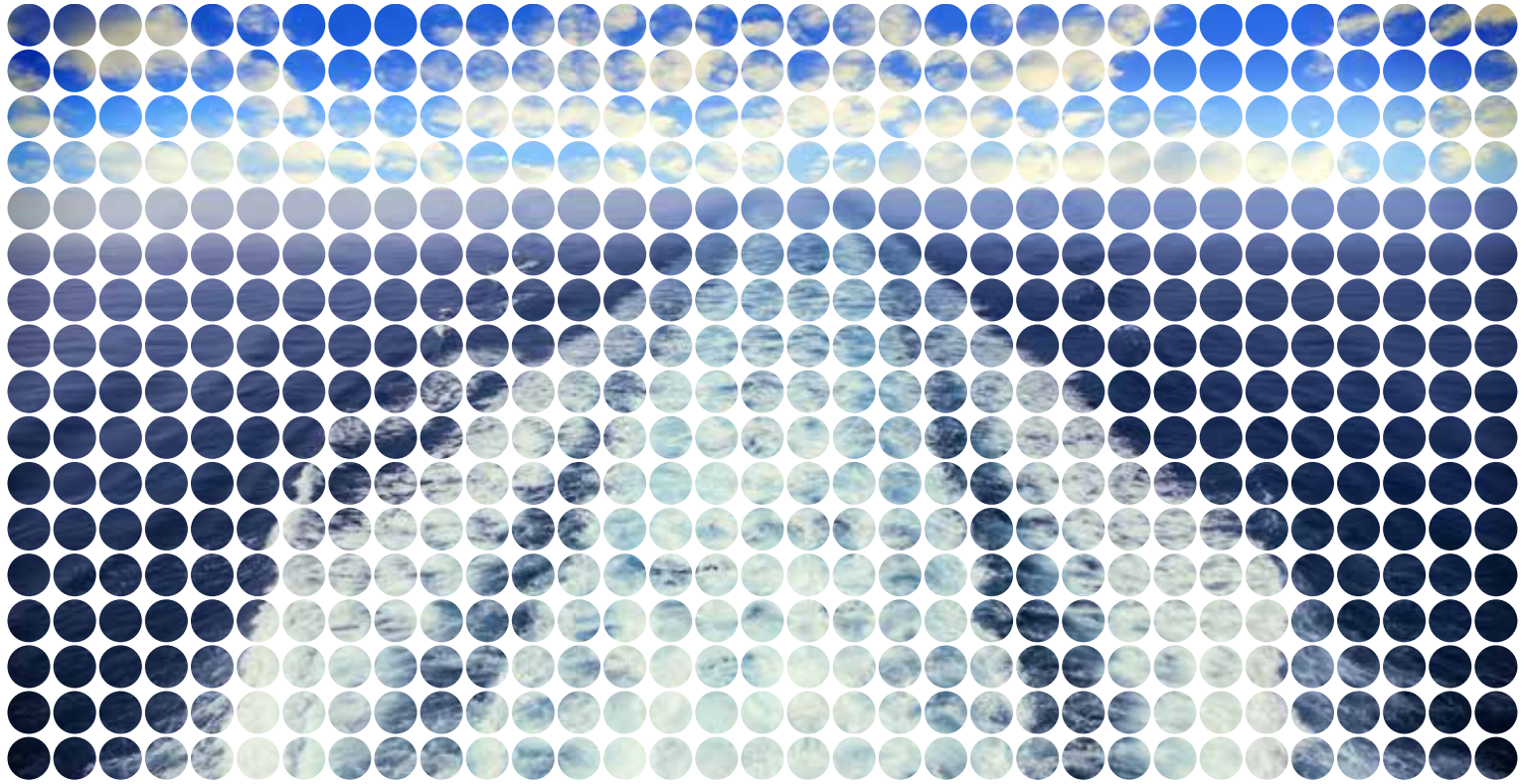


filtersafe

AUTOMATIC SCREEN FILTRATION



ADVANCED FILTRATION FOR WATER TREATMENT APPLICATIONS



About Filtersafe®

Our Challenge

With over three decades experience in automatic filtration of water, Filtersafe filters are equipped not only with the technology but also the knowhow to integrate successfully into water industrial applications.

Filtersafe, being the premier supplier of seawater filters for the Ballast Water Treatment market worldwide, demonstrates our products capabilities to deal with even the most averse filtration conditions. Our filters can be deployed in the following markets;

- Oil & Gas Sectors
- Power & Energy Sector
- Water reclamation & Desalination
- Municipal Water Treatment
- High-end Agriculture



Reliable pre-treatment filtration from 10 microns

our filters tailored designs and simple modularity enable us to supply filters from 10 microns upwards, with flow rates from 50-5000m3/hr in single unit and limitless capacity in a modular configurations.

Filtersafe® brings unrivalled value, effectiveness and durability to even the most demanding filtration solutions. Our filters can effectively remove high volumes of TSS and organic matter including macro-fouling.

Key applications where our filters excel are:

- Intake water
- Process water
- Produce water
- Raw water



Filtersafe® Technology



Filtersafe® automatic screen filters utilize unique, patented and leading edge technologies to ensure the high performance criterion the market demands are met.

Cleaning Process:

1. SmartWeave™ screen traps organic matter & TSS
2. As sediments are trapped, pressure differential between inlet and outlet will initiate the cleaning process
3. Nozzlex™ scans the entire smartweave™ screen removing all matter, disposing of the reject water through the flushing chamber
4. Filter returns to its original operating parameters

Our filters harness our own market-proven smartweave™ filter screens and nozzlex™ proximity suction nozzles:



SmartWave™ high performance filtration screens

- Multi-layered sintered structure
- Enhanced strength & durability
- Available screens: 10-500 μ
- Available material: 316L, 904L



Nozzlex™ self-cleaning cycle for maximum filter efficiency

- Improved flow rate
- 100% screen cleaning
- Zero wear on the filter screen

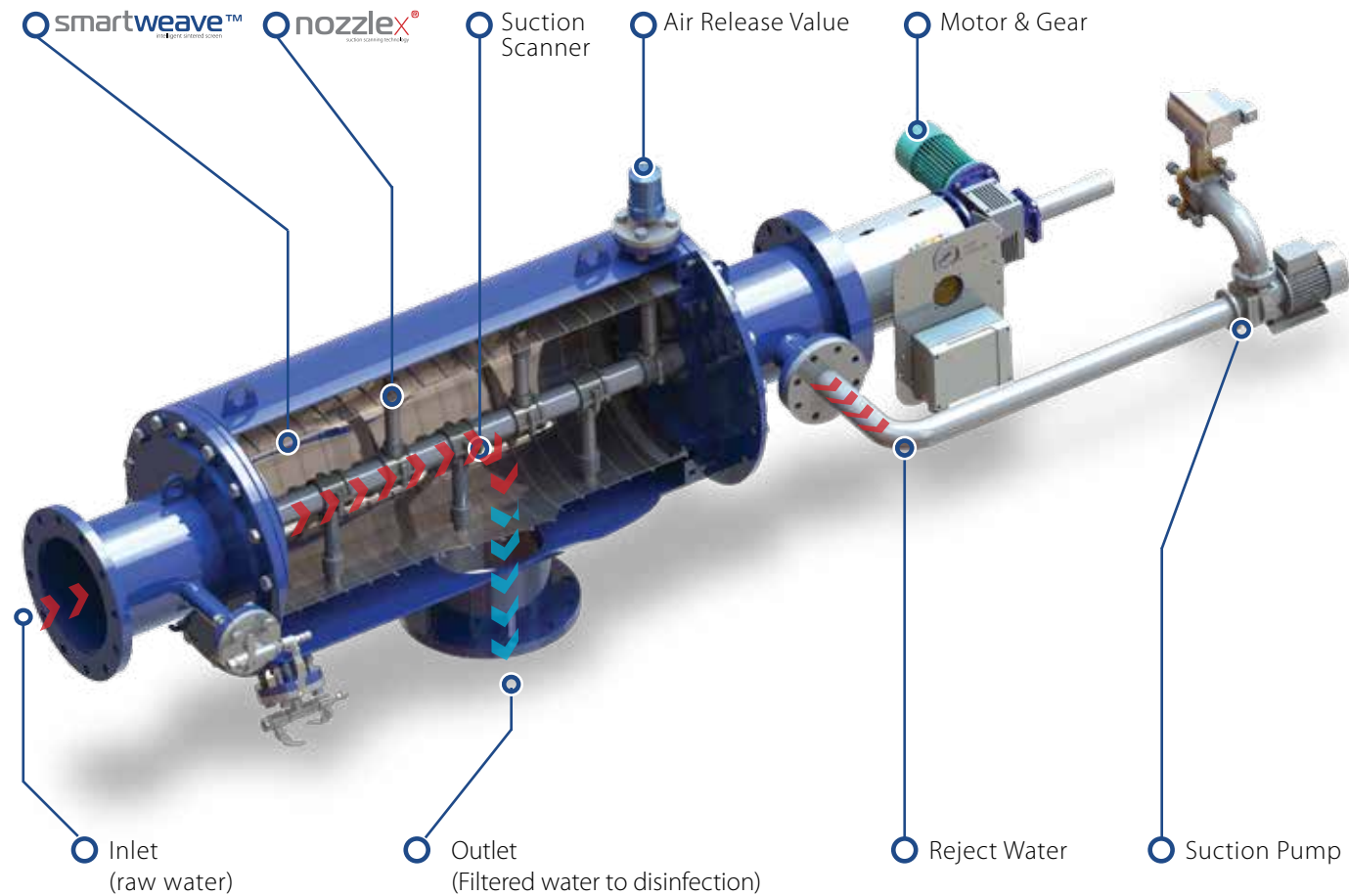


The sum of these technologies amounts to EverClear®

- Autonomous self-cleaning filtration cycle
- Continuous robust automatic operation
- No back washing sequence
- Minimal water required for flushing
- Low operating pressure



Filtersafe® Technology

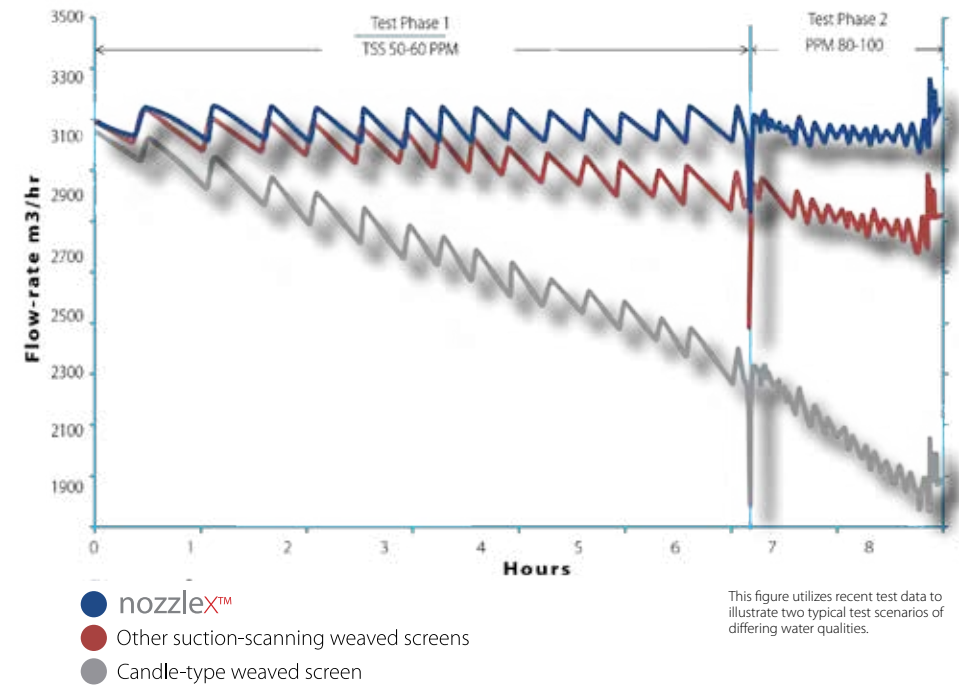


- Use of highly durable, noncorrosive components for robust trouble-free operation, requiring minimal maintenance
- Filtersafe® filters are reliable and durable. Hundreds of commissioned filters have consistently performed without delay
- Tailor made design for optimal installation solution



nozzleX™ Cleaning Performance

Real-time test data comparative technologies



Filtersafe's filter performance is substantially better when compared to other filtration systems

After just 6 hours of operation, other technologies suffer a substantial loss in performance with virtually no ability to reclaim original flow rates.

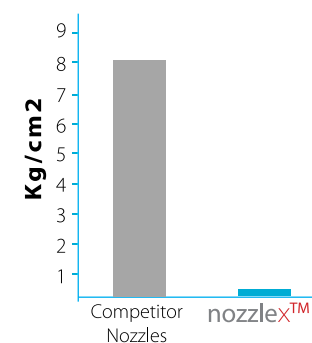
Filtersafe's filters will continue to work to specification.

Zero screen wear

NozzleX™ has zero screen wear, where other nozzle-based cleaning technologies utilize often detrimental mechanical force, often pushing TSS against the screen causing punctures.

NozzleX™ equalizes system pressure and ensures an optimal amount of force is activated on the screen

Force exerted on screen by nozzles



Only **3.1%**

of the strenuous force exerted on the screen compared to other suction scanning technologies.

What does this mean?

- 1 An increase in force means more wear of the nozzle head leading to shorter maintenance cycles.
- 2 The increase in force by standard nozzle also pushes sediment into the filtration screen puncturing the fine screen and rendering it significantly less productive.
- 3 **nozzleX™** is designed and proven to have no impact on the performance of the screen due to our consistent but low force applied to the screen.

Filtersafe® BS-SERIES

Single Screen

35-650 m³/hr

- Easy maintenance, can be performed by one person with unique inspection port. No lifting tools required
- Includes a preliminary coarse screen for prevention of large solids entering the filtration chamber
- Horizontal and vertical configurations



Compact Single Screen Filters

50-1,475 m³/hr

- The largest single screen filter on the market
- Small footprint
- Horizontal and vertical configurations



Multi-Screen Filters

1,000-5,000 m³/hr

- Unique twin-screen assembly reduces service space required
- Horizontal and vertical configurations



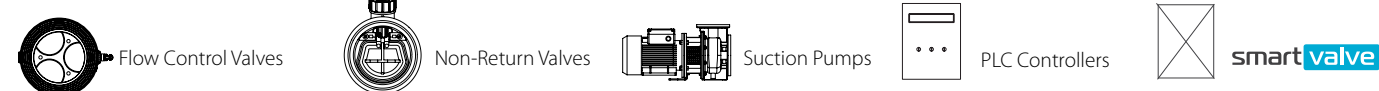
Custom Pressure Vessel Design

Filtersafe® offers Explosion Proof (EX) and pneumatically operated models. We also have experience in delivering ASME & PED standard pressure vessels.

Modular Configurations

Specifically designed for retrofit installations in particular. BS-Series filters can be coupled or manifold mounted to increase flow rates with a flexible footprint.

Optional Filter Accessories



Market leading R&D

The original weavewire screen tailored specifically for challenges of seawater filtration

Leading Filtration Performance

Being a pioneer of the BW filtration, Filtersafe® is in constant pursuit of finding added value & benefit. Filtersafe® stays ahead of the rest by adopting new, advanced and polished technologies and solutions. Our ever evolving R&D program ensures our filters are best equipped to meet the stringent needs of ship owners and operators.

* Test data shown accurately represents numerous tests conducted by Filtersafe & research groups over the course of the last 10 years.

Research partners

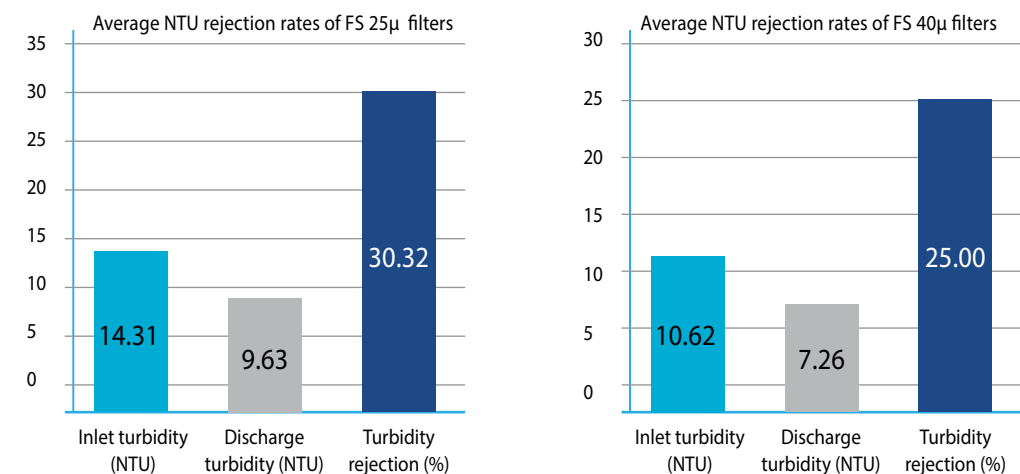
In conjunction with our research, Filtersafe® has tested the performance of its automatic screen filters to meet the rigorous demands of all marine industry standards. Through scientific development, we have been able to implement some unique technological breakthroughs, including:

- Epoxy phenol corrosion prevention
- High flow rate models
- Refined water-saving mechanisms
- Spatial efficiencies in service zones
- smartweave™ sintered screen technology
- nozzlex™ proximity nozzles

TSS & Organism Removal Rate - 40µ Screen



NTU Removal Rate



Regional Office, Manufacturing & Assembly

ISRAEL

A 4,000 sq/m premises comprising our regional sales offices, R&D facilities and manufacturing/assembly hall. The facility is capable of handling very large volumes of production in line with market growth.

Contact Information:

Address: Ha'ella Street, P.O.B 23, Tefen Ind. Zone 2495900, Israel
Phone: +972 4 987 3620 ext. 105, Email: sales@filtersafe.net

HONG KONG

Our Hong Kong assembly plant supplies our entire line of products to the region and is supported by a world-class steel fabrication facility.

Contact Information:

Address: Lantau Island, Hong Kong
Phone: +852 2454 4300, Email: sales@filtersafe.net

BRAZIL, Rio de Janeiro

Branch Office

Contact Information:

Cell: +55 21 98899 6890
Direct: +55 21 3798 2307
Email: sales@filtersafe.net

GERMANY, Hamburg

Branch Office

Strategic sales & technical office serving all European markets.

Contact Information:

Phone: +49 151 5111 9622
Email: sales@filtersafe.net

SINGAPORE

Branch Office

Strategic sales & technical office

Contact Information:

Phone: +65 9848 9856
Email: eric@filtersafe.net

CHINA, Beijing

Branch Office

Contact Information:

Address: Room 811, Building 1, Xinyuanguoji Plaza, No 1, Chengshousi Road, Fengtai Dist., 100078 Beijing, PRC China
Email: sales@filtersafe.net

MEXICO, Mexico City

Contact Information:

Address: Laguna Yuriria 113, Granada, 11520 Ciudad de México, CDMX, Mexico
Phone: +52 55 5254 0208
Email: sales@filtersafe.com



○ Filtersafe Offices

● Filtersafe Manufacturing Facilities



www.filtersafe.net

*All flow rates are for 25, 40 & 50 micron. Max 50 PPM dirt load.

Filtersafe reserves the right to change any of the information presented in this document without prior notice.

The data presented in this document is for general information only and cannot be used for quotation purposes. Please contact Filtersafe for specific quote.