

WATER FILTRATION FROM MECHANICAL IMPURITIES. WHAT IS IT AND WHY IS IT NEEDED?

Water filtration from mechanical impurities is the process of removing particles and contaminants of various sizes that may be in water. These impurities can include sand, dirt, rust, metal particles, and other materials commonly found in water from various sources such as rivers, lakes, wells, or the municipal water supply.

Filtration of water from mechanical impurities is crucial because these particles can be harmful to human health or the equipment used for water treatment. They can cause clogging or damage to filters, pumps, and other devices, as well as serve as a source of water contamination, which can reduce its quality for drinking or various processes.

Therefore, filtering water from mechanical impurities is the first step in water treatment, preceding other purification methods such as filtration, disinfection, or reverse osmosis, ensuring a more effective and safe purified water.

The most commonly used types of water filtration filters for mechanical impurities in households and industries are:

- **Mesh Filters:** These filters allow water to pass through a mesh or screen with fine openings, trapping mechanical particles. They can be easily cleaned or flushed to remove accumulated deposits.
- **Cartridge Filters:** These filters utilize cartridges containing materials that trap water particles of specific sizes. Cartridges can be replaced or flushed to maintain filter efficiency.
- **Bag Filters:** Bag filters work by passing water through a bag with a fine porous structure, which traps mechanical particles and contaminants. Bags are typically made from various materials like nylon, polyester, or synthetic fabrics and offer different filtration levels depending on pore size and material density.

Choosing a specific type of filtration system depends on water purification needs, the volume of impurities, and other parameters that need consideration when selecting a water filtration system for mechanical impurities.

Filters for removing mechanical impurities are used in various industrial sectors, including food, pharmaceuticals, oil, and even in the aerospace industry to ensure clean water for manufacturing or life support.

Backwash Mechanical Filtration Filter with Manual Flushing Krilico FM-HGS-05 1"

Mesh backwash filters are primarily designed for coarse water purification from mechanical impurities. These may include insoluble particles like clay, sand, rust formed within pipelines, and other foreign inclusions. During the filtration mode, water passes through the mesh filtering element from outside to inside, delivering purified water at the filter outlet. During the backwash process, rotating the handle opens the drain hole and turns the reverse flushing element. This action sucks and washes away particles that have settled on the filter element. The backwash water is then drained into the sewer.

One advantage of this model is its versatility, allowing installation in both vertical and horizontal positions.

Supply kit: filter housing, filter element, wing nuts with gaskets (union nuts), service wrench.



Krilico FM-HGS-05 1"		
Flow Rate	m ³ /h	4,0
Filtration Degree	µm	40
Water Pressure	bar	1,0 – 8,0
Pressure Drop	bar	0,2
Water Temperature	°C	+4 – 40
External Thread Diameter	Dn (")	1
Order number		HGS-05

Backwash Mechanical Filtration Filter with Manual Flushing Krilico FM-HGS-08 1"

Modern-designed mechanical filter. Blends functionality with aesthetics. Features compact dimensions and ergonomic shapes, facilitating easy installation and maintenance. The color scheme and filter shapes correspond to modern interiors or the style of equipment it integrates with.

Supply kit: filter housing, filter element, wing nuts with gaskets (union nuts), service wrench.



Krilico FM-HGS-08 1"		
Flow Rate	m ³ /h	4,0
Filtration Degree	µm	40
Water Pressure	bar	1,0 – 8,0
Pressure Drop	bar	0,2
Water Temperature	°C	+4 – 40
External Thread Diameter	Dn (")	1
Order number		HGS-08

Backwash Mechanical Filtration Filter with Manual Flushing Krilico FM-JQD-4 1"

The simple and economical mechanical filter. Equipped with a transparent housing for convenient assessment of the filter screen's contamination level.

Supply kit: filter housing, filter element, wing nuts with gaskets (union nuts), service wrench.



Krilico FM-JQD-4 1"		
Flow Rate	m ³ /h	4,0
Filtration Degree	µm	40
Water Pressure	bar	1,0 – 8,0
Pressure Drop	bar	0,2
Water Temperature	°C	+4 – 40
External Thread Diameter	Dn (")	1
Order number		JQD-4

Self-cleaning mechanical filter with automatic backwash Krilico FM HGS-04-1 1"

Mesh self-cleaning filters are primarily designed for coarse water purification from mechanical impurities. These can include insoluble particles of clay, sand, rust formed in pipelines, and other foreign inclusions. During the filtration mode, water passes through the mesh filtering element from outside to inside and comes out purified at the filter outlet.

The filter backwash can be performed either manually by pressing a button or automatically by selecting the required time interval between backwashes (3, 7, 15, or 30 hours). The choice of backwash frequency of the filtering element depends on the level of water contamination by mechanical impurities. The backwash water is drained into the sewage system.

Supply kit: filter housing, filter element, wing nuts with gaskets (union nuts), service wrench.



Krilico FM HGS-04-1 1"		
Flow Rate	m ³ /h	4,0
Filtration Degree	µm	40
Water Pressure	bar	1,0 – 8,0
Pressure Drop	bar	0,2
Water Temperature	°C	+4 – 40
External Thread Diameter	Dn (")	1
Order number		HGS-04-1

Water filtration filters for mechanical impurities type BB

The main element of a BB filter is a cartridge made of polypropylene, polyester, or nylon with specific porosity. This material acts as a mechanical filter, capturing large particles and preventing them from passing through. This process removes mechanical impurities from the water, enhancing its quality.

BB filters can have various filtration levels determined by the pore size, i.e., the diameter of particles that the filter can trap.

Supply kit: filter housing, wing nuts with gaskets (union nuts), service wrench.



Krilico FM-BB		BB10	BB20	BB10	BB20
Colour		blue		clear	
Flow Rate*	m ³ /h	2,5	3,5	2,5	3,5
Connection Diameter	inches	1	1	1	1
Empty Weight	kg	2,9	3,7	2,9	3,7
Dimensions, Diameter/Height,	mm	214/599	185/600	214/599	185/600
Order number		FM-BB10B	FM-BB20B	FM-BB10P	FM-BB20P

Cartridges for filters type BB10

Krilico-C	PP5M10BB	PP20M10BB	PP50M10BB	PS5M10BB	PS20M10BB	PS50M10BB	CBL10BB
Filtration Degree, µm	5	20	50	5	20	50	20
Material	Polypropylene thread			Foamed polypropylene			Coconut charcoal
Dimensions, diameter/height, mm	120/250			120/250			120/250
Order number	PP5M10BB	PP20M10BB	PP50M10BB	PS5M10BB	PS20M10BB	PS50M10BB	CBL10BB

Cartridges for filters type BB20

Krilico-C	PP5M20BB	PP20M20BB	PP50M20BB	PS5M20BB	PS20M20BB	PS50M20BB	CBL20BB
Filtration Degree, µm	5	20	50	5	20	50	20
Material	Polypropylene thread			Foamed polypropylene			Coconut charcoal
Dimensions, diameter/height, mm	120/500			120/500			120/500
Order number	PP5M20BB	PP20M20BB	PP50M20BB	PS5M20BB	PS20M20BB	PS50M20BB	CBL20BB