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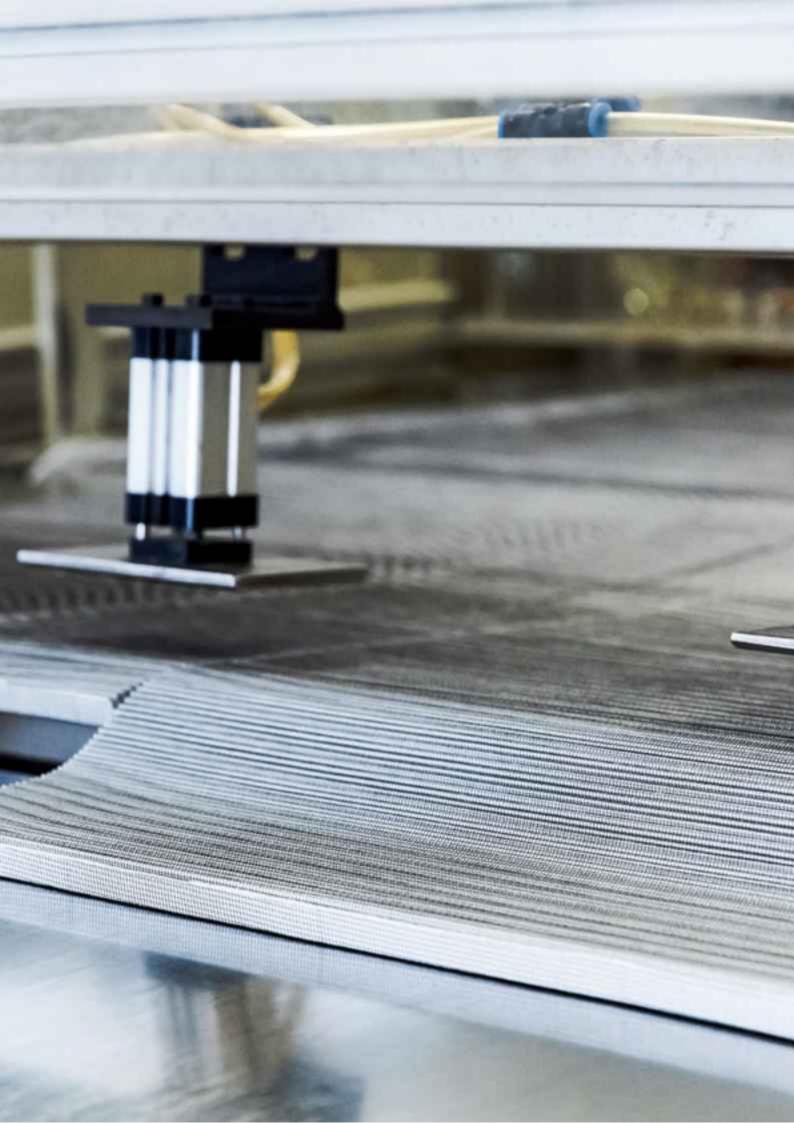
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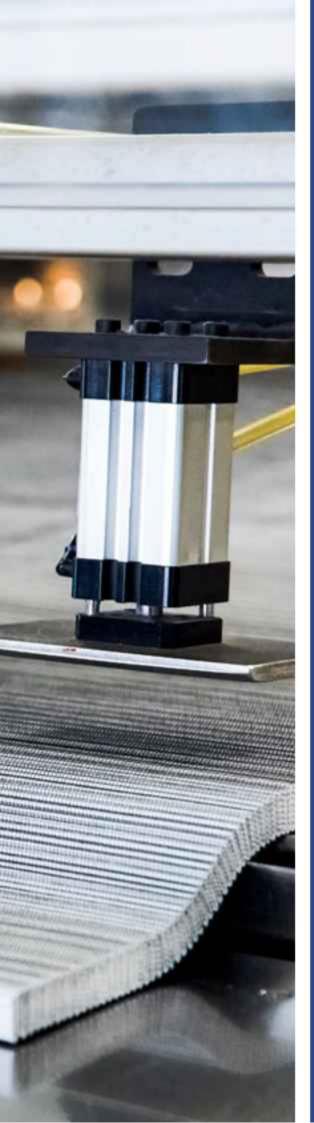
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### **IDENTITY**

# WE REPRESENT EXCELLENCE IN THE HYDRAULIC SECTOR

Founded in 1964 by entrepreneur Bruno Pasotto, MP Filtri has established itself as a major player in solutions for the hydraulic industry. Bruno's successors, the second generation of the Pasotto family, have worked tirelessly to build on his achievements and enhance the company's reputation as a market leader for innovation and quality.

Based in Italy, the company boasts a rapidly-expanding global network, with branches in Germany, France, United Kingdom, USA, Canada, Russia, India and China as well an international distribution network with a presence in more than 100 different countries.

Substantial investments in Research and Development, technical specialists, and high-tech production equipment have all played a key role in enabling the company to deliver innovative, high-performance products for the Hydraulic Filtration, Contamination Control, Power Transmission and Tank Accessories sectors.

MP Filtri's consistent commitment to excellence is recognised by independent quality benchmarks.



9

offices around the world

+100

countries managed through distributors

80<sub>.000 m²</sub>

of covered and uncovered areas

5.000.000

units/year produced in Italy **77** м€

turnover 20% in Italy 60% from branches 20% RoW



#### Vision

### COMMITMENT TO CONSISTENT EXCELLENCE

As a company we are completely committed to meeting the needs of our customers and business partners.

We are guided by an entrepreneurial spirit that drives both our thinking and actions as a company and ensures we can meet our goal of delivering innovative solutions that increase productivity and performance.

#### ENERGY

We put all of our enthusiasm and proactiveness into our work, not only to do well, but to do better and better.

#### FORESIGHT

We work hard today, aware that what we do today is the basis on which to build our future.

### ETHICS

We are honest and transparent towards all stakeholders, because we believe that this is the only way to develop and consolidate lasting partnerships.

#### Mission

### WE ARE A GLOBAL PARTNER WITH A LOCAL PRESENCE

Our mission at MP Filtri is to establish ourselves as a global first-choice partner for the design and production of complete solutions to boost the reliability and performance of hydraulic systems.

#### **EXPLORATION**

By analysing industry, we can anticipate market trends and seize every new opportunity.

#### TRAINING

We transform experience gained into valuable expertise, which allows us to face every challenge.

#### DETERMINATION

We continue to innovate, combining high performance, in terms of responsiveness, with a unique ability to develop and bring to market new series of products.

## ENDURING VALUES FOR TOMORROW'S SUCCESS



#### PASSION TO PERFORM

Every employee at MP Filtri shares the same passion for their work. Our people are committed to quality and do their jobs with enthusiasm.

The dedication of each employee determines the overall success of the company.



### INNOVATIVE BY NATURE

At MP Filtri each project we undertake helps us build up a wealth of knowledge and technical expertise which can be used to deliver high-quality solutions for the future. What we learn helps us accelerate our problem-solving abilities and enables us to develop innovative cutting-edge technology.



#### FOCUS ON EFFICIENCY

MP Filtri is committed to minimising the time which elapses between an order and delivery to its customers.

Therefore, it uses interconnected software (ERP, MES, MRP)

Therefore, it uses interconnected software (ERP, MES, MRP and a a Warehouse Management System that oversees the operation of the warehouse.



### **R&D THAT GENERATES VALUE**

The technical staff in Research & Development develops and prototypes new products and evaluates them in terms of performance, size and design.

They not only make use of specific software, but also collaborate with prestigious Italian universities.



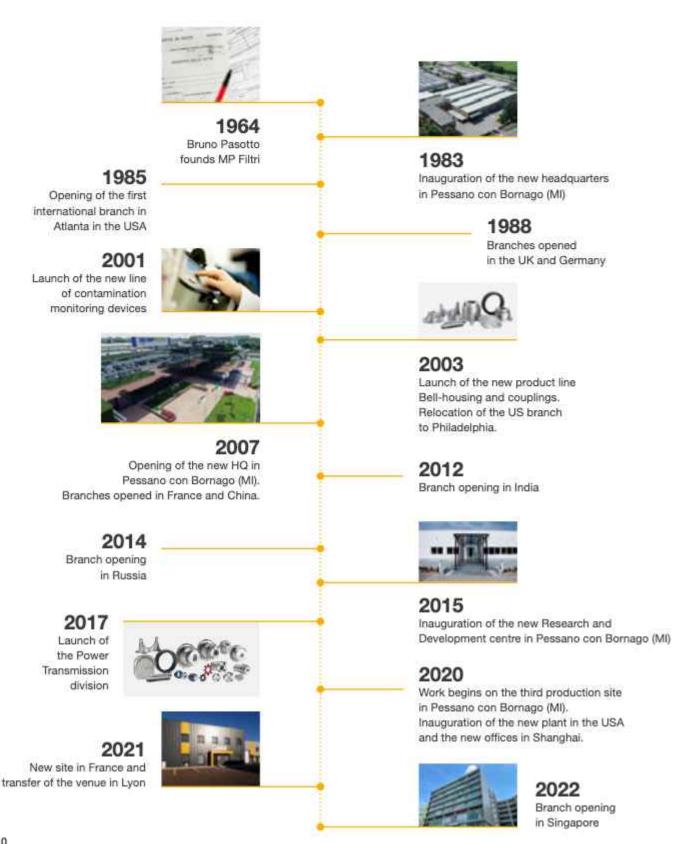








### SINCE 1964 OUR HISTORY





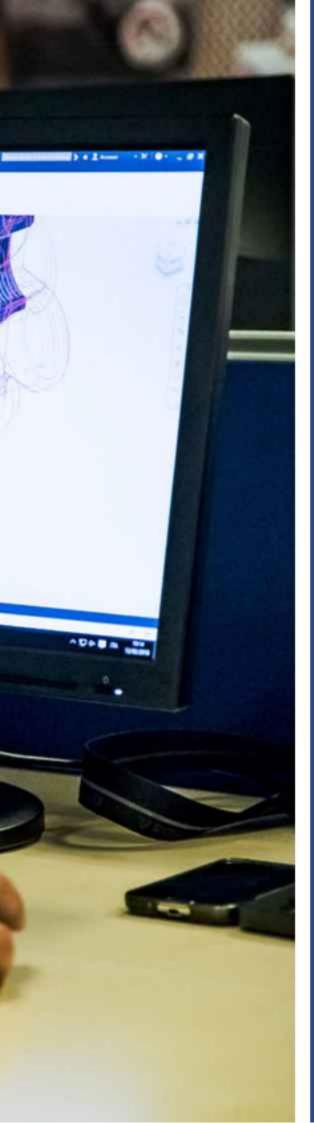
Code of Ethics

### RESPECTING THE RULES IS OUR FIRST RULE

The activity of the entire Group of companies that are part of MP Filtri is conducted in a socially responsible manner. Practices of fairness and correctness are adopted in the management of the employment relationship, to guarantee the safety of workers. With the implementation of this Code of Ethics, the company aims to express the values of responsibility and commitment to ensure the transparency of operations and conduct. The MP Filtri Group shares the principles of the UN Universal Declaration of Human Rights and the main Conventions of the International Labour Organisation (ILO). In the event that the regulations in force in the countries where the subsidiaries are present are more permissive than those contained in the Code of Ethics, those contained in the latter will be applied.

The Code of Ethics is intended as a guide and as a support for every director, manager and other employee of the MP Filtri Group in order to help them pursue the Group's mission in the most effective way. The MP Filtri Group endeavours to ensure that these commitments are shared by consultants, suppliers and any other person who has business relations with the Group at any time.





### INNOVATION

### INNOVATION IS IN OUR DNA

The essence of innovation for MP Filtri is built on the acquisition and sharing of knowledge. This valuable expertise combines with the latest scientific research; extensive experience in real-world industrial applications and close collaborations with centres of academic excellence, such as the Milan Polytechnic, the University of Bologna and the University of Modena and Reggio Emilia.

These creative partnerships have driven the development of our new 1,200 sqm R&D laboratory at our Pessano con Bornago headquarters. Unique in the range and quality of its facilities, the lab is the result of a 2.5 million euro investment. It plays a central role in delivering premium quality and reliability – both in terms of verification of existing products and in the development and production of new prototypes. Prototyping is extremely quick, thanks to the adoption of 3D printers that allow the customer to get a hands-on preview of what was designed on the CAD systems.

The introduction of the new facilities at the lab are crucial to the company's applied research programme and can also be offered to customers to support their own product development. At the heart of the complex, test benches are used to validate the filtration performance and operating characteristics of the filter elements and complete assemblies. These are also accompanied by analyses aimed at measuring the level of contamination from solid particles present in the





1.200 m<sup>2</sup>

Overall size of the R&D laboratory 900 m

Area used for test benches

200 m<sup>2</sup>

Offices



oils under examination. The tests, carried out to verify the characteristics of the filters, are performed in accordance with international standards within controlled and filtered climate chambers, reproducing the operating conditions of pressure and flow rate of any hydraulic circuit.

The MULTIPASS, in accordance with the ISO 16889 standard, stands out among the various tests. The retention capacity of particles of a given size are established by comparing the amount of contaminant present upstream and downstream of the filter being tested.

During this test the maximum operating pressure (ISO 2941), the pressure drop across the filter as a function of the flow rate (ISO 3968) and the so-called "first bubble point" (ISO 2942) are also examined.

The latter coincides with the breaking point of the filter element material as a function of the pressure and the amount of contaminant present. The area is completed by scanning electron microscopes for sample analysis.

The laboratory also includes offices and meeting rooms designed to provide training courses for customers. Here customers can alternate theoretical frameworks with practical experimentation on test benches, carry out tests and learn the operating modes of the equipment for the control of fluid contamination.

### CONNECTION BREAKS DOWN DISTANCES

The technological infrastructure supporting the latest generation ERP system allows to connect most of the branches on a single, highly reliable/available system. The adoption of a group CRM system in the Cloud allows the sharing of all commercial information on the move, using notes, voice notes, photos, linking everything to events and customers. Alongside the CRM system, the high-performance BI system makes over 100 reports available online, ready for a drill down/drill up analysis of the data.

A further expression of innovation is the adoption of an advanced MES system. All the machines operating in the workshop, foundry and assembly departments are physically connected with the MES management software, which in turn interacts with the ERP system for total control of the production activity and maximum operational flexibility, according to the recent technologies of Industry 4.0.





### **GREEN**

### WE SAVE ENERGY ONLY TO PRESERVE NATURE

Aware that natural resources must be respected and used in a sustainable manner, MP Filtri has designed its headquarters according to strict environmental criteria. The architecture was built in compliance with the most recent standards required by current safety and energy saving regulations.

The spaces have been designed to ensure the well-being of the workers and everyone is involved in the correct management of them. Due to the modern insulation, the overall structure has a high thermal insulation and the LED lights illuminate the different departments, guaranteeing greater energy savings.

The preventive evaluation and constant monitoring of the reference parameters enable minimisation of environmental risks related to the production processes or to the company's products themselves. For example, noise pollution is kept under control thanks to soundproofing panels, best practices are implemented to prevent fires or other types of accidents, and the proper management of waste is promoted, encouraging recycling.

Inside the R&D laboratory, the temperature of the rooms is managed by utilising the heating and cooling system of the test machines, which are themselves powered by renewable energy (geothermal and solar). Ground water and a 195 kW photovoltaic system allow the operation of two heat pumps suitable for heating, which are also used to maintain the correct temperature of the rooms in the winter months. Conversely, groundwater alone allows the rooms to be cooled during the summer. Compared to traditional systems, this method enables the reduction of energy consumption by 50% during the coldest season.

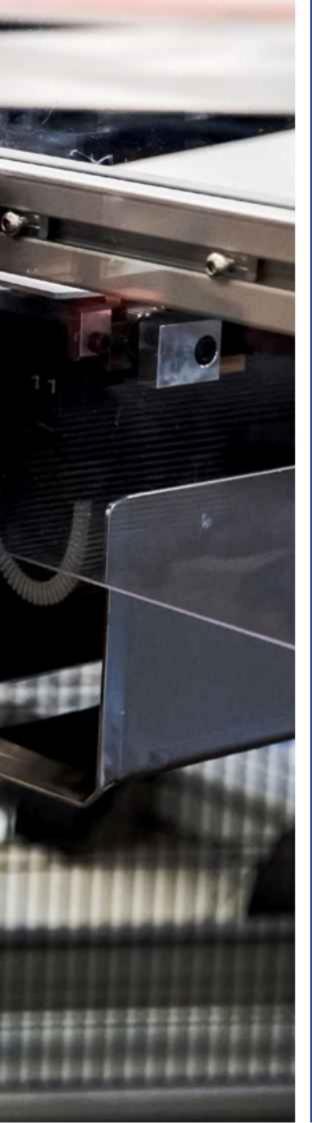
Finally, the plant and machinery park are subject to constant improvement and development, which makes the technologies used increasingly sustainable.











### **PRODUCTION**



## EXCELLENCE THROUGHOUT THE SUPPLY CHAIN

MP Filtri has developed a highly-efficient production process which is controlled step-by-step to ensure the best possible results.

The constant search for technological solutions allows the company to place on the market the best products required by such sectors as: mobile, stationary industrial, test benches, lubrication, heavy industry, renewable energy, motor sports, marine engineering, off-shore engineering, aviation systems and emerging technologies.

Our policy for vertically integrated production with minimal reliance on external suppliers.

Our cutting-edge facility features state-of-the-art robotics ensuring non-stop production over three shifts.

The production includes die casting and shell gravity casting of aluminium in the foundry: mechanical machining on semi-finished products in aluminium, cast iron, steel and stainless steel. Production continues with the mould of plastic material and is followed by the pleating of the filter elements in microfibre, paper and metal mesh. The final element of production is assembly.











9.700 m² Total foundry area

### THE FOUNDRY BETWEEN TRADITION AND TECHNOLOGY

The excellence of the Lurano (BG) plant stems from over 20 years of experience in aluminium die casting and shell gravity casting. It features a total production area of 9,700 sqm, in which a passion for craftsmanship is combined with the aid of the latest technologies to create components for the Hydraulic Filtration and Power Transmission divisions.

We use only premium quality materials at our foundry – and respect the impact on the environment by using aluminium alloy ingots which have been recycled and regenerated.

The ability to blend two distinct working methodologies allows MP Filtri to constantly improve the performance of its products.

On the one hand, the highly automated and highly productive processes of die casting allow for better dimensional tolerances and surface finishes.

In this way, unique qualities are given to the casting which

are maintained for the entire duration of the process until solidification occurs. On the other hand, gravity die-cast aluminium is an ideal alternative for producing medium and large series of pieces with elaborate internal geometries. It is thus possible to combine a high-quality surface finish, discrete dimensional accuracy and, at the same time, excellent mechanical characteristics.

The production cycle is integrated and efficient. There is also a mechanical workshop at the Lurano site. There, work is carried out to finish the foundry castings and die-casting, eliminating even the smallest irregularities from the cast iron, steel and stainless steel blanks.

Finally, the Quality Control Department monitors the entire process and compliance of the products with strict standards defined by the company, guaranteeing high-value semifinished products.

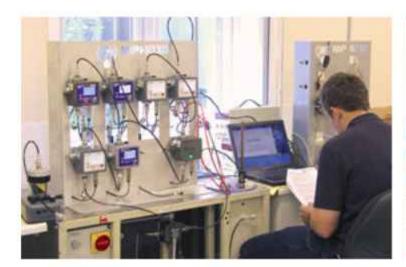
### CMP DIVISION

Monitoring contamination levels in fluids is vital to guarantee the continuity of operation of hydraulic systems.

The risks of damage are constantly increasing with the development of increasingly technological systems which can be damaged and malfunction in the presence of even a few microns of particles.

To increase the productivity and life of the circuits, MP Filtri designs and manufactures solutions for contamination control at its UK branch, based in the CMP Division. The range consists of portable or stationary sampling equipment, products for monitoring, and technical oil analysis devices dedicated to the certification of existing and new machines.

CMP technology allows both preventive and predictive maintenance, which brings such benefits as: enhanced reliability and performance, as well as a longer service life of the components. Repair costs are reduced following downtime of fixed machinery or self-propelled vehicles. The management of spare parts and inventory is more accurate and predictable. In addition to preventive maintenance, MP Filtri combines complete systems with high functionality and energy-efficiency with a wide range of after-sales services. Among these is the oil analysis program, with which it is possible to safely monitor the conditions and performance of the operating fluid, promptly identifying possible mechanical problems.

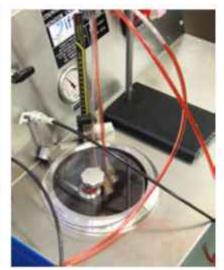






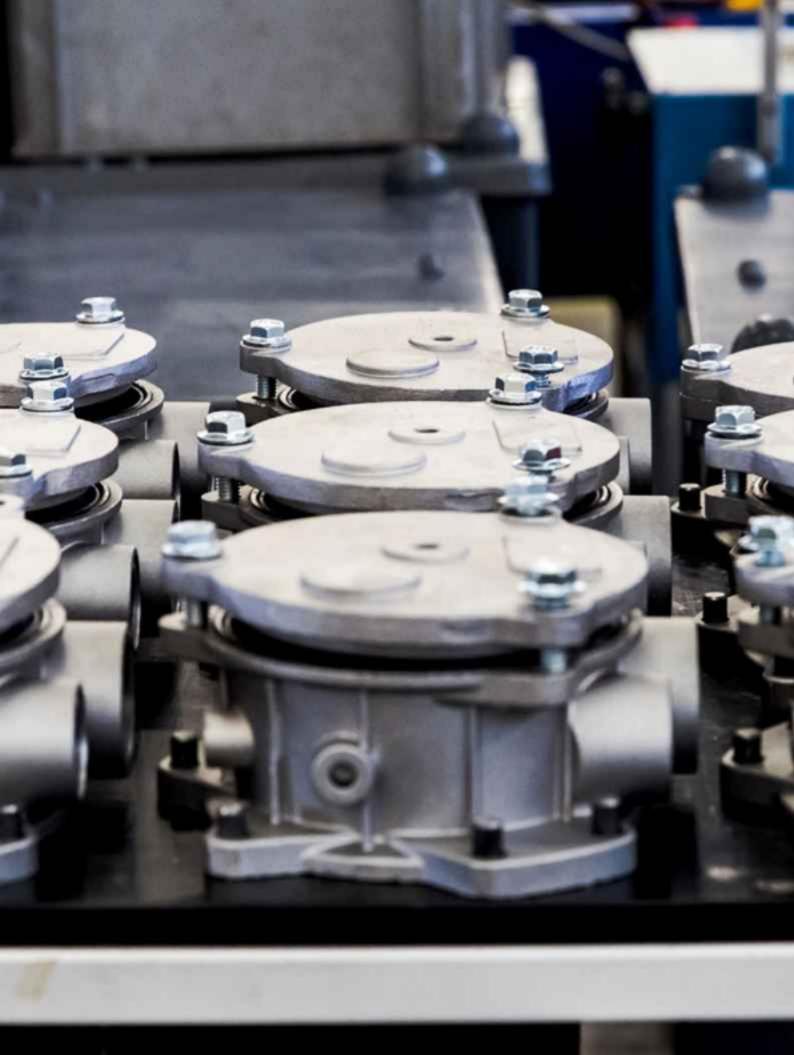














### **PRODUCTS**



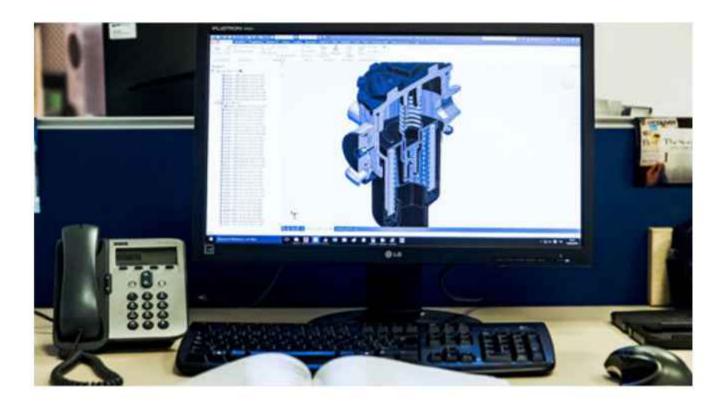
### ESSENTIAL DESIGN FOR MAXIMUM PERFORMANCE

Modern machinery design has finally woken up to the need to include adequate filtration systems. The latest machines are created around high-quality components and require high-performance environmentally-friendly filters to protect reliability and performance. This is why conceiving a fluid purification system today means evaluating the type and location of the filters in a specific hydraulic system in relation to the sensitivity of the individual components, the degree and type of contamination, the pressure/flow rate, the environmental conditions, the fluid used and the intervention cycles, thus guaranteeing a machine life exceeding expectations.

Always attentive to the expectations expressed by the market, MP Filtri focuses its efforts on the development of products with an essential design that is extremely customisable. Paying close attention to modularity, MP Filtri is able to develop a large number of combinations of components and materials, with the aim of satisfying both functional applications and the structural needs required by customers.

The added value of the company lies in its ability to evolve itself, to fine tune the design phase with the production process and to ensure faster delivery times, in an even greener perspective.

An example of this sensitivity is the EliXir line. An innovative family of filters with in-line connections for low pressure hydraulic circuits up to 16 bar, they have a smart design that makes replacement and maintenance operations simpler, faster, cheaper and environmentally sustainable. Previously if it was necessary to eliminate the entire metal container, now it is sufficient to unscrew the container with a wrench and extract only the FEX filter element, positioned inside the filter itself.





### HYDRAULIC FILTRATION

The wide range includes filters and filter elements for cleaning fluids in the suction, in-line and return circuits for low, medium and high pressure applications, the latter also provided in stainless steel. Available in different versions and configurations, they are available complete with a rich choice of clogging indicators and accessories.

### POWER TRANSMISSION

A specialist division dedicated to structural components for couplings between an electric motor and pump. A complete series is available consisting of pump-motor housings, transmission couplings and accessories, including, for example, shock-absorbing rings and mounting stand.





### CONTAMINATION CONTROL SOLUTIONS

State-of-the-art equipment for measuring fluid contamination. Available for stationary applications or for portable use, these products allow operators to diagnose the degree of oil contamination in favour of preventive and predictive maintenance. The range is complemented by mobile off-line filtration units, developed to further enhance the capacity and durability of the hydraulic circuit.



A vast assortment of accessories for tanks and control units that completes the range of products for complex hydraulic systems.







### QUALITY



# CERTIFICATION DEMONSTRATES OUR COMMITMENT TO QUALITY

In MP Fittri, the concept of Quality has taken on an increasingly important meaning over time, going beyond the traditional concept of conformity linked exclusively to the intrinsic characteristics and properties of the product. Quality is now conceived as a structured, intentional and measurable growth path in a dynamic context that impacts the entire company as a whole according to the Total Quality Management strategy. An organisational model that is built on customer satisfaction, as a parameter for measuring and

enhancing results and performance from a perspective of competitiveness and business excellence. A constant focus on continuous improvement through the evaluation and company KPIs is a key priority for MP Filtri.

Finally, the company's automated warehouse enables rapid distribution of components and raw materials for the filter element and filter assembly departments, storage of finished products, and rapid distribution to customers.

#### QUALITY IN PRODUCT DEVELOPMENT

Each new product is designed and evaluated through a series of highly-accurate laboratory tests – ensuring MP Filtri combines technology and efficiency to deliver innovative products.

#### QUALITY IN THE PROCESSES

MP Fittri offers efficient and effective products that are always focused on meeting customers' needs, while at the same time eliminating waste, improving quality, and offering innovation.

#### QUALITY IN MATERIALS

Strict criteria for selecting raw materials and components ensure compliance with high quality standards, while the evaluation of their performance allows for the setting of continuous improvement objectives.

#### QUALITY IN SERVICE

MP Filtri keeps a detailed focus on customer feedback and the latest market developments ensuring it is fast and flexible in its product development. Its managers and production teams have extensive market knowledge which is vital in developing an evolving high-quality product portfolio.

#### **OUR CERTIFICATION**













#### OF THE PROCESS

MP Fittri's commitment to achieving the highest quality, respect for the environment and the health and safety of its people are all recognised by independent standard certification. ISO 9001: 2015 validates the management of the quality system for the design, construction and sale of filters, accessories and components for hydraulic circuits and systems, while ISO 14001: 2015 ascertains the requirements for a correct environmental management system.

#### OF THE PRODUCT

The CE European Conformity Mark guarantees the consumer compliance of the product with the standards laid down for its usage by the European Community. The ATEX certification certifies compliance with Directive 2014/34/EU which deals with risk due to the presence of potentially explosive atmospheres. RoHS certification determines the rules on the restriction of hazardous substances in electrical and electronic equipment (EEE). These are the product certifications obtained by the company which also operates in compliance with the REACH regulation, the European Union regulation concerning the registration, evaluation, authorisation and restriction of chemical substances (Registration, Evaluation, Authorisation and restriction of Chemicals).





### CUSTOMER CARE



### CLOSE TO CUSTOMERS AROUND THE WORLD

At MP Filtri, the entire company organisation converges in a single goal: customer satisfaction. This philosophy has allowed the company to build solid partnerships over time and become partners with small and large companies operating nationally and internationally. In addition to the quality of the products, MP Filtri prides itself on its availability and accountability to customers.

We try to fully understand what the requirements and conditions for filter applications are. Each individual case is studied to propose the solution that best suits the sector and the required performance, and the products are packaged and delivered quickly all over the world.

The technical staff does not finish its task here, but is always available for any eventuality, because the customer is always at the centre of our focus, even after the products have been installed and are fully operational. The preparation and specialisation of the team enables assistance to customers wherever they are, providing them with advice and proposing every future solution that can improve their business.

Wherever the customer is, the technology available today to the technical-commercial staff makes it possible to transform distance into skilled and prudent assistance, always ready to be at their side.











### **HEADQUARTERS**

### MP Filtri S.p.A.

Pessano con Bornago Milano Italy sales@mpfiltri.com

### **BRANCH OFFICES**

### ITALFILTRI LLC

Moscow Russia mpfiltrirussia@yahoo.com

### MP Filtri Canada Inc.

Concord, Ontario Canada sales@mpfiltricanada.com

#### MP Filtri France SAS

Lyon AURA France sales@mpfiltrifrance.com

### MP Filtri Germany GmbH

St. Ingbert Germany sales@mpfiltri.de

### MP Filtri India Pvt. Ltd.

Bangalore India sales@mpfiltri.co.in

### MP Filtri SEA PTE Ltd

Singapore sales-sea@mpfiltri.com

#### MP Filtri (Shanghai) Co., Ltd.

Shanghai - Minhang District P.R. China sales@mpfiltrishanghai.com

### MP Filtri U.K. Ltd.

Bourton on the Water Gloucestershire United Kingdom sales@mpfiltri.co.uk

### MP Filtri U.S.A. Inc.

Quakertown, PA U.S.A. sales@mpfiltriusa.com

