Mechanically Cleaned Filter System

The DCF-1600 disc clean filter (DCF) is an innovative, proven solution for filtering a wide range of liquids in a wide range of applications.

Designed to address the challenges of increasing environmental costs and pressures, loss of valuable product, and the need for greater operator safety, the DCF is like no other filtration system on the market. Key benefits include:

- No loss of valuable product caused by media changeout
- No replacement media costs or disposal needs
- Mechanically cleaned permanent media
- Reduced operator exposure
- Reduced environmental impact
- Reduced labor demands - no more media changeouts
- Increased profitability - improves overall system efficiency and reduces downtime
- Longer life - high screen strength and erosion resistance
- Space-saving design - small, compact footprint
- Collection and removal of contaminant from fluid being filtered - with no interruption of operation
- Unattended operation capability - with optional automation packages

How the DCF-1600 works

The patented design uses a spring-loaded cleaning disc that travels up and down inside the filter media - removing collected contaminants. Filtrate flows from the top down and from the inside of the media outward to increase retention of undesirable solids. Contaminants are trapped on the screen for easy removal and evacuation to the purge collection chamber.

On the downstroke, any remaining contaminants are driven downward. This process concentrates the solids for easy, complete elimination through the purge chamber.

On the upstroke, the cleaning disc removes particles from the media surface. System fluid flow washes the particles downward toward the purge chamber past the cleaning disc.
Ronningen-Petter DCF-1600
Mechanically Cleaned Filter System

Dimensions
Weight: 215 lbs (98 kg)
Height: 81.9 in. (2,082 mm)
Service: 104.9 in. (2,666 mm)
Footprint: 19.6 in. (498 mm) x 18 in. (457 mm)
Volume: 13 gal (49 l) total
Debris Volume: 2 gal (7.6 l) capacity

Connection
Standard: 3 in. (80 mm) I/O NPT thread, 2 in. (50 mm) purge valve NPTI thread
Optional: Flanged (AN SI, DIN), tri-clamp or BST thread

Process Parameters
Temperature: 400°F (204°C) max.
Flow: 30–200 gpm (114–757 l/min)
Operating pressure: 30–150 psig (2–10.5 bar)

Media
Wedge wire: 15µ – 1125µ, or defined pore 25µ – 100µ
Screen: diameter 8 in. (203 mm), length 24 in. (610 mm), area 610 in² (3935 cm²)

Elastomer Seals
Standard: Element and lid: Viton® (400°F (204°C) maximum), Shaft seal: urethane (220°F (105°C) maximum)
Optional: Element and lid: EPT (300°F (149°C) maximum), or Teflon® 400°F (204°C) maximum)
Shaft seal: Teflon® 400°F (204°C)

Cleaning Disc
Standard: Polyethylene (UHMW PE) (<180°F/82°C)
Optional: Teflon (<400°F/204°C), Kynar (<285°F/140°C)

Housing/ Wetted Parts
Materials
Standard: 316 stainless steel, glass bead blasted

Stand Materials
Standard: 304 stainless steel

Controllers
Standard: continuous cleaning valve (CCV)
Options: push button, semi-automatic electric, electric timer, dual pneumatic timer, PLC minicomputer

Utilities
Electrical: (if equipped with optional electric automatic control timer): 110 or 220 Volt, 50 or 60 Hz, single-phase.
Air: 60 psig (4 bar) at 5 CFM (140 m³/m). Air must be clean, dry, and non-lubricated
Water: when equipped with optional FluidSeal: flow rate <1 gpm (3.8 l/min)
when using water (rather than filtrate) with optional Stealth Purge: 35 psig (2.4 bar) or less than filter's inlet pressure

FluidSeal Option
Advanced dual seal design replaces standard single seal. Available in Teflon or urethane to suit liquid properties. With Twin Actuators, also available as a retrofit kit

Other Options
Stealth Purge with semi-automatic or PLC mini computer - water flush available
Steam jacketed housing
ASME UM code
Electropolish external/ internal
Polished interior surface finish
1/4 in. (6.4 mm) NPT gauge ports
Multiplex configuration

 Specifications without prior notice.
DCF is a registered trademark and FluidSeal is a trademark of Eaton. All other trademarks are the properties of their respective owners.

Eaton
9151 Shaver Road
Portage, Michigan 49024 USA
Toll Free: 800-656-3344 (North America only)
Phone: +1 269-323-1313
Fax: +1 269-323-0065
E-mail: info@eaton.com
Web: www.filtration.eaton.com

Eaton SAS
Immeuble Colisée Défense
50-64 avenue François Arago
F-92022 Nanterre Cedex France
Phone: +33 (0) 1 56 83 83 00
Fax: +33 (0) 1 56 83 83 01

Eaton reserves the right to change specifications without prior notice.

RAR-DCF1600SS
PW B RPF-140 02/02 4M
Litho in U.S.A.