

IDEAL

DAFTM

Dissolved Air Flotation



Ideal DAF™

Dissolved Air Flotation (DAF) systems remove suspended solids, fats, oils, greases and non-soluble organics by a process of dissolving air into water under pressure. The process begins with the water to be treated entering the DAF through an influent header box that reduces velocity and distributes the water across the length of the vessel. In order to optimize treatment, the influent header box is designed with multiple points at which whitewater, a highly saturated pressurized stream of air and DAF effluent, and flocculant, where applicable, are injected. Wastewater then enters the flotation zone and microbubbles from the whitewater attach to the particle surface and affect the particle density, causing the suspended solids to float to the surface of the DAF where they are skimmed by a chain and flight and separated into the sludge hopper. The treated wastewater is continuously removed at several points inside the DAF and discharges over pipe weirs into an effluent chamber. From there, it flows out of the DAF.



The Ideal DAF™ achieves high rate removal efficiencies at a low operational cost with a smaller footprint and longer lifespan by employing such techniques as:

- 💧 **Progressive Water Extraction** – Extended retention time and better effluent quality
- 💧 **Cross-Flow Design** – Lower velocity and better separation
- 💧 **Ideal DAG™ Technology** – High removal efficiency, lower power requirement and lower chemistry
- 💧 **Plate Separators** – Maximize solids removal
- 💧 **Thickening Beach** – Sludge thickening
- 💧 **Cone Bottom** – Easy sludge removal

With a polypropylene construction, the Ideal DAF offers benefits including:

- 💧 Corrosion resistance
- 💧 Up to 9,000 GPM systems
- 💧 High TDS and saltwater tolerance
- 💧 Chemical treatment flexibility
- 💧 Heavy duty, lightweight construction
- 💧 Wide pH range
- 💧 High temperature tolerance
- 💧 Guaranteed long life

MODEL	FLOW *		APPROXIMATE VESSEL DIMENSIONS						PIPE DIAMETERS						SHIPPING WEIGHT		OPERATIONAL WEIGHT		RAKE
	GPM	m3/hr	W		L		H		Influent		Effluent		Sludge		lbs.	kgs.	lbs.	kgs.	HP
ROP-5	5	1	3'5"	1.0 m	6'0"	1.8 m	4'6"	1.4 m	2"	50 mm	2"	50 mm	2"	50 mm	900	410	2,450	1,110	0.5
ROP-20	20	5	3'5"	1.0 m	8'6"	2.6 m	4'6"	1.4 m	3"	80 mm	4"	100 mm	2"	50 mm	1,100	500	3,700	1,680	0.5
ROP-40	40	9	5'9"	1.8 m	8'6"	2.6 m	4'6"	1.4 m	3"	80 mm	4"	100 mm	2"	50 mm	1,350	610	6,850	3,110	0.5
RSP-15MS	60	14	4'3"	1.3 m	6'11"	2.1 m	7'7"	2.3 m	3"	80 mm	4"	100 mm	2"	50 mm	2,800	1,270	4,050	1,840	0.5
RSP-30MS	120	28	4'3"	1.3 m	9'9"	3.0 m	7'7"	2.3 m	3"	80 mm	4"	100 mm	2"	50 mm	3,400	1,540	6,650	3,020	0.5
RSP-45MS	180	41	4'3"	1.3 m	12'8"	3.9 m	7'7"	2.3 m	4"	100 mm	6"	150 mm	2"	50mm	4,550	2,060	12,550	5,690	0.5
RSP-8S	320	74	6'7"	2.0 m	13'10"	4.2 m	10'0"	3.1 m	6"	150 mm	8"	200 mm	3"	80 mm	8,000	3,630	23,700	10,750	1.5
RSP-11S	500	115	6'7"	2.0 m	17'5"	5.3 m	10'0"	3.1 m	6"	150 mm	8"	200 mm	3"	80 mm	10,250	4,650	37,450	16,990	1.5
RSP-17S	750	173	6'7"	2.0 m	21'0"	6.4 m	10'0"	3.1 m	10"	250 mm	8"	200 mm	3"	80 mm	11,900	5,400	44,400	20,140	1.5
RSP-17SW	1,100	253	11'0"	3.4 m	21'0"	6.4 m	10'0"	3.1 m	10"	250 mm	12"	300 mm	3"	80 mm	14,200	6,440	71,700	32,520	1.5
RSP-20SW	1,400	322	11'0"	3.4 m	24'7"	7.5 m	10'0"	3.1 m	12"	300 mm	14"	350 mm	3"	80 mm	17,100	7,760	82,500	37,420	5
RSP-25SW	2,000	460	11'0"	3.4 m	29'6"	9.0 m	10'0"	3.1 m	14"	350 mm	18"	450 mm	3"	80 mm	20,750	9,410	127,950	58,040	5
RSP-13L	5,000	1,150	11'6"	3.5 m	32'5"	9.9 m	15'7"	4.8 m	24"	600 mm	30"	750 mm	6"	150 mm	43,000	19,500	209,000	94,800	5
RSP-20L	9,000	2,070	11'6"	3.5m	45'0"	13.7 m	16'2"	4.9 m	30"	750 mm	36"	900 mm	6"	150 mm	63,500	28,800	295,500	134,040	5

All models also available in stainless steel construction.

* Flow based upon a TSS level of < 2,500 mg/l

World Water Works, Inc. is a highly focused company in the wastewater treatment sector. We are driven to provide industrial and municipal customers proven and cost-effective wastewater treatment solutions delivering superior effluent quality.

We are a passionate and adaptable company providing value through expertly engineered products and technologies. Founded in 1998, we have unparalleled depth of application knowledge and experience.

We have offices located throughout the US, India, and UAE with a fully integrated in-house manufacturing facility at our headquarters in Oklahoma City, OK. This strategically positions us to control schedule while delivering the highest quality products and solutions at the lowest cost of ownership. Working hand-in hand with our customers, we optimize wastewater treatment solutions globally.

We at World Water Works are ensuring our wastewater treatment systems meet today's challenges while preparing for tomorrow's water needs.

Ideal DAF™ Rental Fleet

With a fleet of Ideal DAF™ rental units available, emergency, temporary, or short-term situations can be addressed immediately. Flow capacities of these units range from 40–750 GPM. Most units are shipped with and include:

- Skid mounted or stand-alone option
- Full controls
- Flowmeters
- Chemical feed
- Start-up and optimization services