CECO Mefiag

SERIES HF HORIZONTAL DISC FILTRATION SYSTEMS





MEFIAG® is the world's leader in the design and manufacture of filter systems utilizing horizontal disc technology for superior performance. The new 9000-HF through 30000-HFD systems utilize an all fiberglass pump for superior corrosion resistance and higher flow.

- ✓ Flow rates to 30,000 GPH
- ✓ Horizontal disc technology
- ✓ Maximum surface area (1 sq. ft. per 100 GPH!)
- ✓ Large sludge holding capacity
- Superior corrosion resistance
- ✓ FRP pump with choice of mechanical seals
- ✓ Temperature to 190°F (90°C)
- Low disposal cost
- Choice of cellulose, carbon/cellulose or reusable polypropylene filter media
- Powder coated steel frame with casters for easy handling
- ✓ NEMA 4 water tight, corrosion resistant starter
- Mechanical cover lifting device for easy access to filter pack
- Bottom plate and lifting rod for quick change of disc stack standard (optional for 4500 & 9000)

Exclusive MEFIAG® stainless steel lifting device provides for simple mechanical movement of the cover for maintenance purposes. Just turn crank to raise lid. Then swing lid away to access filter media.



Liquid

Tight

Motor

Starter

Air Relief

Valve

Filter

Chamber

Filter

Filter chambers are constructed of mild steel with hard rubber lining (3 mm) on the interior and corrosion resistant paint (2 coats) on the exterior.

A flanged tangential inlet is standard, along with a bottom outlet and drain.

Stainless steel eyebolts with handwheels hold the powder coated steel cover in place. The lifting device provides for mechanical movement of the cover for maintenance purposes. An air release valve positioned on the cover, is also used as the return line during pre-coating.

A pressure gauge (0-60 PSI) is supplied with a corrosion resistant guard.

Filter media suited for the application is placed between the rigid polypropylene filter discs. Filter media of various materials and micron ratings are available. Ten (10) micron cellulose is standard.

All systems are mounted on a powder coated structural steel frame with casters for easy handling.

Pump

Model 9000-HF through 30000-HFD

Fybroc fiberglass centrifugal pumps are standard. Mechanical seal options are single CRS- 35/B with silicon carbide faces or double water flush.

Model 4500-HF

Mefiag polypropylene centrifugal pumps are standard with a stainless steel pump shaft. Mechanical seal is CRS-25/B with silicon carbide faces.

Slurry Tank

Slurry tanks are mild steel construction with an interior of hard rubber (3 mm) and an exterior of corrosion resistant paint (2 coats). They are used to facilitate pre-coating and addition of activated carbon (if required), as well as solution make-up and priming of the pump. The slurry tank can also be used to store solution from the filter chamber during changing of media or maintenance.

Pre-coating provides superior filtration and extends the life of the filter media.

Piping, Valves and Connections

Piping, valves, and connections are all CPVC construction.

Suction of the pump is piped to permit flow from the solution tank, slurry tank, and the filter chamber.

X-Construction

X-construction is used for more aggressive solutions such as acid copper, acid zinc, and acid tin. The filter chamber and slurry tank are outside rubber lined, the base and cover are powder coated and the pump shaft is titanium.

All CPVC Plumbing Polypropylene **TEFC** Pump Motor Model 4500-HF Model 9000-HF Model 15000-HF Model 18000-HFD Model 30000-HFD Parameter Precoated Flow Rate (GPH 18,000 4.500 30.000 (Filtering Capacity) Open Pumping Capacity 7.200 13.000 18.000 26.000 36.000 Filtration Surface Area (Ft2) 44 89 150 178 300 Number of Filter Media 45 50 100 120 (14" Diameter) (19" Diameter) (22" Diameter) (19" Diameter) (22" Diameter) Sludge-Holding Capacity (Ft 0.85 2.11 3.0 4.22 6.0 Dimensions: with Slurry 41"x30"x50" 59"x44"x59" 59"x44"x79" 90"x55"x55" 104"x71"x59" w/o Slurry 30"x24"x50" 44"x36"x59" 44"x36"x79" N/A (LxWxH) Crated Weight (approx): 2,100 2,400 720 1280 1.100 with Slurry w/o Slurry 600 1140 1.300 N/A N/A (Lbs) System Connections: 2" NPT (Female) 3" NPT (Female) 3" NPT (Female) (2) 3" NPT (Female) (2) 3" NPT (Female) Suction Discharge 1.5" NPT (Female) 2.0" NPT (Female 3" NPT (Female) (2) 2" NPT (Female) (2) 3" NPT (Female) Motor* (TEFC) 5 HP 10 HP

Cover

Lifting

Device

Slurry

Slurry

Recirculation

Line

Pressure

Gauge

Filter

Inlet

*Motor availability (Specify completely with order): 3 HP, 5 HP or 10 HP - 208, 230, 460, and 575 VAC (all 60 HZ, three-phase only) Fully-wired, liquid-tight motor starter is included for proper thermal and overcurrent protection

(Two Motors)

VD Lid assembly (15000/30000 standard, 9000 optional)

VD Lid assembly is used to tighten down the disc stack verses the cover.

© COPYRIGHT 2008 CECO ENVIRONMENTAL, MEFIAG DIVISION

MEFIAG $^{\otimes}$ IS A REGISTERED TRADEMARK OF CECO ENVIRONMENTAL

20-5013 608

(Two Motors)

CECO Mefiag

A Division of CECO Environmental

700 Emlen Way • Telford, PA 18969

Phone: 215.723.8155

Email: infofhs@onececo.com www.cecoenviro.com