



RT SERIES DAF (DISSOLVED AIR FLOTATION) SYSTEMS

GENERAL DESCRIPTION:

Dissolved Air Flotation (DAF) is a proven and effective physical/chemical technology for treating a variety of industrial and municipal process and wastewater streams. DAF systems are commonly used to meet a variety of treatment goals including:

- Product recovery and reuse
- Pretreatment to meet sewer discharge limits
- Pretreatment to reduce loading on downstream biological treatment systems
- Polishing of biological treatment effluent
- Thickening of biosolids

Evoqua's RT Series DAF systems are designed to remove total suspended solids (TSS), biochemical oxygen demand (BOD), and oils and greases (O&G) from a wastewater stream. Contaminants are removed through the use of a dissolved air-in-water solution produced by injecting air under pressure into a recycle stream of clarified DAF effluent. This recycle stream is then combined and mixed with incoming wastewater in an internal contact chamber where the dissolved air comes out of solution in the form of micron-sized bubbles that attach to the contaminants. The bubbles and contaminants rise to the surface and form a floating bed of material that is removed by a surface skimmer into an internal hopper for further handling.

RT SERIES DAF FEATURES

RT Series packaged DAF systems have incorporated over twenty-five years of continuous improvements with multiple installations in a variety of applications. RT systems provide unique standard features including:

- Fifteen (15) different models to meet a variety of applications and flow ranges (10 to >2,000 gpm)
- Complete, skid-mounted design for ease of installation (no field assembly required)
- Rectangular profile for maximum space utilization
- Rugged tank design that will not flex
- Superior performance without the use of plate-pack that can foul or collapse
- Quality drive and pump components for long-term reliability
- An industry-leading HELLBENDER® whitewater system that is both efficient and simple to use
- Large, internal float hopper eliminates the need for an external float tank
- Standard RT series options include:
 - Available in 304 or 316 SST tank construction
 - Recycle Piping available in PVC, CPVC, 304 SST, 316SST
 - Several controls platforms (Motor Starter, Relay Logic, Integrated Controller, Allen Bradley PLC/HMI)

DAF EQUIPMENT SPECIFICATIONS

DAF Model	Utility Requirements		Piping Connections and Specifications				Physical Dimensions**				Capacities		Weight **	
	Electrical (Voltage)	FLA (Amps) 460VAC Typ	Inlet Connection (150# FLG)	Effluent Connection (150# FLG)	Float Discharge (150# FLG)	Settled Solids Discharge	Length, overall	Width, overall	Height, overall	Active Surface Area (ft ²)	Nominal Water Volume (gals)	Float Hopper Capacity (gals)	Shipping Weight (lbs)	Operating Weight (lbs)
RT-015X	460VAC/3ph/60Hz	6.0	3"	3"	4"	(3) 2" MPT	8'-3"	3'-6"	5'-3"	12	280	15	1,300	3,700
RT-030X		9.0	4"	4"	4"	(3) 2" MPT	11'-10"	4'-9"	7'-1"	30	880	60	2,760	10,260
RT-050A		23.5	6"	6"	4"	4" FLG	14'-11"	6'-4"	7'-2"	57	1,260	100	4,900	15,500
RT-070A		23.5	6"	6"	4"	4" FLG	17'-11"	6'-4"	7'-2"	73	1,550	100	5,700	19,200
RT-080A		23.5	8"	8"	6"	4" FLG	15'-8"	8'-5"	8'-2"	78	1,900	180	5,600	26,600
RT-100A		23.5	8"	8"	6"	4" FLG	18'-8"	8'-6"	8'-2"	101	2,400	170	7,000	33,300
RT-125A		29.0	12"	12"	6"	6" FLG	19'-1"	10'-5"	9'-8"	125	4,500	360	8,400	46,000
RT-140A		29.0	10"	10"	6"	4" FLG	24'-8"	8'-5"	8'-2"	146	3,500	180	8,600	39,900
RT-150A		29.0	12"	12"	6"	6" FLG	22'-5"	10'-5"	9'-8"	153	5,500	390	10,000	55,800
RT-160A		29.0	10"	10"	6"	4" FLG	27'-8"	8'-5"	8'-2"	159	4,000	180	9,400	42,500
RT-180A		29.0	12"	12"	6"	6" FLG	25'-1"	10'-5"	9'-8"	182	6,500	360	11,000	71,900
RT-240A		29.0	12"	12"	6"	6" FLG	31'-1"	10'-5"	9'-8"	239	8,450	360	12,500	83,300
RT-300A		29.0	10"	12"	6"	6" FLG	37'-1"	10'-5"	9'-8"	297	11,500	360	15,600	111,500
RT-350A		43.0	16"	16"	8"	6" FLG	37'-6"	13'-0"	10'-0"	360	12,400	780	19,000	135,600
RT-500A		43.0	16"	16"	8"	6" FLG	49'-6"	13'-0"	10'-0"	503	17,500	780	23,000	170,000

* Other voltage options available upon request ** Estimated

AVAILABLE RT SERIES DAF SYSTEM OPTIONS:

- Access platforms and stairs
- Flotation cell cover to contain and vent process gasses
- Integrated skid mounted flocculation tubes
- Flocculation mix tanks
- Pressure transmitter/flow monitoring sensor
- Sludge level monitoring
- Effluent TSS monitoring
- Chemical feed systems
- Polymer blend and feed systems
- Comprehensive treatability testing program
- Customization available with little impact on either delivery or cost

KEY INDUSTRIAL MARKETS

- Food & beverage
- Oil & gas
- By product rendering
- Pulp & paper
- Biochemical
- Manufacturing
- Mining
- Light industry

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