

# JAGTAP AUTOMATIC SELF-CLEANING FILTER

ASSURE CONTINUOUS FLOW,  
SIMPLIFIED MAINTENANCE AND  
WORRY-FREE OPERATION.



**JAGTAP ENGINEERING WORKS**

*your reliable Filtration Partner* | A ISO 9001:2008 Company

**The JAGTAP's, motorized, automatic, self-cleaning filter system, provides continuous debris removal from fluid piping systems that require full time uninterrupted clean fluid flow.**

The JAGTAP'S self-cleaning filters are particularly effective in fluid applications where unattended service, high solids loading and/or uninterrupted flow requirements deem a basket filter and its attendant maintenance problems impractical.

Any of the JAGTAP's filter unit's, applied correctly, will prove efficient and cost effective compared to simplex/duplex strainers or any other automatic filtering systems.

## PROVEN FEATURES INCLUDE

Rugged screen and mechanical assist backwash mechanism extends useful service life.

Unique clog-resistant wedge wire filter element reduces maintenance downtime.

All internal replaceable parts supplied in corrosion resistant material.

Efficient proven design reduces maintenance requirements; requires fewer parts.

Low rpm backwash mechanism provides more efficient cleaning, less wear of internals.





## APPLICATION

The JAGTAP's unique self-cleaning filter unit design permits installation in virtually any piping system operating at a positive pressure.

The JAGTAP's self-cleaning filter unit can operate through a wide range of operating pressures ( $0.7 \text{ Kg/cm}^2$ ) and solids loading with effective debris removal and backwashing across the entire pressure range. Additionally, only one drain/backwash connection is required for installation effectively eliminating the expense of a separate backwash connection.

Strainers are used to protect equipment such as valves, pumps, meters, heat exchangers, turbines or spray nozzles, as well as in feed water and process water applications or virtually any similar application.

The JAGTAP's Self- Cleaning Filters are customized to suit most application requirements by closely understanding the process requirement.



## GENERAL OVERVIEW ON WORKING OF JAGTAP'S AUTOMATIC SELF-CLEANING FILTERS

Debris laden fluid enters through inlet to inner chamber.

Dirty fluid flows within the filter element.

Debris is retained on the plane surface of the filter element, while stained fluid continues to outer chamber and exits through filter outlet.

During backwash or cleaning cycle, the motor/ gear reducer is engaged and drives the hollow drive shaft and hollow port around the inner circumference of the strainer element.

The backwash assembly is opened to atmospheric pressure by opening the backwash control valve .

Flow reversal occurs at the port/filter element interface because of the pressure differential described.

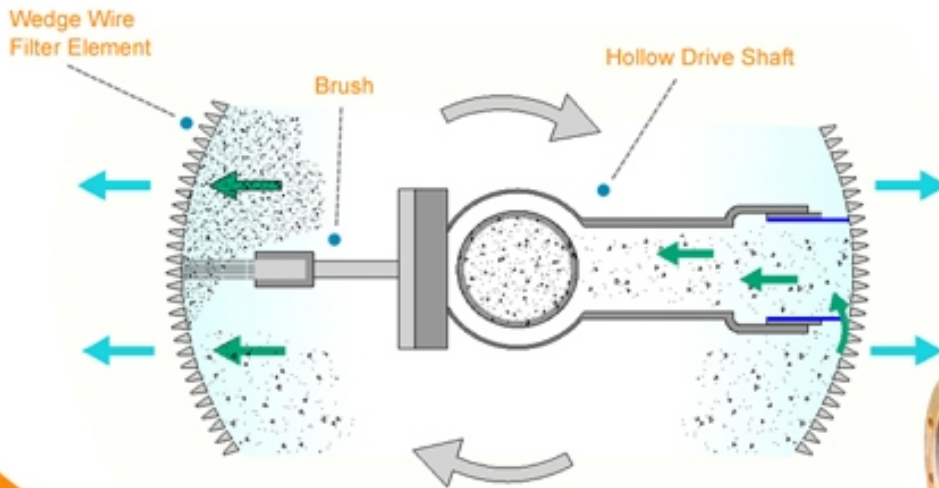
Debris is effectively vacuumed from the full length of the filter element by a vigorous reverse fluid flow and into the hollow port; down the hollow drive shaft and out the backwash outlet.

The hollow port continues to sweep the full length of the filter element until the cleaning cycle has ended.

A brush mounted on the other side of the shaft facilitates debris removal on the filter element .  
A non-brush option is available.

The filter will provide continuous uninterrupted fluid flow during the cleaning operation.

The cleaning cycle can be set for continuous or intermittent backwash.





## FILTER ELEMENT

The JAGTAP filter system features a revolutionary wedge wire screen filter element that is extremely rugged and more clog resistant than conventional filter elements that use perforated plate or wire mesh screens. This proven state-of-the-art Filtering media is fabricated by wrapping vertical supports with wedge shaped profile wire. Each intersection of supports and wire is welded to produce an extremely rugged one-piece element. This forms a continuous slot that allows only two-point contact with debris particles to reduce clogging.

Jagtap is one of the leading manufacturer for Wedge Wire Screen Filtration Element in INDIA

The wedge shaped profile wire reduces the possibility of retaining debris smaller than the screen opening which historically has been the cause of premature clogging or failure of competitive screen designs.

## ADVANTAGES OF WEDGE WIRE SCREEN FILTER ELEMENT

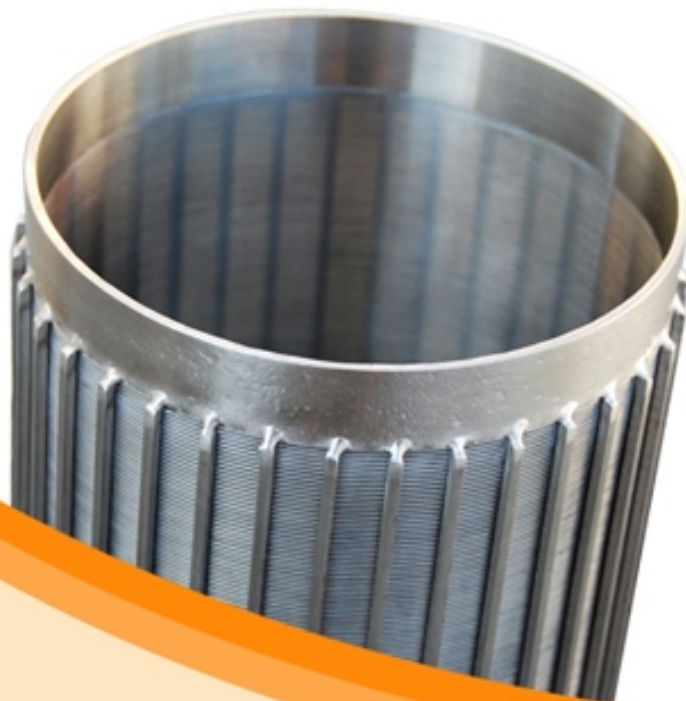
Maximum effective flow area and maximum operating efficiency are maintained throughout service life.

Maintenance costs are reduced drastically due to reduced clogging and stapling of fibrous material.

Long-lived straining element provides reduced operating costs over entire service life.

Rigid element prevents flexing which can cause premature element failure.

Efficient, effective debris collection at media/screen interface.



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