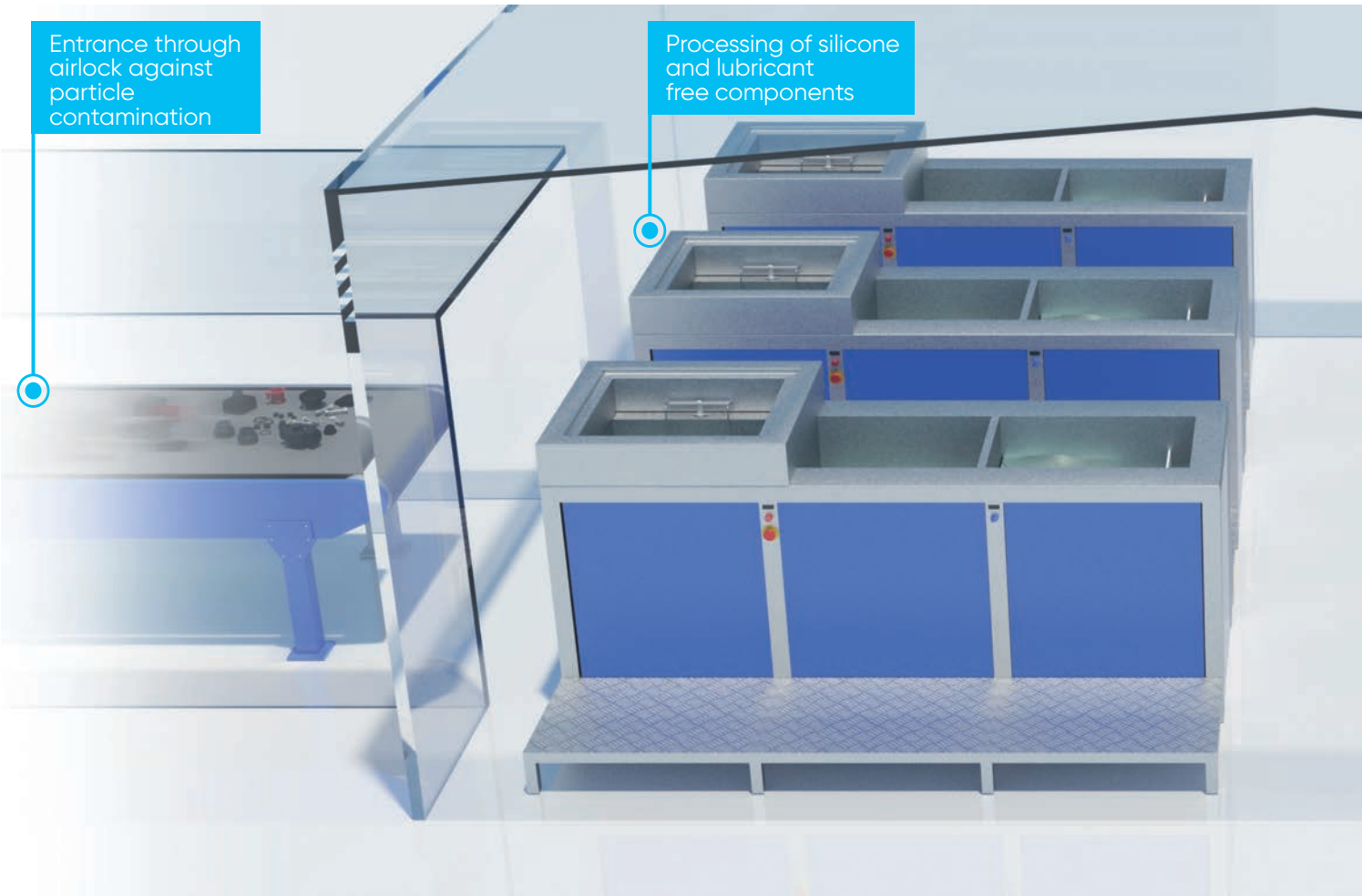
Silicone and lubricants are present in a large number of widely used industrial products such as oils, greases, and processing aids.

Contamination by these substances impairs the adhesion between materials and, especially during painting or coating operations, can cause surface defects such as cratering or fish eyes, making the items unacceptable.

Both silicone-based and lubricant-based products are relatively chemically inert and difficult to remove, requiring strict control to avoid upstream contamination.

Industries where surface treatments, painting, or ink applications are performed — most notably the automotive sector — demand components that are guaranteed to be free from silicone and lubricants.

To avoid the risk of such defects, production sites performing these operations apply strong focus on installing and using only components certified as Silicone & Lubricant Free.



Customized solutions

FIP range is now available
Silicone & Lubricant Free.

FIP is now able to meet this need with the new clean room classified as ISO 5 (Class 100) level according to ISO 14644-1.

FIP manual valves, variable area flowmeters and the whole range of fittings in plastic materials, up to d160, can be processed in the clean room and **supplied as**.

Silicone and lubricants free as they are produced and assembled without any lubricant and therefore free from paint wetting impairment substances (PWIS).

The processing of the components is entirely perfomed inside the cleanroom, **valves are 100% tested** and all products are **packaged in a double bag** before leaving the controlled evironment.

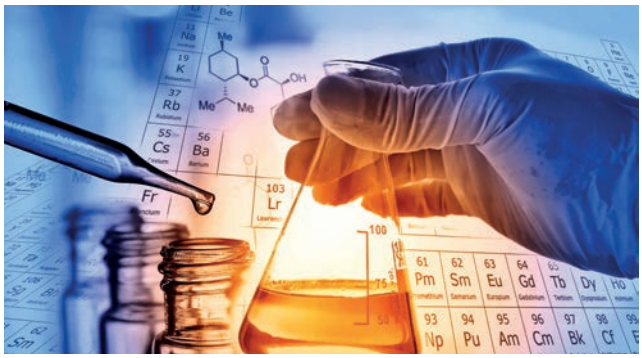
Thanks to the processing of the products in a controlled environment and the special packaging, silicone and lubricant free products are **delivered with the lowest amount of particle contamination**.

Automotive

Wet liquid coatings are composed of pigmentation molecules immersed in a solvent, which can be either organic or water-based. During electrophoretic coating, an electrical potential is applied between the metallic component and the medium.

Cataphoresis is widely used in the automotive industry as it ensures **full and uniform coating deposition**, even in the least accessible parts of the frame.

FIP Silicone & Lubricant Free plastic components guarantee that **no contamination from silicone or lubricants** is introduced into the regeneration circuit, ensuring optimal surface quality and full compatibility with PWIS-sensitive processes.

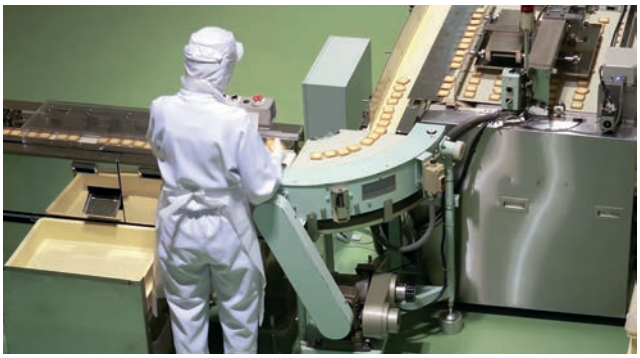


Pharmaceutical

The high resistance to corrosion and **excellent leaching behaviour** make plastic components a widely adopted standard in the life science industry.

The conveyance of pressurized fluids is a common requirement in pharmaceutical production processes, where media purity is of utmost importance.

FIP Silicone & Lubricant Free products are tested to ensure the **highest level of purity and reliability**, eliminating the risk of contamination from silicone or lubricants and ensuring full compatibility with sterile and sensitive environments.



Food and beverage

The corrosion resistance properties, excellent migration behaviour, and **low inner surface roughness** make plastic components a preferred choice in the food and beverage industry.

They ensure the ideal balance between total cost of ownership and **minimal biological film growth**.

All Silicone & Lubricant Free products retain the same markings as standard products. FIP PVC-U, PP-H, and PVDF compounds are certified in conformity with FDA standards, and FIP Silicone & Lubricant Free products preserve the organoleptic properties of the conveyed substances and fluids, eliminating any risk of contamination from silicone or lubricants.

Metal surface treatment

Oils, greases, and other lubricant residues left on a metal surface impair the **adhesion between the base material and most types of coatings**.

To remove these contaminants, organic solvents or increasingly common aqueous cleaners are often used. FIP Silicone & Lubricant Free components, combined with high **chemical resistance to the corrosive fluids** typically used in surface treatment processes, ensure that **no additional contaminants** – including silicone or lubricants – are introduced into the system, supporting optimal coating performance and process reliability.

Household appliances

Whenever the **visual appearance of a product is a key factor** in its acceptability, the presence of oils, greases, or silicone residues on the base metallic surface must be avoided.

These contaminants impair the correct adhesion of coating layers during electrodeposition and painting processes such as electrophoresis.

FIP Silicone & Lubricant Free products ensure the **ideal level of product quality** and purity to meet the increasing demands for high aesthetic standards in household appliance manufacturing.

Data centers & High-Performance Computing

Modern data centers and HPC systems rely on ultra-sensitive electronic components and cooling systems where contamination must be strictly controlled. Silicone and lubricant residues **can interfere with thermal interface materials**, cause contact failures, and degrade long-term reliability.

FIP Silicone & Lubricant Free solutions support the stringent requirements of these environments, **offering cleanroom-grade components** that ensure **optimal performance** and **system integrity** in mission-critical infrastructures.

System overview

Technical data and range

Valves			
Product group	**Type**	**Range**	**Description**
Ball valves	VKD	DN 10÷100	Two way industrial ball valve
	VKR	DN 10÷50	Regulating ball valve
	TKD	DN 10÷50	Three way industrial ball valve
	VXE	DN 10÷100	Two way industrial ball valve
Butterfly valves	FK	DN 40÷160	Industrial butterfly valve
Diaphragm valves	DK	DN 15÷65	Industrial diaphragm valve
Check valves	SR	DN 15÷50	Ball check valve
	SXE	DN 10÷100	True union ball check valve
	VR	DN 10÷100	Angle seat check valve
Sediment strainer	RV	DN 10÷100	Transparent sediment strainer

PN: nominal pressure with water at 20 °C

Pipes and Fittings	
Product group	**Description**
Fittings	Solvent Welding ISO-DIN standard
	Adaptor fittings Solvent Welding/Threaded ISO-UNI/BSP standard
	Solvent Welding BS Imperial standard
	Socket Welding ISO-UNI Standard
	Adaptor fittings Socket Welding/Threaded ISO-UNI/BSP Standard
	Butt Welding ISO-UNI Standard
	Adaptor fittings Butt Welding/Threaded ISO-UNI/BSP Standard

Measurement and Instrumentation			
Product group	**Type**	**Range**	**Description**
Flow Measurement	FC	DN 10 ÷ 25	Compact Variable Area Flowmeter
	FS	DN 20 ÷ 65	Standard Variable Area Flowmeter

Other FIP products in Silicone & Lubricant free version are available on request based on specific needs.

	Sealing Material	PVC-U	PVC-C	PP-H	PVDF
	EPDM and FPM	PN 16	PN 16	PN 10	PN 16
	EPDM and FPM	PN 16		PN 10	PN 16
	EPDM and FPM	PN 16	PN 16	PN 10	
	EPDM and FPM	PN 16	PN 16		
	EPDM and FPM	up to PN 16	up to PN 16	up to PN 10	up to PN 16
	EPDM and PTFE	PN 10	PN 10	PN 10	PN 10
	FPM			PN 10	PN 16
	EPDM and FPM	PN 16	PN 16		
	EPDM and FPM	up to PN 16		up to PN 10	
	EPDM and FPM	up to PN 16	up to PN 16	up to PN 10	

	PVC-U	PVC-C	PP-H	PVDF	PE
	PN 16 DN8÷150	PN 16 DN10÷150			
	PN 16 DN10÷100	PN 16 DN10÷50			
	PN 16 DN10÷100				
			PN 10 DN15÷100	PN 16 DN15÷100	
			PN 10 DN15÷50	PN 16 DN15÷100	
			up to PN 10 DN15÷150		up to PN16 DN10÷150
			up to PN 10 DN15÷50		

	Sealing Material	Body Material	Floater Material
	FPM	Transparent PVC and Polysulfone	PP and Inox AISI 316
	FPM	Transparent PVC and Polysulfone	PP and Inox AISI 316

Aliaxis Worldwide

The Aliaxis Distribution Network

- **Aliaxis Netherlands** - Netherlands
- **Aliaxis Deutschland GmbH** - Germany, Austria
- **ALIAXIS Utilities & Industry SAS** - France
- **Aliaxis Iberia, SAU** - Spain
- **Aliaxis UK Ltd** - United Kingdom
- **Aliaxis Greece** - Greece
- **ALIAXIS Utilities & Industry d.o.o.** - Serbia
- **ALIAXIS Utilities & Industry EOOD** - Bulgaria
- **ALIAXIS Utilities & Industry KFT** - Hungary
- **ALIAXIS Utilities & Industry SP ZOO** - Poland
- **GLYNWED UAB** - Lithuania
- **Ashirvad Pipes Pvt Ltd.** - India
- **VINIDEX PTY LIMITED** - Australia
- **RX PLASTICS** - New Zealand
- **IPEX Inc.** - Canada
- **IPEX Inc.** - United States Of America
- **DURMAN ESQUIVELGUATEMALA s.a.** -
- Costa Rica
- **NICOLL PERU' S.A.** - Peru

The Aliaxis Group

We are a global leader in the manufacturing and distribution of fluid handling solutions. Our extensive plastic pipes and fittings offering finds its way into buildings, infrastructure and industrial applications all over the world. With a global workforce of more than 16,200 employees, our flexibility means we provide both standard and tailored solutions that match the needs of our customers and end-users perfectly. Our Group is active through more than 100 manufacturing and commercial companies, operating in over 45 countries. Aliaxis is privately owned, and our global headquarters is in Brussels, Belgium.

Customer-focused innovation

Innovation is key for Aliaxis. In our highly competitive sector, innovation is one of the most powerful differentiators. We invest in market-leading R&D and dedicate people to develop what our customers need - products and solutions to get projects up and running, quickly, easily, reliably and more profitably. And by sharing practices and learning from colleagues and customers around the world, we innovate at speed.

Health and safety above all

The health, safety and well being of our employees are our top priority. We aim to raise our overall safety performance, with a goal of zero accidents worldwide. Our global safety community, consisting of HSE managers from our different divisions, is dedicated to streamlining the structural exchange and the transfer of best practices.

Committed to the environment

Lifecycle analyses have shown that plastic pipe systems are not only more environmentally-friendly but also healthier alternatives to pipes made from other materials. But we don't rest on our laurels. Environmental protection is taken into account for each of our business processes. Our environmental programme defines specific KPIs for monitoring CO2 emissions, non-recycled waste and water consumption. It also includes initiatives aimed at sharing best practices and training, as well as raising environmental awareness among our employees.

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