# We put a half-century of experience to work solving them

Fuel and

petrochemical

Process water

treatment

fabrication

Spray nozzle

protection

Scale removal

Marine

Debris removal

• Equipment cooling

Mechanical seal water

Ballast water treatment

Sea water intake

water treatment

Grey and black

• Utility water

**Metals milling and** 

#### Mining

- Dust suppression
- Deep mine extraction
- Tailings recycle
- Storm water management

#### **Pulp and paper**

- Whitewater filtration
- Wet end additives
- Surface treatment
- Clarified white water

#### Oil and gas

- Injection water
- Produced water
- Hydraulic fracturing
- Oil sand wastewater reuse

#### Food and beverage

- Processing: cooling, dissolving dispersing, diluting
- Washing and rinsing
- Steam generation

#### Fine, specialty and **bulk chemical**

Process water

#### Pharmaceutical and biotechnology

- Process water
- Ultra-pure water

#### **Power generation**

• Service water Cooling tower blowdown

North America

Auf der Heide 2

Tel: +49 2486 809-0

#### Europe/Africa/Middle Eas 53947 Nettersheim, Germany

Friedensstraße 41 68804 Altlußheim, Germany Tel: +49 6205 2094-0 An den Nahewiesen 24 55450 Langenlonsheim, Germany

# Powerina Business Worldwide

F<sub>1</sub>T•N

44 Apple Street Tinton Falls, NJ 07724 Toll Free: 800 656-3344 (North America only) Tel: +1 732 212-4700

Tel: +86 21 5200-0099

Singapore 100G Pasir Panjang Road #07-08 Singapore 11852 Tel: +65 6825-1668



Utility Water / Process Water / Wastewater / Desalination

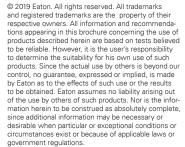
Water filtration solutions

No. 3, Lane 280, Linhong Road Changning District, 200335 Shanghai, P.R. China

Av. Ermano Marchetti, 1435 Água Branca, São Paulo - S 05038-001. Brésil Tel: +55 11 3616-8461

#### For more information, please email us at filtration@eaton.com or visit www.eaton.com/filtration

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## Eaton understands your filtration challenges

As a global leader in filtration technology for all kinds of fluids, Eaton brings an unparalleled depth of engineering experience and breadth of product availability to bear on your unique set of water filtration challenges. Pre-packaged, one-size solutions definitely do not fit all, and Eaton water filtration experts know how to analyze your requirements and harness proven design technologies to create a system that meets your needs exactly.

can draw on a broad range of products

and technologies to create component solutions, modules and systems that precisely meet your specific water filtration challenges, you can depend on Eaton to deliver solutions that are:

#### Effective

Eaton water filtration systems are at work today consistently meeting EPA, FDA, USDA, cGMP and literally hundreds of other regulatory and process-specific requirements for utilities, in mind. The most process industries, and Because Eaton engineers manufacturing facilities around the world.

#### Efficient

Eaton water filtration systems are engineered to meet your challenges using the best available components and technologies selected and integrated to achieve an optimal solution and deliver the results you need.

#### Economical

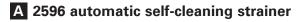
Eaton water filtration systems are always designed with your operating cost and profitability goals firmly effective and efficient solution to your needs always is the most economical solution in for you. the long run.

#### Environmentally Responsible

Eaton water filtration systems are part of our corporate commitment to being sustainable by design in everything we do. Good environmenta stewardship is simply good business, for Eaton, for our customers and for the world.

Whatever your water filtration challenge may be, wherever in the world it's located, Eaton is ready to help you meet it with an effective efficient, economical, and environmentally responsible solution specifically engineered

Five 24" Eaton Model 2596 strainers with backwash assist pumps installed at a potable water treatment plant.



Eaton's Model 2596 automatic self-cleaning strainer combines a compact, modular design with an automatic backwash system to give users a simple, low-maintenance, environmentally responsible solution that delivers the benefits of low energy consumption, no media disposal, and no emissions.



Model 2596 is also available in 10", 12", 14" and 16" sizes provides flow rates up to 6,500 gpm (1,476 m<sup>3</sup>/hr).



#### **S** Pipeline strainers

Eaton's standard cast simplex, duplex, and Y pipeline strainers are available in cast iron, carbon steel, stainless steel and bronze. Custom-fabricated designs can be configured to meet virtually any combination of retention and flow rate, special alloys, unique piping connections, or extraordinary size requirements. Pipeline strainers meet ISO 9001:2008 quality management standards.

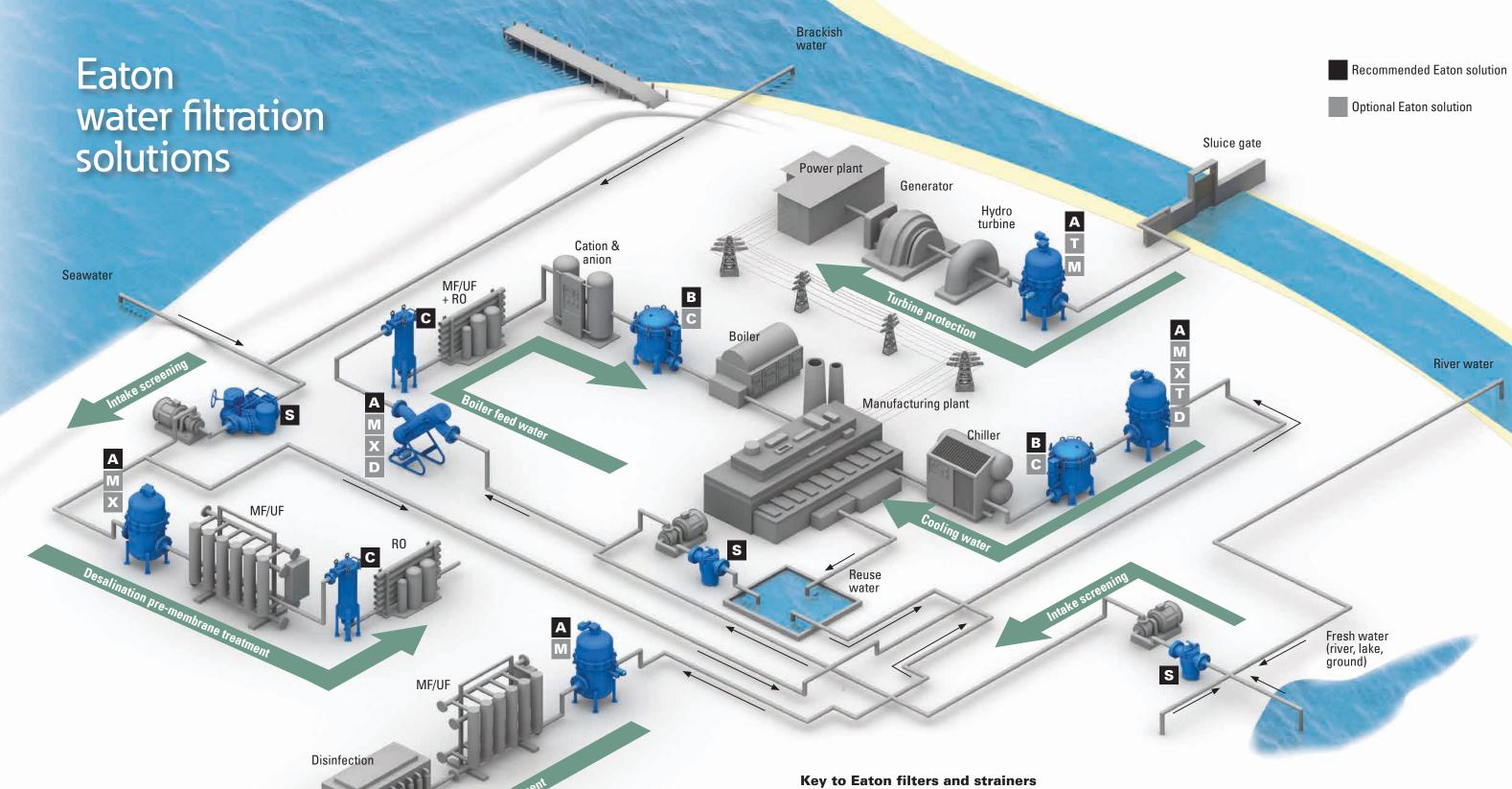


#### **B** Bag filtration systems

Eaton offers more than 1,500 different bag filter configurations to deliver the exact performance required for virtually any combination of flow rate, particulate size, filtration level, and operating cost goals. All are engineered to provide optimum performance and maximum cost effectiveness in Eaton bag filter housings.

Economical PROLINE<sup>™</sup> 100 Series SE with eight bag capacity. QIK-LOCK<sup>™</sup> feature makes changeouts quick and easy.





	D DCF - mechanically cleaned filters	X MCF-824 filters	M MCS - mechanically cleaned strainers	<b>A</b> 2596 - automatic self-cleaning strainer	<b>B</b> Filter bags & bag filter housings	<b>C</b> Cartridges	<b>T</b> AFC, AFR, F tubular backwash	<b>S</b> Standard & fabricated pipeline strainers
Retention range (µm)	15 to 600	15 to 1,125	15 to 1,140	25 to 3,000	.45 absolute to 800	.03 to 150	1 to 1,700	38 to 12,700
Operating pressure rating psi (bar)	to 300 (to 21)	to 150 (to 10.5)	to 150 (to 10.5)	to 275 (to 18.7)	to 150 (to 10.5)	NA	to 1,000 (to 69)	to 1,480 (102)
Flow rate at 100µ gpm (m <sup>3</sup> /hr)	to 200 (to 45.4)	to 200 (to 45.4)	to 1,500 (to 340)	to 35,000 (to 7,949)	to 4,500 (to 1,021)	NA	to 3,000 (to 681)	to over 40,000 (to over 9,000)
Temperature* °F (°C)	to 350 (to 177)	to 180 (to 82)	to 180 (to 82)	to 150 (to 66)	to 500 (to 260)	to 752 (to 400)	to 350 (to 177)	450 (232)

Dependent on elastomer seal selection

The AFR self-cleaning tubular backwash system features low micron retentionsreduces labor, replacement media. and media disposal costs.

#### **T** AFR, AFC and F-series tubular backwashing filters

Eaton's single, duo, and multiplex tubular backwashing filters eliminate the need for disposable media with an advanced clean-in-place technology that simplifies maintenance and reduces operating costs giving users a sustainable solution for the automatic removal of debris from water.

#### **D** DCF mechanically cleaned filters

Eaton's DCF-Series mechanically cleaned filters combine mechanical simplicity and low initial cost with a design that produces low differential pressure to reduce energy consumption.

#### X MCF mechanically cleaned filters

Eaton MCF-824 Series mechanically cleaned filters use Eaton's magnetically coupled actuation technology to move the cleaning disc without a shaft or external seals. This minimizes the need for media changeout and associated product loss and disposal requirements, while simplifying access and reducing maintenance downtime.

### **M** MCS mechanically cleaned strainers

Eaton MCS-500 and MCS-1500 strainers use a unique magnetically coupled actuation technology to eliminate the need for dynamic seals. This produces an efficient, environmentally responsible, low purge volume solution for fresh water applications that minimizes both maintenance downtime and operating costs.

## **C** Cartridge filtration

Eaton nominal and absolute rated depth-type and Eaton membrane-type filter cartridges are engineered to deliver optimal performance in Eaton stainless steel and plastic filter housings across the full range of filtration applications, including difficult high purity water, food and beverage, and other critical process flow streams.



MCF-824 filter uses magnets to control the

cleaning disc



MCS-1500 strainer is perfect for high-capacity needs. Its magnetically coupled actuation eliminates the need for dynamic seals.

#### Eaton services

- State-of-the-art water testing lab facility
- Long-term or shortterm equipment rental
- Field service inspections, start-up, repair, replacement, and maintenance
- Extensive network of manufacturer representatives and distributors
- Worldwide technical support
- Team of product specialists dedicated to providing application engineering

#### Eaton quality standards

- ISO 9001:2008 quality management
- ISO 14001:2004 environmental management
- European standards DIN/DE/PED
- Canadian Registration Number (CRN)
- GB-150 (China)

HAYFLOW<sup>™</sup> filter element combines the best of both bag and cartridge filters into a single filtration element.