



PROCESS BURNER GAS CONDITIONING

High Efficiency Fuel Gas Separation / Filtration and Coalescing in One Package

Maintaining the new high performance, low emission process burners requires that fuel quality be free of contamination. Constant maintenance due to fouling and plugging is a sure sign that the fuel is dirty and/or wet.

The **TRITON**[®] filter coalescing system will assure that the fuel gas is properly conditioned to minimize the need for high maintenance and poor performance associated with contaminated fuel.

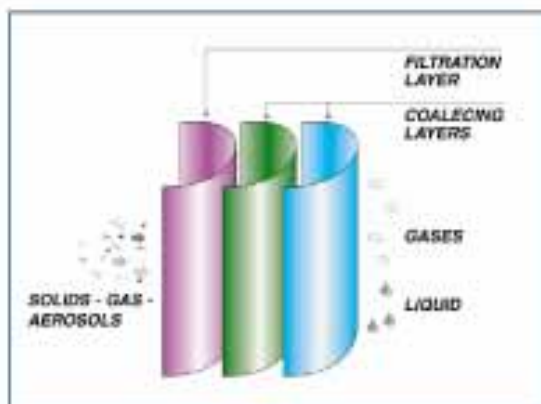


High Efficiency – The multi-function **TRITON**[®] element combines the essential components to condition the gas in a single element (pre-filtration for particulate and coalescing in a single element)

Compact Footprint – The single element compact vertical vessel design saves space and allows the deployment in very tight situations. Elimination of a separate filtration vessel also means less in terms of cost, complexity and instrumentation.

Ease of Maintenance – The **TRITON**[®] element can be quickly replaced by one man without the need for special tools or confined space entry. No o-rings or separate element gaskets to come loose.

Low Pressure Drop – Typically our system is designed so that the initial pressure drop is less than 1 psi.



TRITON[®] Fuel Gas Filter Operating Principle



Filtration Process Skid

Single Vessel w/ Slug Catcher



Performance Specifications

Standards

Filtration Efficiency	.01 micron nominal with 99.98% coalescing efficiency at 0.3 micron (um) per ANSI/CAGI ADF 400
Flow Rate (air @ < 1 psi Δ)	<p>Element Rate .05 – 1.8 mmscd @ 2 psig operating</p> <p>.5 – 29.2 mmscd @ 50 psig operating</p> <p>2.1 – 73.2 mmscd @ 1,000 psig operating</p>
Temperature (continuous)	Standard to 275 F High Temp to 400 F

Vessels & Elements

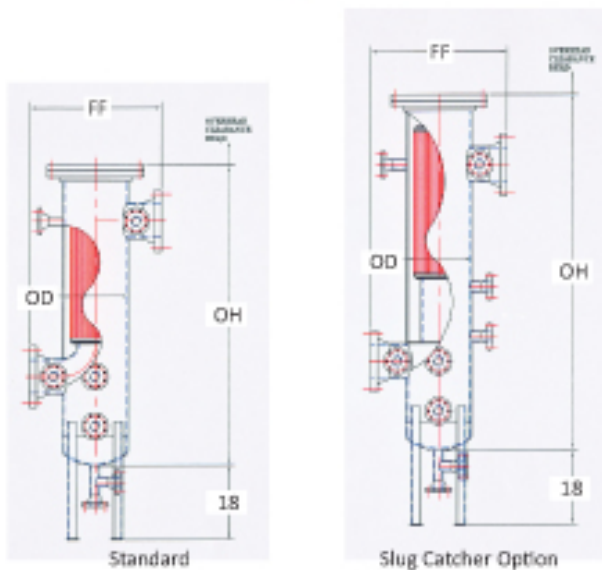
- ✓ Carbon Steel – Epoxy Painted interior and exterior
- ✓ ASME VIII
- ✓ Design 260 psig @ -20 to 200F (w many variations available)
- ✓ All nozzles to flanged RFWN with closure to be slip-on.
- ✓ Blind Flange Closure
- ✓ Davit Included
- ✓ Visual Differential Pressure Gauge
- ✓ Visual Sight Glass
- ✓ Steam Out Connection

Service Platforms & Skids

Request Skid Guideline Standard

Options

- ✓ Special Alloys
- ✓ Electroless Nickel Plating (H₂S or chloride service)
- ✓ Remote monitoring and control
- ✓ Automatic Liquid Drains
- ✓ Dew Point Heater
- ✓ Pressure / Flow Controls



Request Additional Information:

Installation & Piping Recommendations
Principles of Coalescing
E-Nickel Coating for Acid / Sour Gas Service
Gas Conditioning Bulletin 0611a

Flow ¹ (mmscd)	.6	2.1	3.9	9.8	16.2	25.9	48.6
Process Size	2" RFWN	3" RFWN	4" RFWN	6" RFWN	8" RFWN	10" RFWN	12" RFWN
Housing Series	FXTRT04	FXTRT08	FXTRT17	FXTRT30	FXTRT41	FXTRT65	FXTRT140
OD	8.6"	8.6"	10.75"	12.75"	16.0"	20.0"	24.0"
OH ²	41.0"	49.0"	52.0"	59.0"	72.0"	82.0"	84.0"
FF ³	25.0"	26.0"	28.0"	32.0"	32.0"	42.0"	42.0"
Slug Catcher adder ⁴	Add 14.0"	Add 14.0"	Add 14.0"	Add 14.0"	Add 14.0"	Add 14.0"	Add 14.0"
Overhead Clearance	18.0"	26.0"	26.0"	30.0"	39.0"	42.0"	42.0"
Weight (approx) - lb	175 - 330	305 - 375	420 - 506	555 - 655	775 - 885	1275 - 1800	1475 - 1950

¹ Flow rate based on typical refinery fuel gas (0.6 specific gravity) @ 50 psi operating pressure. Higher operating pressures will result in higher flow rate.

² Dimensions are typical and include legs -

³ Flange-to-Flange dimension assumes 180° orientation (nozzle location can be customized)

⁴ Slug catcher option consists of a additional lower chamber for gross liquids (separate sight glass and drain required)

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