

BROCHURE

OIL & GAS INDUSTRY



Spifil[®]
Incorporated



Introduction

For 25 years **Spifil**[®] has offered solutions for filtration to the national and international markets. The success of our clients goes hand in hand with the quality and functionality of our products. Our main concern is the complete satisfaction of our customers and to cover their needs in full. We aim to optimize the production process while generating a minimal impact on the environment.

Our goal is to integrate and design innovative products with excellent quality according to the growing needs of the market. We are constantly investing in the latest cutting-edge technology and training our staff in state of the art manufacturing methods. To ensure we are meeting our customers needs we offer the best options with our wide, ever growing, range of products.

We develop and manufacture with the highest quality standards. This enables us to confidently and securely provide filtration solutions to our customers and help reduce the operation and maintenance cost in any application.

Aware of the important role that our clients and brand represent, we strive to improve our productivity and services everyday while still creating efficient and effective filtration solutions.

Spifil[®] Group



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SP-05FBI Series

Coalescing Cartridge

Coalescing filter removes oil, particles and moisture in hydrocarbon process lines, filtering pollutants in the form of particles. Emulsified water droplets are collected, forming larger droplets that are carried to the surface of the cartridge and collected at the end of the vessel. Mainly used in lines of refineries, petrochemical plants and process flow condensers that produce gas. Highly useful as part of installations that distribute and sell hydrocarbons where storage can cause emulsification of gasoline and jet fuel.



Gas



SP-09 Series

Meltblown Cartridge

High efficiency and great retention of contaminants are the main characteristics of this element. Works with any type of fluid and conditions of operation, achieving uniform retention 1 to 100 microns and efficiencies from 98% to 99.5%. Some of its applications are: water treatment for human consumption (complies with FDA), soft drink industry, solvent chemicals and waste water treatment, among others.



Process Fluids



SP-08MC Series

Depth Filter Cartridge

Filter element whose main quality is that the total area of the filter media acts the end of the process, maximizing contaminant holding capacity.



Process Fluids



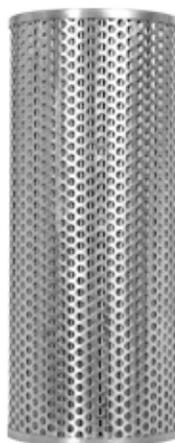
SP-02MC Series

Washable Cartridge

This element is characterized by its easy maintenance and long service life, in addition to the excellent mechanical qualities and high resistance to heat, it presents great stability to physical and chemical agents resulting in the filter media ideal for all types of fluids. It has an effective area of 100% filtration and a maximum retention according to the microns that operation requires.



Universal



SP-01MC Series

Cartridge Element

Designed and built to retain and filter impurities from the process flow, lubrication lines and hydraulic controls. This filter media can handle solvents, acids, bases, compressed and atmospheric air among others. It can be used with any kind of fluid, the media of the filter varies depending on the application. It can achieve an efficiency of filtration of solid particles and liquids of 99.99% according to what the service requires.



Universal



SPK Series

Multistage Filter

Designed for applications where the filtered fluid has a large concentration of pollutants that are highly viscous. The filter is easy to use and provides a low maintenance cost.



Oil



Refinery

SP-04C Series

Oil Filter Cartridge



Filter element used for the retention of solid particles in organic and synthetic hydraulic fluids. Designed to work in high and low pressures of operation, it can handle temperatures above 194° F. Retention capacity starts at 10 microns. It is widely used in lubrication systems as a protection, and in mobile equipment for light and heavy duty application (bombs, valves, servo valves, actuators, lines of suction and return among others).



SP-8791 Series

Oil Filter Element



Cartridge designed and constructed to retain and filter impurities in process fluids, lubrication lines and hydraulic controls. This element can also handle solvents, acid fluids, air compressed and atmospheric and others. It can be used with any type of fluid and filter media varies depending on the application (the media can be treated with flame retardant, if the process requires). This element achieves an efficiency 100% filtration for solid and liquid particles in the micron retention required.



SP-8062 Series

Panel Filter



Used in air intake and recirculation ventilation systems (clean rooms, operating rooms, laboratories), industrial processes (microelectronics, food, optical, pharmaceutical, chemistry) and treatment of hazardous substances (asbestos, metallurgical dust, bacteria, viruses, radioactive particles). This filter has an efficiency of 98%.



Aminifilt® Series

Aminifilt® is a patent design exclusive of Spifil®

Its unique design allows a double filtration which consists of pre-filtering and retention of contaminants at a high capacity. It has a special pleated media that focuses on retaining and absorbing pollutants, making the element capable of retaining 22 lbs. of contaminants. Aminifilt® has a great chemical compatibility and excellent performance with low differential pressure. This series provides a great reduction in maintenance and operation costs.



Pre-Filter

Disposable



Used as a first stage filter or pre-filter in static systems in injection of air gas turbines. It is a surface filter, with high capacity of dust accumulation; practical and with excellent retention, characteristics that make it ideal for multiple applications. It is perfectly suited for use as pre-filter for fans, motors and air conditioning ducts. Thanks to the construction materials, it is 100% incinerable.





SP-5103

Fuel Gas Filter

This filter is manufactured with steel in combination with specialty fiber. They are mainly used in turbo generators and compression stations as well as production sites. This series of **Spifil**® filter is characterized by its pleats which allows a high load capacity.

 Process Fluids



SP-70053B

Oil Filter

Manufactured with steel in combination with specialty fibers, they are used mainly in turbo-generators, compression stations and production sites. This **Spifil**® series is characterized by the high load capacity pleats.

 Oil



SP-27569-2

Filter

Element which promotes condensation of liquids dissolved in the environment. Functions as a demister with particulates of moisture coalescing into drops. Ideal for areas with high humidity and usually used in metallurgical, pharmaceutical and electrical industries among other applications.

 Process Fluids



SP-4793

Pre-filter Pad

This pad has a 100% mechanical resistance to moisture. The fibers are treated to achieve an increased uptake of powders and making more effective filtration.

 Universal



SP-CDC

Cartridge

The special design of this filter is a media impregnated with resin and polyester fibers, providing resistance to humidity, high flow rates and raising the holding capacity of particles with a low pressure drop. Ideal for water treatment, potable water, food and beverage industry.

 Universal



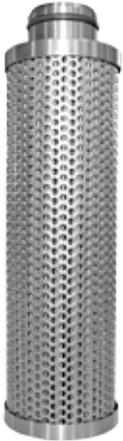
SP-2219-4-5

Filter Bag

Secondary filter for high dust collecting, used in turbo-machines and systems that demand high efficiency. Ideal for large volumes of air at a high speed. It is usually used in the air suction of a turbine, turbo-generator and turbocompressors. These filters are highly recommended for optimum air purification.

 Air

Offshore Platforms



SP-4172

Cartridge

This element promotes condensation of dissolved liquid, working as a demister, coalescing moisture particles. Used in modules of compression in the metallurgical and power industry among other applications.

 Process Fluids



SP-4350

Cartridge for Oil

Manufactured to provide a range of filtration of 2 μm to 20 μm , their materials have high resistance to severe temperature fluctuations and an efficiency of up to 99.98% in proper operating condition.

 Oil



Temporary Cone Strainer

Used in plants startups to remove impurities in the pipeline work to protect the equipment. It can be used as a temporary filter or as a regular filter, is known for being an excellent material separator. Thanks to its design, low cost of operation and great versatility, can be used in operations where cannot stop the process, our line of strainers offers a wide range of types, sizes and materials of construction, which makes them versatile, economic and highly efficient.

 Universal



SP-04MC

Spin-on Filter

Filter element used in lubricant oil fluid systems, fuel and water systems. The components of the filter stay together through an epoxy resin highly resistant to the attack of hydrocarbons and high working temperatures. This element performs its filtration on the surface.

 Oil



SP-2219-4-P

Pre-filter Bag

Element of low efficiency on primary air filtration it is used in collector and turbo-machine systems with high air volume, speed and coarse dust. Other applications in the industry include electronic, pharmaceutical, biological, mechanical and petrochemical instrumentation.

 Air



SP-3140H

Used in air inlets in gas turbines, turboblowers and turbo-generators. Because of its filtration capacity, it is ideal to protect the entrance of air in turbines and generators for urban, industrial, marine and coastal environments.



Air



SP-8375

Coalescer Element

Filter element for solid and liquid particles dissolved in sweet and sour gas. It shows high performance and resistance to corrosion that could result from contact with liquids and hydrocarbons associated with gas. It is capable of removing 99.99% of solid particles from 0.3 microns and larger by weight. It also can remove 99.5% of liquid particles with sizes from 0.3 microns and larger.



Gas



SP-7470

Amine Cartridge

Surface filter element with a solid structure and excellent mechanical qualities. It offers high resistance to heat, and high stability in the presence of physical and chemical agents. It is intended for high flow and has a great capacity to retain contaminants (its load capacity can double the elements weight).



Process Fluids



SP-8750

Coalescer Element

Filter element with high capacity, removes solid particles and coalesces liquid particles dissolved in gases; efficiency of 99.9% to remove solid particles of 0.3 microns and larger. Designed to optimize the ability to capture heavy polluting particles. This is a depth element and commonly used in natural gas applications.



Gas



SP-4172

Filter element promotes condensation of liquids dissolved in the environment, functions as a demister, coalescing particles of moisture and converting them into drops. Ideal for areas with high humidity, it is usually used in compression modules.



Gas



SP-282 Series

Filter Bag

Designed for applications where the filtered fluids are highly viscous and have a large concentrations of pollutants. The filter is easy to use, supports large volumes at low costs and perfectly adaptable to any application. Available in wide range of filtration from 1 to 100 microns as well as materials of construction, polypropylene and polyester are the most common.



Process Fluids

Gas Processors



Series: SP-01MC

Dry Gas Cartridge

Filter element for dry gas service with high resistance to erosion and retentions from 1 to 10 microns. Ideal for handling high flows on severe erosion conditions and remove contaminants (such as oxides, sands or chemicals) located in air and gas streams, its media allows a large filtering area. This design is available in a wide variety of sizes. Consult your sales rep for more information.



Universal



Series: SP-4182

Coalescing Filter

Multilayer element with high efficiency, high flow and high capacity to retain solids. The coalescent design of this filter allows it to drain water drops present in aerosols formed in the gas flow, which guarantees the continuous running of dry gas. It is commonly used as a charge filter at the inlet of catalytic towers in oil refinery plants.



Gas



Series: SP-2407

Panel Filter

Specially used in the air inlets of the turbocharger generator, its design and highly specialized materials provide high resistance to corrosion and low electrical and thermal conductivity.



Air



Series: SP-05MC

Coalescing Filter

Element manufactured with depth filter media, so it has a large filtration surface, which minimizes operational pressure drop, and provides a direct flow path from outside to inside. Coalescence is achieved by mixing micro-fiberglass. The filter cover is 100% cotton, allowing the drop precipitation. This element is especially suited for industries in marine environments, natural gas processing/distribution, power generation, gas turbine and high-humidity locations with sulfur.



Gas



Series: SP-2837-ELP

Dust Collecting Filter

Designed with a mix of fibers that provides greater durability and considerably reduces the change of elements without compromising its efficiency and performance. Generally used in gas turbines.



Air



Series: **SP-3303TGB**

Cartridge for Sour Gas

This filter series provides efficient elimination of liquids and aerosols in gas streams. The conical shape makes it highly resistant to abrasion and provides a uniform collection of aerosols, increasing separation up to 99.97%.



Gas



Series: **SP-5609BK1**

Dry Gas Seal Cartridge

This filter series offers optimum performance due to its sturdy design and high absorption of polluting particles, which reduces the maintenance costs in compressor stations. Its widely used in turbogenerators.



Gas



Series: **SP-27322**

Activated Carbon Element

This element series provides excellent results in eliminating pathogenic microorganisms such as viruses and bacteria. It retains a wide range of chemicals including radioactive waste and fuels. The element is resistant to various chemical abuse and remain stable during sudden changes in pressure. Used mainly in water treatment as well as in the regeneration of diethanolamine gas plants.



Process fluids



Series: **SP-7410-PPFS**

Element widely used in compressor stations. Its main function is the elimination of solid particles in amine flows. The design helps to maintain minimum pressure drops.



Process fluids



Series: **SP-2837-SCO**

Conical Gas Turbine Air Filter

High efficiency and high speed filter element. It is able to catch submicron particles, showing 100% resistant to constant relative humidity conditions. Ideal for marine or coastal environments with severe morning fog. It is mainly used and highly recommended for air injection systems and turbomachines where there are large air flows at high speeds.



Air



Series: **SP-2837-SCI**

Cylindrical Gas Turbine Air Filter

High efficiency and high speed filter element, intended to protect air purification systems in turbine compressors and generators. It traps submicron particles and shows 100% resistance to constant relative humidity conditions. Ideal for marine or coastal areas and environments with high level of morning fog.



Air

Exploration and Production



Series: **SP-2361**

Pleated Panel Filter

High efficiency filter element that is used as a final filter in air purification systems, combustion turbines and turbomachinery. It is specially designed to resist up to 80% of relative humidity conditions in tropical, marine and coastal environments. It also resist the attack of water, oil, soot and gases derived from sulfur in the air.



Air



Series: **SP-5612-20**

Polypropylene Cartridge

Built in different micron removal levels, it allows a progressive depth filtration that provides a high flow circulation with a higher filtration efficiency, and shows ample chemical compatibility. Some of the most common applications are: water cooling, water processing/treatment, food industry, and chemical industry in general.



Process fluids



Series: **SP-2314**

Mist Eliminator Filter

Filter with minimal resistance to air flow, it offers high efficiency at eliminating liquid droplets as well as preventing low pressure drops in humid and dry particles. Manufactured to be 100% resistant to corrosion, this filter is excellent for environments with high precipitation and is highly recommended for offshore and coastal installations. Some applications include inlet air filtration for gas turbines and compressors. The filter can be designed and built according to customer specifications to meet a wide variety of applications.



Air



Series: **SP-4018**

Oil Seal Collector Cartridge

Cartridge oil separator seals widely used in centaur generators.



Oil



Series: **SP-2412-4V/3V**

Mini-pleat Type Filter

Air element with a solid design that has no metal components, eliminating the risk of abrasion or corrosion. It is ideal to work in hard environmental conditions, such as high and turbulent air flow, high temperatures, and high relative humidity levels. Because of the innovative design, it provides great air flow and high dust retention capacity. It is fully incinerable making it environmentally friendly. Some of the most common applications include offshore structures and platforms, humid zones, or any area where humidity is present in high levels.



Air



Series: **SP-02MC-57**

Washable Element

Filter element characterized by its simple maintenance and long duration, in addition to excellent mechanical qualities and high resistance to heat. It is highly stable in the presence of physical and chemical agents, which makes it an ideal filter for any kind of fluid and a wide range of applications. It has an effective filtration area of 100% and maximum retention rate depending on the efficiency required by the operation.



Universal



Series: **SPJE**

String Wound Cartridge

Cartridge type filter element used in filtering all kinds of fluids such as: gases, solvents, oils and process fluids in the oil and gas industry. The filter media is manufactured with different materials making it very versatile for the processing of industrial fluids. Adaptable to the system requirements, it shows a high operation efficiency.



Universal



Series: **SP-2003CC**

Wedge-Wire Nozzle-Type Element

This element is mainly used for the granular retention in water treatment equipment. The nozzle is manufactured with stainless steel, which makes it resistant to high temperature. The element structure guarantees an adequate flow distribution, both in pressure working equipment and gravity working equipment. This filter is suitable for the petrochemical industry, oil refineries and catalytic towers.



Universal



Series: **SP-2990**

Filter Bag with Wire Cage

The primary purpose of this **Spifil**® series is to purify the gas within industrial environments to reduce emissions in the air. Adaptable to the specific needs of the customer in a variety of diameters, lengths and materials (Sleeves: fiberglass, PP, polyester, PTFE. Cages: galvanized, stainless, special, alloys among others).



Universal



Series: **SP-2513- PF025**

Lubrication Filter

Used in compressor lubrication systems, this design shows excellent resistance to severe changes in temperature and corrosive fluids. Considered a long life filter, it reduces the static load optimizing the efficiency and maintaining a low differential pressure. The result is superior cleaning of fluids and maximum protection to the system.



Oil



Series: **SP-02MC-190-105-985-O**

High efficiency filter, designed with a mix of multiple media layers to maximize the filtration area. It is considered durable and resistant to significant increases in temperature and operating conditions.



Air



Petrochemicals



Series: SP-01MC-110-44

Cellulose Cartridge

Used in turbogenerators, this cartridge is designed with cellulose media to maximize the area of filtration and the retention of contaminants. The main function is to maintain clean fluids. Ideal for applications with low pressure that require 15 to 40 microns and operating temperatures up to 250°F.



Universal



Series: SP-02MC

Filter element characterized by its simple maintenance and long duration, in addition to excellent mechanical qualities and high resistance to heat. It is stable in the presence of physical and chemical agents, which makes it an ideal filter for any kind of fluid and a wide range of applications. It has an effective filtration area of 100%, and maximum retention rate, depending on the application requirements.



Universal



Series: SP-P

Pre-filters

Developed to retain particles in air intake systems for fans, compressors and motors. Manufactured from synthetic fibers it is resistant to temperatures over 212°F. The pre-filter can extend the life of a wide variety of air filters thanks to the large range of sizes available for this series.



Universal



Series: SP-P242412-CC

Pre-filter

The panel pre-filter can prolong the life of fine filters due to its high capacity to retain dust. Thanks to the design and materials used to produce the pre-filter, it is suitable for applications in humid environments. This design makes installation and removal of the pre-filter from the fine filter effortless.



Air



Series: SP-2353

Accordion Filter

Filter with high efficiency and high flow that allows homogeneous circulation and prevents turbulence from forming. It's deep pleated media design allows for safe operation and contributes to a prolonged shelf life. The element is 100% biodegradable and can be incinerated. It is mostly used in air purification systems.



Air

Storage Terminals



Series: **SP-05FBI-ES-56-A**

Coalescing Element

Filter that coalesces emulsified water particles in hydrocarbon processing lines into larger water drops, which are sent out of the filter for disposal. It can also filter contaminant particulate. This cartridge is used in processing lines in refineries, petrochemical plants, and in condensate flows where gas is produced to remove liquids in gasoline and jet fuel.



Gas



Series: **SP-633-FB**

Separator Filter

The media in this element is woven with a PTFE thread media that retains liquid particles, draining out of the element. Although the liquid constantly runs through the vessel, the filter media is never saturated. This filter element is ideal in gas and jet fuel streams where water particles are present.



Gas



Series: **SP-05JA-644**

Separator Cartridge

The surface elements has a hydrophobic cover that prevents the saturation of the media by gas flooding in the vessel. This element effectively removes water particulate material from gas streams, and is commonly used in gas sweetening plants.



Gas



Series: **SP-05JA-644**

High Efficiency Element

This filter element is recommended for applications where the pollutant is granular. Due to its large surface area it allows for high flow and low initial charge.



Gas



Series: **SP-2794-LPI**

Washable Element

A homogeneous filter element used in tanks where particles are present in hydrocarbons. Its primary objective is to remove contaminants before storage of the final product.



Universal



Series: **SP-05FBI**

Coalescing Filter

An easily installed element with a threaded base or open ends. The media is a composite of fiberglass, synthetic and inorganic fibers. Through design and thin media layers, it meets the needs of filtration through achieving a better capture of the particles. The main function of the element is the elimination of emulsified water derived from hydrocarbons.



Gas

Compressor Stations



Series: SP-4351

Last Stage Gas Separator

Considered a specialty element, this filter is resistant to high temperatures. Designed specifically for gas turbine systems with high pressure, high speed rate and minimum load of pollutants.



Gas



Series: SP-5002

Depth Cartridge

This element has a large filtration area which minimizes pressure drop during operation. It is built by using a mix of special fibers that show a high level performance and has proven to be strong and durable. It is commonly used in gas seals.



Gas



Series: SP-4191

Gas Coalescer

Designed to recollect particles and aerosols, it provides constant performance in the fluctuation of high load contaminants. Its drain layers provide holding capacity and is designed for efficiency of up to 99.5% and a retention of 0.5.



Gas



Basket Strainers

Mainly used during the start up of plants to remove impurities in the pipelines, protecting the equipment. Also can be used as a temporary filter or as a regular filter. Basket strainers are known for being an excellent separator thanks to its design and low cost of operation. It can be used in systems that cannot be stopped. Our line of basket strainers offer a wide range of types, sizes and building materials which makes them versatile, economical and highly efficient.



Universal



Series: SP-490078

Vapor Filter

Designed to collect vapors from the motor compressors. The design and materials of construction make it resistant to high operation temperatures while maintaining a clean environment.



Process Fluids



FILTGASTM

This element is primarily used to remove the liquid droplets that form in gas streams. Thanks to the easy operation and high performance, this is the preferred solution within the industry.



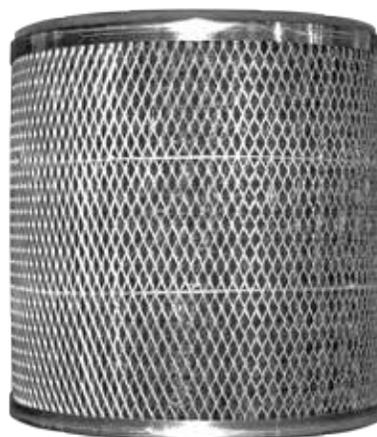
Series: SPFN

Nozzle filters available in a wide variety of materials such as stainless steel, specialty alloys, polypropylene and more. We offer a broad range of sizes and efficiencies.



Series: SP-7123-SB

High performance hydraulic filters with a compact design to achieve minimal drops in pressure and excellent retention of pollutant particulates.



Steam Element

The main function of this element is to collect 100% of the liquid particles between 2 to 5 microns found in steam flows. Provides high efficiency and low pressure drop.



Series: SP-07PV-5 SP-05PV-10

Coalescing elements used in compressed air systems and dryers. Easy installation and maintenance to avoid downtime during shutdowns.



Series: SP-2219-GRB1

Pocket Filter

A secondary filter used to collect fine powder in systems where high efficiency is required. Ideal for large volumes of air at high speed. It is usually used in the suction of air turbines, turbogenerators and turbochargers. These filters are highly recommended to obtain optimal air purification.

LENGTH OF BAG: 24 INCHES



Industrial Applications



Basket Strainer

Strainer with high resistance to chemical substances. Very useful in the drainage of solids from streams flows where liquids and particles might be harmful to the normal function of industrial machinery and equipment. Among its applications includes the maximization of protection to turbines, compressors and prevents erosion.

Universal



Series:

SP-2412-1BP

High Efficiency Pleat Filter

Designed specifically for heavy duty air filtration with high efficiency and optimal performance. It is not effected by intermittent air fluctuations or severe pressure, so it is recommended for rotating industrial machinery, air purification systems, centrifugal compressors, gas turbines or ventilation systems with a high efficiency performance.

Air



Series: SP-4191LP

Filter cartridges used in a wide range of applications. It offers a large filtration area and its dimensions are ideal for large flows. The directional flow of the filters are "inside to outside". Easy operation and removal, they can be disposed of through incineration.

Process Fluids



Series:

SP-274LPF

Rigid panel filter for cooling systems manufactured for a variety of applications such as: humidity eliminator, fine filter panel and pre-filters for high specialty filters. This filter is environmentally friendly.

Air



Cleanable Filter

This type of element is crucial during operations, the main advantage is its long life period and low maintenance cost.

Process Fluids



Series: SP-6609-1F

Mist Eliminator

Used for removing gases in oil, its designed to collect particles smaller than 0.3 microns that form and become trapped in the filter media preventing migration. This type of mist eliminator can remove sub-micron size particles.

Gas



Series: SP-4122

Bag/Basket Filter Housings

For multiple applications in the industry. These are available in a wide variety of sizes, materials, pressure ratings and particle retention.



2nd & 3rd Phase Separators



Horizontal & Vertical Coalescing Vessels

Spifil® vessels are designed for easy operation and maintenance for various applications including: amine sweetening systems, catalyst protection, storage terminals and compressor protection. Offered in a wide range of sizes from 6" to 100" in both horizontal and vertical presentations.



Duplex Filtration Systems

This type of system allows for continuous operation by letting one side remain functional while the other is under maintenance. Ideal for the following applications: separation of two or more fluids from oil in the same stream, such as the removal of water from oil, diesel and jet fuel among others.



Mist Eliminator

This kind of filter makes possible the removal of liquid from a variety of gas streams. It is commonly used in adsorption and distillation columns, boilers, desalination plants, oil mist separators, and gas treatment plants. Among common applications we can mention: refining, chemical/petrochemical industry, and pollution control equipment. These are made to fit any size or shape and can be manufactured in a variety of materials both, metal and nonmetal.

 Universal

Equipment and Services



At **Spifil**® we strive to adapt and cover the needs required by our customers. With the experience of our technicians we offer:

- On-site filtration **Services**
- **Leasing** of equipment
- Cost-Effective **Solutions**
- 24/7 on-site **Technical Assistance**





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