



## SmartScreen HSF

Composite filter frames

## SmartScreen

TP-Filter has developed the SmartScreen filter frame as an advanced, full-composite filter frame that improves on the performance of the existing metal disc filter frame technology .

With over 30 years experience of monofilament filter meshes and disc filter equipment over various industrial applications, we are well positioned to add value to the product and its many world wide users.

The disc filter media is commonly a polyester monofilament filter mesh with mesh openings ranging from 10-100µm. The monofilament fabric is a high throughput, highly uniform, as well as easily cleanable filter media.

With the knowledge acquired from being a historical supplier to original equipment manufacturers in this field, TP-Filter use only original quality or better filter media for SmartScreen filter frames.



### Waste water plant

Disc filters are used as tertiary filtration in waste water plants to polish the effluent, reducing nitrogen and phosphorous released to the recipient water body. With the benefits of smaller footprint and lower cost over other techniques, the number of installations are large and will continue to grow.



### Potable water plant

Disc filters can be used in plants supplying domestic fresh water, where the water source is surface water. After initial sieving of the intake water the filter is used to remove suspended particles and marine life before additional filtration in sand filters or infiltration.



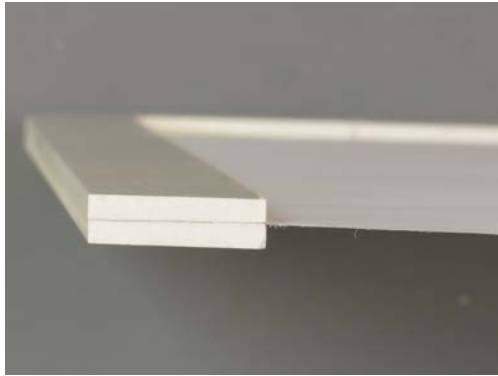
### Process industry

Industries relying on large quantities of water for process applications or cooling, frequently rely on the intake of surface raw water. After initial sieving of the intake water a disc filter can be used to remove suspended particles and marine life before additional filtration in sand filters.



### Aquaculture

In recirculating aquaculture installations great costs can be saved in reusing the already heated water, increasing growth rate of stock while reducing costs. Disc filters are used to clean the recirculated water from suspended particles of feed, feces and other biologic material.



### Fully enclosed filter mesh

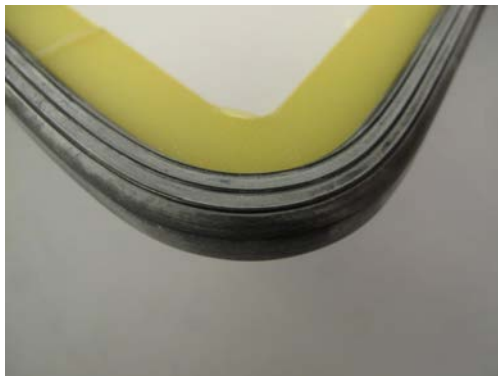
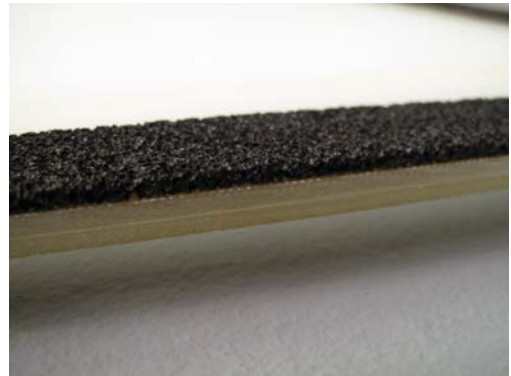
The fully enclosed filter mesh cannot peel from the frame under any conditions.

The fully enclosed filter media does not have to be excessively tensioned making it much less prone to catastrophic side-to-side ruptures caused by mesh damage.

### Symmetrical

The symmetrical Smart Screen filter frame will always be installed correctly, there is no need to keep track of a downstream or upstream side!

This removes the risk of faulty installation and in the case of the HSF 2100 means you only have to have one type of panel as spare part, by adding the gasket to the correct side as required.



### Light weight

The complete SmartScreen panel weighs about a third of its metal counterpart, reducing stress on machine load bearing parts as well as on your maintenance personnel. The cost of world-wide freight of course is also reduced.

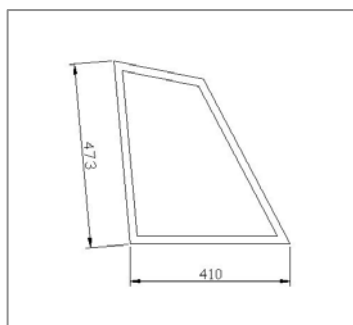
The weight keeps adding up, the savings on a single machine can exceed 700kg of rotating weight !

### Marked

A SmartScreen panel is always marked for simple spare part identification and follow up on the performance of each filter frame.

Smart Screen panels are packed and sent to the customer in a set of one or more discs with gasket installed and ready for an easy and failsafe installation.





### SmartScreen HSF 2100

Info: Exists in a left (L) and right (R) version

Gasket: Glued on foam rubber

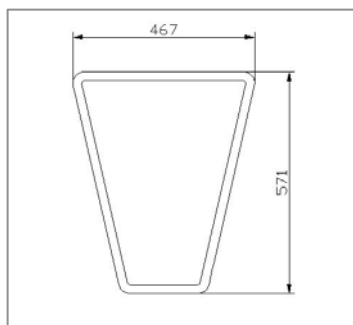
Number of frames per disc: **32**

Weight (inc. gasket): **361 g**

Weight savings per frame: **879 g**  
(Compared to standard metal frame)

Weight savings per disc: **28,1 kg**

Weight saving on 12 discs: **337 kg !**



### SmartScreen HSF 2200

Info: Symmetrical frame

Gasket: Wring-on waxed EPDM

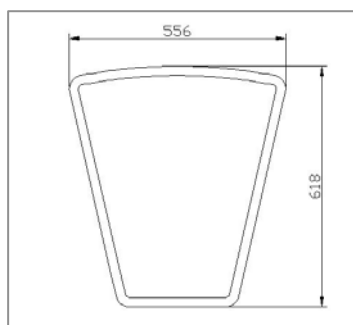
Number of frames per disc: **28**

Weight (inc. gasket): **582 g**

Weight savings per frame: **986 g**  
(Compared to standard metal frame)

Weight savings per disc: **27,6 kg**

Weight saving on 24 discs: **662 kg !**



### SmartScreen HSF 2600

Info: Symmetrical frame

Gasket: Wring-on waxed EPDM

Number of frames per disc: **28**

Weight (inc. gasket): **685 g**

Weight savings per frame: **1065 g**  
(Compared to standard metal frame)

Weight savings per disc: **29,8 kg**

Weight saving on 24 discs: **715 kg !**

Typical application and mesh opening (µm)	10	20	30	40	60	80	100
Waste water							
Fresh water							
Process water							
Aquaculture							



**TP**  
**FILTER**

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