



## Reverse Flow Horizontal Filters



- Superior, clean filter tank processing
- Efficient for intermittent or continuous operation
- Internal filter plate cartridge assembly fully contains filter cake
- Fast, easy removal of filter plate cartridge
- Positive sealing during increased pressure differential
- Complete recovery of product by chasing or gas blow down
- Engineered to use filter aids
- A wide range of filter media from paper and non-wovens to cloth is available
- All-welded filter plates and plates for sanitary service are available



***For All Fine Filtration***

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# Effective and Efficient

The Sparkler Reverse Flow (RF) Horizontal Plate Filter combines the proven filtration superiority of the Sparkler Horizontal Plate Filter with the benefit of easy maintenance due to its reverse flow design. The horizontal arrangement of the plates assures economical operation and uniform clarity by maximizing the distribution of the filter cake.

During operation, the reverse flow of the Sparkler RF Filter deposits all filter cake and solids in the plate cartridge or bundle. Thus, clean tank processing with only clear filtrate in the tank is achieved. By simply removing the bundle, Sparkler RF Filter can be easily and quickly cleaned.



## Versatile Operations

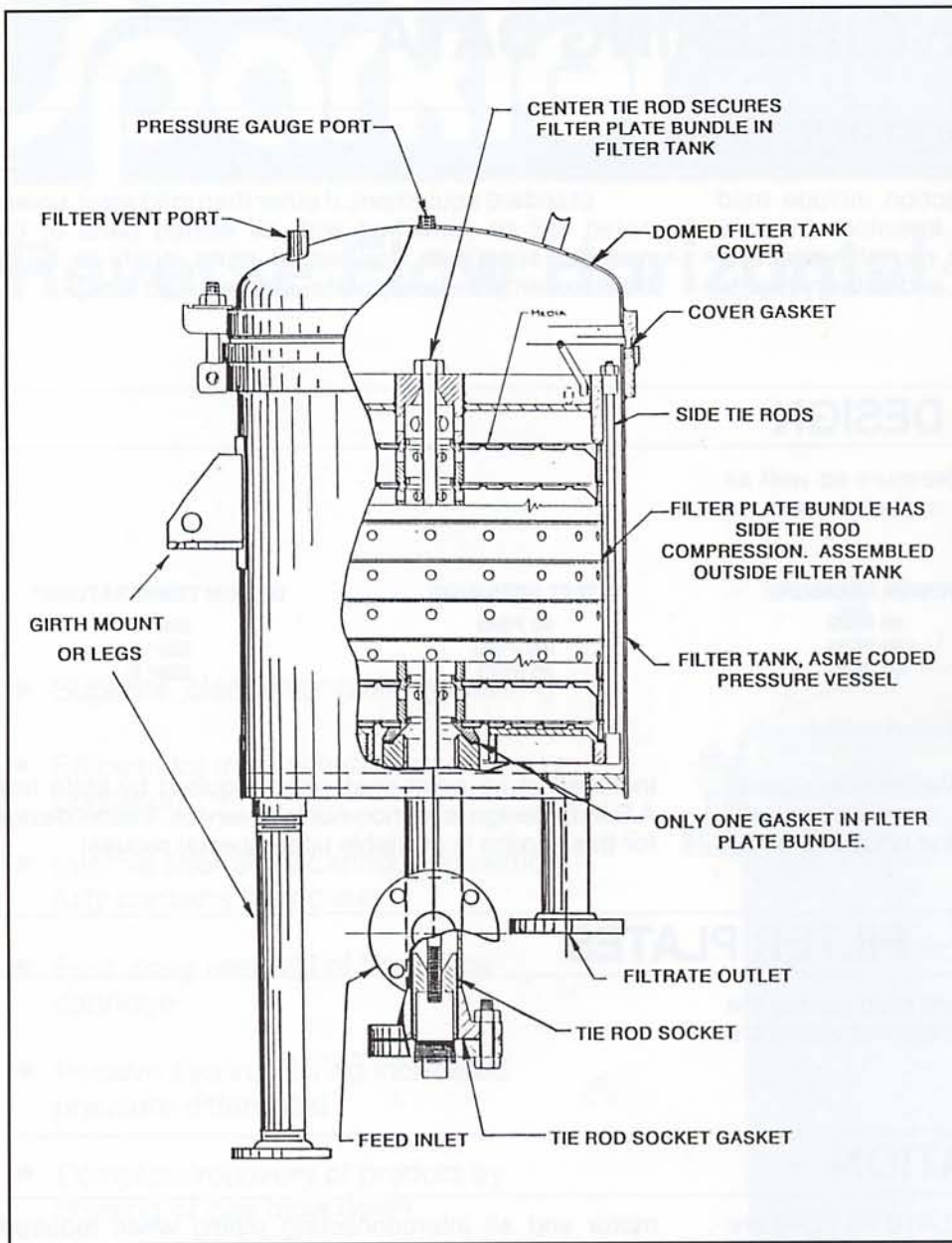
Sparkler RF Filters are an excellent choice for either continuous or intermittent operations. The tank inlet and plate cartridge seal is designed to provide a positive seal over a wide range of pressure differentials. A variety of filter media including paper and non-wovens can be used with the RF filter. In addition, filter aids such as diatomeaceous earth, cellulose and activated carbon can be adapted to achieve specific process requirements without compromising flow rates. Complete product recovery is easily achieved by blowing air or inert gas through the bottom feed inlet and chasing residual product through the filter.

## Sparkler Reverse Flow Horizontal Plate Filters

Model Number	Filter Area Sq. Ft.	Cake Space Cu. Ft.
RF18-S-7	10.85	0.63
RF18-D-4	6.20	0.62
RF18-S-15	23.25	1.35
RF18-D-10	15.50	1.55
RF18-S-18	27.90	1.62
RF18-D-12	18.60	1.86
RF18-S-23	35.65	2.08
RF18-D-15	23.25	2.32

Model Number	Filter Area Sq. Ft.	Cake Space Cu. Ft.
RF18-S-30	46.50	2.71
RF18-D-20	31.00	3.10
RF33-S-9	49.23	4.10
RF33-S-14	76.58	6.38
RF33-S-19	103.93	8.66
RF33-S-28	153.16	12.76

**Typical Sizes:** RF18 Plates are: Shallow (S)- 1.0" High; Deep (D)- 1.5" High; RF 33 Plates are: Shallow (S) - 1.5" High. Built to ASME pressure vessel code.



## Sparkler Reverse Flow Horizontal Plate Filter Model RF18

### Easy Maintenance

Since the Sparkler RF Filter cartridge seals directly to the inlet nozzle of the tank, all filter cake and solids are captured in the filter plate cartridge and not in the tank.

By removing a center tie rod, the Sparkler RF Filter cartridge or bundle is easily removed intact. After removal, side tie rods on the filter plate cartridge enable the plates to be easily disassembled, reassembled and replaced in one piece into the filter tank.

Sparkler RF Filters are available for a wide variety of process applications including sanitary services. Individual filters, as well as complete process packages, are available ready to install direct from factory.



# ENGINEERING DATA

## MATERIALS OF CONSTRUCTION

Standard materials of construction include mild steel, 304 and 316 stainless steel. Inventories assure quick delivery. Materials such as elc, monel, hastelloys, titanium and nickel are not stocked, and delivery is subject to availability.

Standard equipment, if other than mild steel, unless noted will be furnished with all wetted parts of the material specified. Non-wetted parts, such as swing bolts, external tank supports, etc., are mild steel.

## PRESSURE VESSEL DESIGN

Standard design pressure and test pressure as well as design temperature for standard materials are as follows:

MATERIAL	DESIGN PRESSURE	TEST PRESSURE	DESIGN TEMPERATURE*
M.S.	60 PSIG	90 PSIG	650° F
304 S.S.	60 PSIG	105 PSIG	350° F
316 S.S.	60 PSIG	95 PSIG	350° F

\*Design temperature refers to vessel design, not to gasket material.

Higher pressure vessels are available upon request. Standard vessels are built to A.S.M.E. specifications and include coded material. Inspection and code stamp are

included at no extra cost when required by state law. A.S.M.E. design is for non-nuclear service. Vessel design for this service is available upon special request.

## DESIGN PRESSURE – FILTER PLATES

Standard design for allowable pressure drop across the plates is 50 PSID. Higher pressure differential plates are available upon request.

## GENERAL INFORMATION

All SPARKLER HORIZONTAL PLATE FILTERS are available with various types of mountings. Standard units include flanged pipe leg mountings. Vessel wall gusset mountings are available for "through floor" installation and are available on request. Other mountings include portable bases that are available with pump,

motor and all interconnecting piping when required. Transfer piping is available on complete portable equipment. Precoat and bodyfeed tanks complete with necessary filter aid feeding devices may be included and mounted on a common base with the filter or independently mounted.

**SPARKLER also manufactures a complete line of Horizontal Plate Filters, Vertical Plate Filters, Horizontal (dual position) Plate Filters, and Manual/Auto Nutsche Filters.**

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