

Clay treaters are usually placed upstream of a coalescer separator system to remove surface active agents (surfactants), color and additives from jet fuel. These unwanted contaminants may be present in fuel at the processing and refining levels or picked up from various transportation methods such as trucks, ships and pipelines that carry several types of petroleum products in addition to jet fuel. The contaminant compounds will accumulate and disarm the coalescer cartridge and reduce the water coalescing efficiency of the coalescer separator. Clay treatment removes the surfactant compounds, color and additives by adsorption and delivers treated fuel to the coalescer separator while prolonging the life of the coalescer cartridges.

Clay treater housings have no internal moving parts. The product flows through the housing inlet chamber and equalizer tube. The equalizer tube evenly distributes product through each clay cartridge. Clay elements are vibra-packed to capacity with the highest grade of Attapulugus clay. This clay has the appearance of very fine sand, with each granule having hundreds of tiny, fiber-like crystals that capture molecular surfactants. The surface area of Attapulugus clay exceeds 13 acres per pound. Facet recommends a maximum flow of 7 gpm (26 lpm) per cartridge.

Facet clay treaters will continuously adsorb surfactants, color and additives from jet fuel when used with Facet replaceable clay elements. Housings are designed for easy servicing and low maintenance. Standard and optional accessories and connections are available to facilitate piping and installation requirements. Clay treaters provide a complete adsorptive system that delivers treated fuel while also prolonging cartridge life of the downstream filter separator.

Standard Housing Design

- Welded carbon steel construction
- ASME Code, Section VIII construction, stamped and certified
- Design pressure: 150 psi @ 250 °F (10.3 bar @ 121 °C)
- Inlet and outlet permanently marked
- Interior: Epoxy coated (EI 1541)
- Exterior: Prime coated
- Removable cartridge mounting post
- Swing bolt closure
- Buna-N closure gasket
- Hydraulic headlift

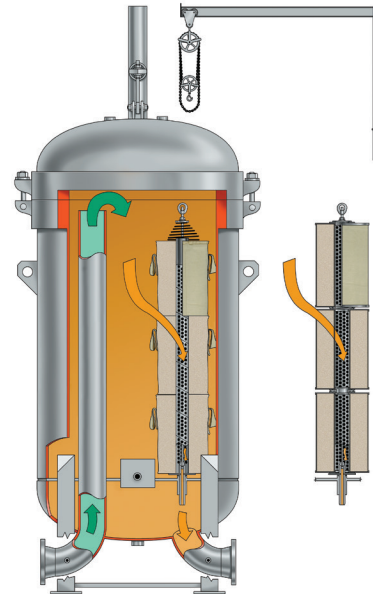
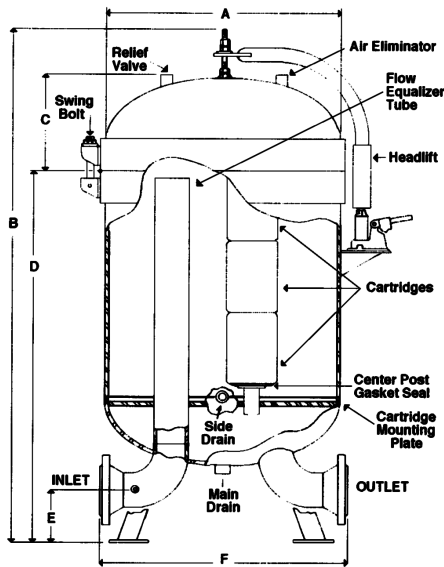
Standard Connections

- ¼" differential pressure gauge
- ¾" pressure relief valve and vent
- 2" main drain
- 1 ½" side drain

Options

- Automatic air eliminator
- Automatic air eliminator check valve
- Differential pressure gauge
- Pressure relief valve
- Sampling probes
- Cartridge hoist assembly
- Removable bundle design

F Series Clay Treater Housings



Typical Clay Treater Housing Flow Diagram
(Including optional items)

DATA

MODEL NUMBER	FLOW RATE		LIQUID VOLUME		REQUIRED CARTRIDGES	DRY WEIGHT		HOUSING TYPE
	gpm	lpm	gal	ltr		lbs	kg	
13F3-C	275	1041	288	1090	39	1913	868	Dished
24F3-C	500	1893	456	2067	72	3250	1474	Dished
31F3-C	650	2460	702	2657	93	4459	2023	Dished
40F3-C	840	3179	874	3308	120	5380	2440	Dished
50F3-C	1050	3974	1167	4417	150	6976	3164	Dished
60F3-C	1260	4769	1442	5458	180	8298	3764	Dished
67F3-C	1407	5325	1570	5942	201	9602	4355	Dished

Other sizes available on request.
Weights and volumes are approximate.

DIMENSIONS

MODEL NUMBER	INLET/OUTLET DIAMETER		DIMENSIONS												ANCHOR BOLT			
			A		B		C		D		E		F		BOLT CIRCLE		BOLT HOLE	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
13F3-C	4	102	32	813	127 ¹ / ₄	3232	12 ³ / ₄	324	87 ¹ / ₂	2222	6	152	30	762	27 ³ / ₈	695	7 ⁷ / ₈	22
24F3-C	4	102	42 ³ / ₄	1086	134 ³ / ₁₆	3408	16 ³ / ₄	425	90 ⁷ / ₁₆	2297	6	152	30	762	36 ¹ / ₂	927	7 ⁷ / ₈	22
31F3-C	6	152	48 ³ / ₄	1238	141	3581	18 ³ / ₄	476	95	2413	7 ¹ / ₂	191	47	1194	40 ¹ / ₂	1022	1 ⁷ / ₈	29
40F3-C	6	152	54 ³ / ₄	1391	145 ⁵ / ₁₆	3691	20 ¹³ / ₁₆	529	97 ¹ / ₄	2470	7 ¹ / ₂	191	43	1092	50	1270	1 ⁷ / ₈	29
50F3-C	8	203	60 ³ / ₄	1543	152 ¹ / ₁₆	3878	23 ¹ / ₄	591	102 ³ / ₄	2610	9	229	55	1397	52	1321	1 ⁷ / ₈	29
60F3-C	8	203	67	1702	154 ³ / ₄	3931	25 ⁵ / ₈	645	102 ³ / ₄	2610	9	229	60	1524	52	1321	1 ⁷ / ₈	29
67F3-C	8	203	73	1854	158	4013	27 ⁷ / ₈	702	104	2642	9	229	62	1574	56	1422	1 ⁷ / ₈	29

Other sizes available on request.

NOTES:

- Housing model number will include clay treater cartridge model number when selected.
- Clay treater housings use Facet bag or canister style cartridges, 3 deep per stack.
- Clay treater cartridges are not installed at factory prior to shipment.