



GSD (China) Co., Ltd.



DAF & IDAF SERIES

Standard & Integrated Dissolved Air Flotation Clarifies



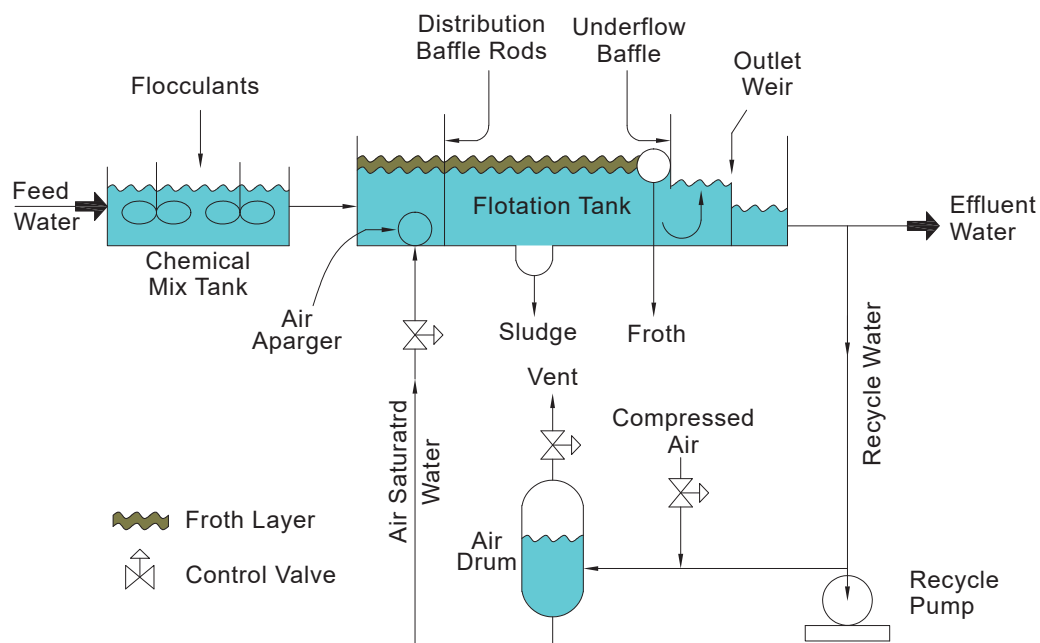
www.gsd.net.cn

Export Version

DAF Dissolved air flotation clarifies

ABOUT DAF

Dissolved air flotation (DAF) is a water treatment process that clarifies wastewaters (or other waters) by the removal of suspended matter such as oil or solids. The removal is achieved by dissolving air in the water or wastewater under pressure and then releasing the air at atmospheric pressure in a flotation tank basin. The released air forms tiny bubbles which adhere to the suspended matter causing the suspended matter to float to the surface of the water where it may then be removed by a skimming device.



APPLICATION

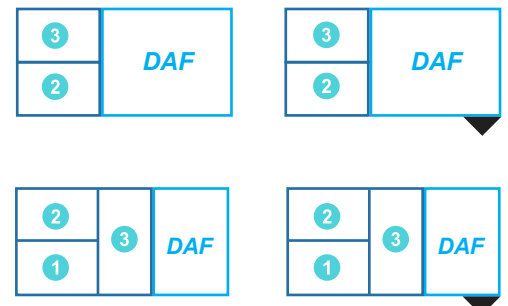
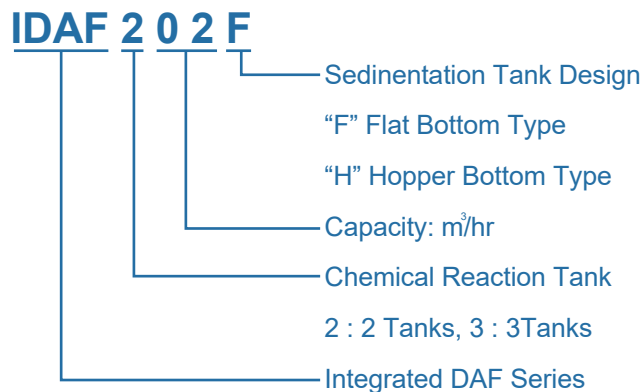
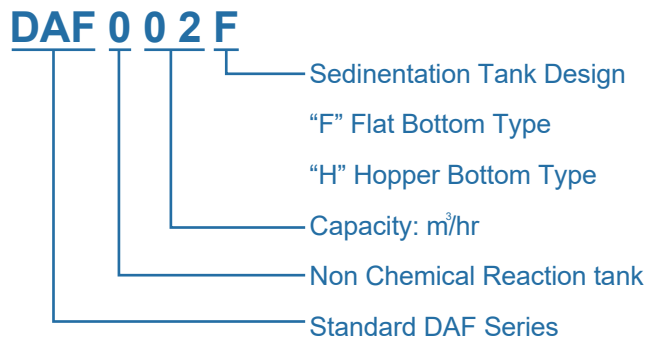
1. Separate or recycle waste oil or grease in high concentration organic wastewater treatment in paper, painting & dyeing, textile, leather, pharmaceutical industrial , etc ;
2. Biochemical effluent liquid / solid separation :
 - Anaerobic effluent solid /liquid separation ;
 - Aerobic (activated, sludge process, contact oxidation, filter) biochemical water solid /liquid Separation ;
 - The secondary settling tank effluent treatment ;
3. Farm and slaughter house of cattle, pigs, chickens farm waste water treatment ;
4. Electroplating, painting manufacturing waste water treatment ;
5. Domestic waste water treatment, water purification , etc ;



FEATURES

- Micro bubble generation technology.
- Forth circulation and flocculation technology.
- Compact package design which consisted flotation tank , air dissolving tank & recycle pump, froth removal skimmer (Standard DAF Series) and coagulation / flocculation mixing system (Integrated DAF Series), assembly in one unit , easy to installation and transportation .
- Hopper type sludge sedimentation bottom which no dead zone designed to make sludge discharge smoothly (Capacity 10m³/hr up).
- High operation stability and reliability , automatic froth layer removals solid content up to 3000mg/L .
- Provide varietal high corrosion resistant materials for main structure.
 - Carbon steel coated by bituminous paint
 - Carbon steel with FRP shell liner
 - Stainless steel SS304
- Integrated walking way assembly by high corrosion resistant material grating plate with carbon steel stair and handrail .
- Provide varietal standard connection flanges , such as JIS, DIN, GB, ANSI, etc.
- Standard control: On-site manual/automatic control, reserve remote operation, total fault signal (DCS), air floatation with low water level protection switch.
- Easy to up grade by custom control systems (PLC, HMI, SCADA or remote control).

MODEL DESCRIPTION



Remark:

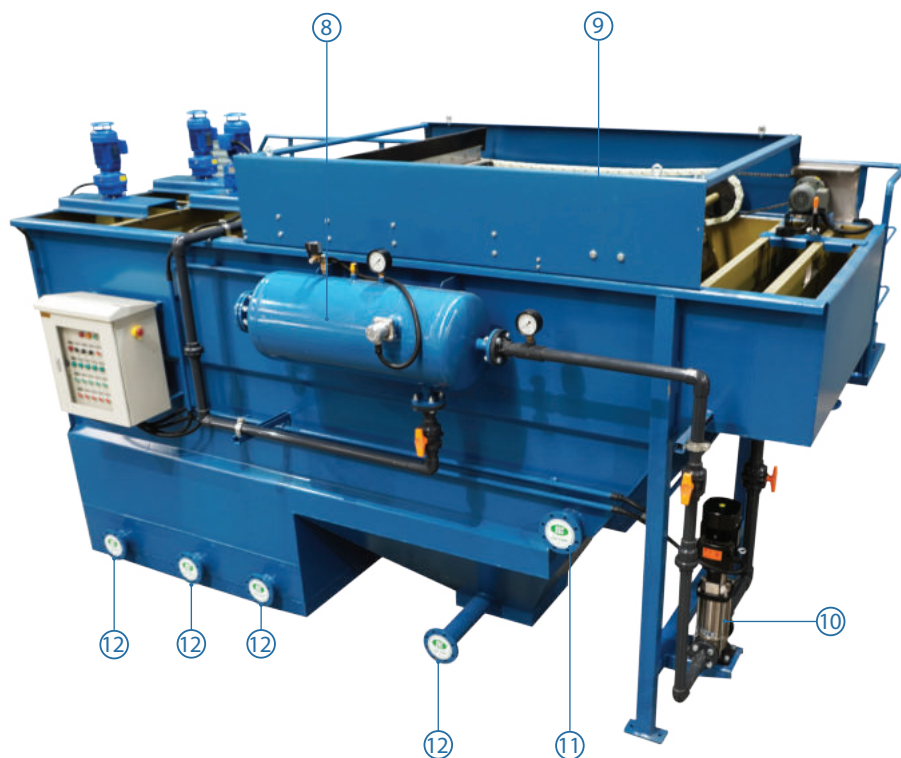
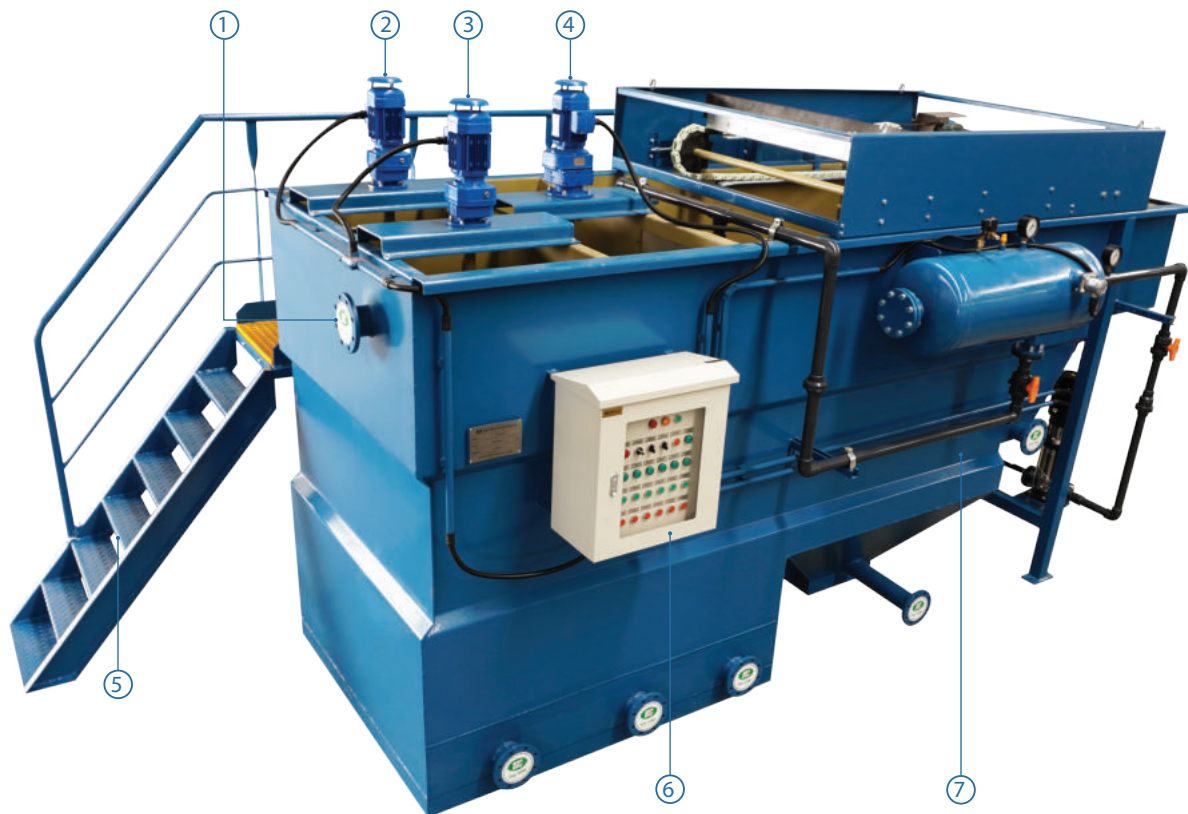
① : PH Adjustment Tank;

② : Coagulation Tank;

③ : Flocculation Tank;



STRUCTURAL COMPOSITION (IDAF Series)



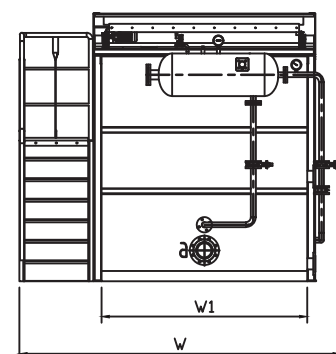
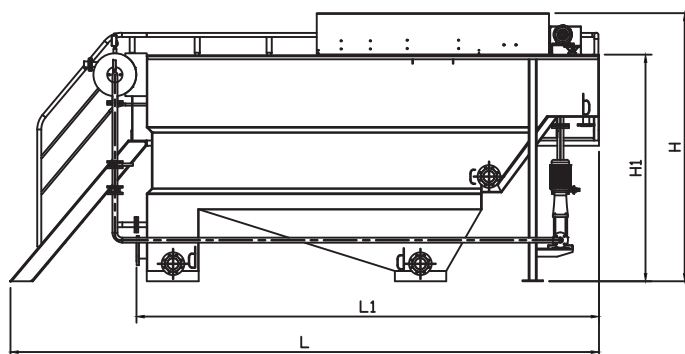
No.	Description
1	Waster Water inlet
2	Coaulation Tank & Mixer
3	PH adjustment Tank & Mixer
4	Flocculation Tank & Mixer
5	Walkway & Handrail
6	Control panel
7	Floation Tank
8	Air Disolved Tank
9	Skimmer System
10	Recycle Water Pump
11	Sludge Outlet
12	Drain Hole

Technical specification

Model	Capacity (m ³ /hr)	skimmer		air-compressor		recirculation pump		Pump Type
		Q'ty	Power (Kw)	Q'ty	Power (Kw)	Q'ty	Power (Kw)	
DAF 002F	2	1	0.2	1	0.55	1	0.75	Vertical Multi-Stage Centrifugal Pump
DAF 003F	3	1	0.2	1	0.55	1	0.75	
DAF 005F	5	1	0.2	1	0.55	1	1.1	
DAF 010H	10	1	0.2	1	0.55	1	1.1	
DAF 015H	15	1	0.2	1	0.75	1	2.2	
DAF 020H	20	1	0.2	1	0.75	1	5.5	Closed-Coupled Horizontal Centrifugal Pump
DAF 030H	30	1	0.2	1	0.75	1	5.5	
DAF 040H	40	1	0.2	1	0.75	1	5.5	
DAF 050H	50	1	0.2	1	0.75	1	7.5	

Dimension

Model	dimension (mm)			inlet /outlet flange connetion size(DN)				Weight (kg) (estimate)	Remark
	L/L1	W/W1	H/H1	Inlet (a)	Outlet (b)	Sludge outlet (c)	Drain (d)		
DAF 002F	3.2/2.4	2.4/1.16	2.1/1.7	50	50	100	100	1200	flat bottom
DAF 003F	3.6/2.8	2.4/1.16	2.1/1.7	50	50	100	100	1400	
DAF 005F	3.9/3.1	2.4/1.16	2.1/1.7	80	50	100	100	1600	
DAF 010H	4.3/3.3	2.92/1.66	2.5/2.1	100	100	100	100	2000	hopper bottom
DAF 015H	6.1/5.0	2.92/1.66	2.5/2.1	100	100	100	100	2600	
DAF 020H	5.4/4.4	3.1/2.16	2.6/2.2	100	100	100	100	3000	
DAF 030H	6.5/5.5	3.1/2.16	2.6/2.2	150	150	100	100	3400	
DAF 040H	7.85/6.5	3.1/2.2	2.6/2.2	150	150	150	100	5000	
DAF 050H	10.1/8.8	3.1/2.2	2.55/2.15	200	150	150	100	5500	

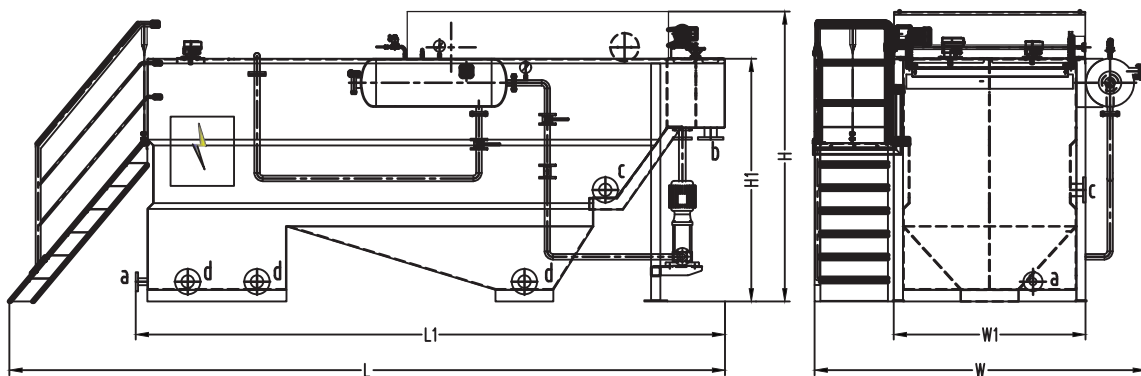


Technical specification

Model	Capacity (m ³ /hr)	coagulation tank		flocculation tank		recirculation pump		Skimmer		air-compressor		Pump Type
		Q'ty	Power (Kw)	Q'ty	Power (Kw)	Q'ty	Power (Kw)	Q'ty	Power (Kw)	Q'ty	Power (Kw)	
IDAF 202F	2	1	0.37	1	0.25	1	0.75	1	0.2	1	0.55	Vertical Multi-Stage Centrifugal Pump
IDAF 203F	3	1	0.37	1	0.25	1	0.75	1	0.2	1	0.55	
IDAF 205F	5	1	0.37	1	0.25	1	1.1	1	0.2	1	0.55	
IDAF 210H	10	1	0.37	1	0.25	1	1.1	1	0.2	1	0.55	
IDAF 215H	15	1	0.37	1	0.25	1	2.2	1	0.2	1	0.75	
IDAF 220H	20	1	0.37	1	0.25	1	5.5	1	0.2	1	0.75	Closed-Coupled Horizontal Centrifugal Pump
IDAF 230H	30	1	0.37	1	0.25	1	5.5	1	0.2	1	0.75	
IDAF 240H	40	1	0.75	1	0.37	1	5.5	1	0.2	1	0.75	
IDAF 250H	50	1	0.75	1	0.37	1	7.5	1	0.2	1	0.75	

Dimension

Model	dimension (mm)			inlet /outlet flange connetion size(DN)				Weight (kg) (estimate)	Remark
	L/L1	W/W1	H/H1	Inlet (a)	Outlet (b)	Sludge outlet (c)	Drain (d)		
IDAF 202F	3.8/2.9	2.4/1.16	2.1/1.7	50	50	100	100	1700	flat bottom
IDAF 203F	4.1/3.2	2.4/1.16	2.1/1.7	50	50	100	100	1900	
IDAF 205F	4.4/3.6	2.4/1.16	2.1/1.7	80	50	100	100	2300	
IDAF 210H	5.1/4.0	2.92/1.58	2.5/2.1	100	100	100	100	3000	hopper bottom
IDAF 215H	6.1/5.0	2.92/1.58	2.5/2.1	100	100	100	100	3500	
IDAF 220H	6.2/5.1	3.1/2.16	2.6/2.2	100	100	100	100	3600	
IDAF 230H	7.7/6.6	3.1/2.16	2.6/2.2	150	150	100	100	4500	
IDAF 240H	8.8/7.5	3.1/2.2	2.95/2.2	150	150	150	100	5900	
IDAF 250H	11.6/10.3	3.1/2.2	2.95/2.2	200	150	150	100	7300	

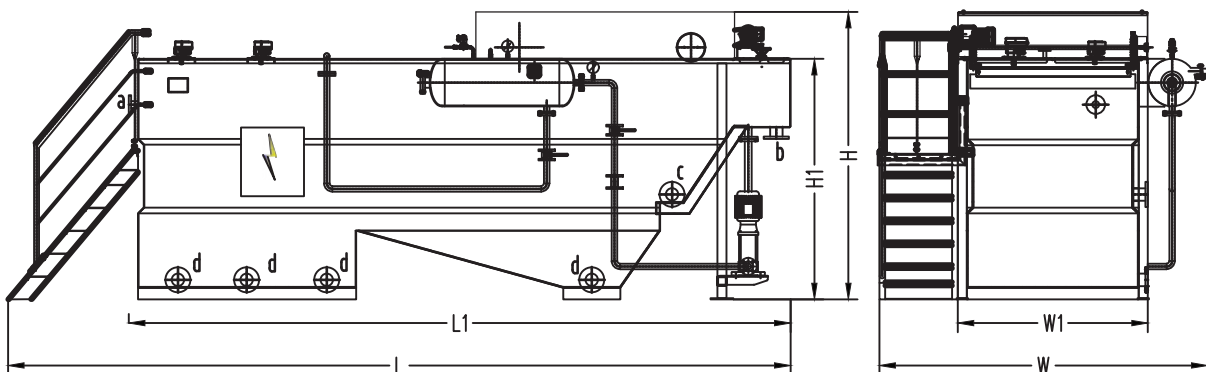


Technical specification

Model	Capacity (m3/hr)	coagulation tank		flocculation tank		PH adjustment tank		recirculation pump		skimmer		air-compressor		Pump Type
		Q'ty	Power (Kw)	Q'ty	Power (Kw)	Q'ty	Power (Kw)	Q'ty	Power (Kw)	Q'ty	Power (Kw)	Q'ty	Power (Kw)	
IDAF 302F	2	1	0.37	1	0.25	1	0.37	1	0.75	1	0.2	1	0.55	Vertical Multi-Stage Centrifugal Pump
IDAF 303F	3	1	0.37	1	0.25	1	0.37	1	0.75	1	0.2	1	0.55	
IDAF 305F	5	1	0.37	1	0.25	1	0.37	1	1.1	1	0.2	1	0.55	
IDAF 310H	10	1	0.37	1	0.25	1	0.37	1	1.1	1	0.2	1	0.55	
IDAF 315H	15	1	0.37	1	0.25	1	0.37	1	2.2	1	0.2	1	0.75	
IDAF 320H	20	1	0.37	1	0.25	1	0.37	1	5.5	1	0.2	1	0.75	Closed-Coupled Horizontal Centrifugal Pump
IDAF 330H	30	1	0.37	1	0.25	1	0.37	1	5.5	1	0.2	1	0.75	
IDAF 340H	40	1	0.75	1	0.37	1	0.75	1	5.5	1	0.2	1	0.75	
IDAF 350H	50	1	0.75	1	0.37	1	0.75	1	7.5	1	0.2	1	0.75	

Dimension

Model	Dimension (mm)			inlet /outlet flange connetion size				Weight (kg) (estimate)	Remark
	L/L1	W/W1	H/H1	Inlet (a)	Outlet (b)	Sludge outlet (c)	Drain (d)		
IDAF 302F	4.3/3.5	2.4/1.16	2.1/1.7	50	50	100	100	1900	flat bottom
IDAF 303F	4.5/3.7	2.4/1.16	2.1/1.7	50	50	100	100	2400	
IDAF 305F	4.8/4.1	2.4/1.16	2.1/1.7	80	50	100	100	2800	
IDAF 310H	5.8/4.7	2.92/1.58	2.5/2.1	100	100	100	100	3600	hopper bottom
IDAF 315H	6.9/5.8	2.92/1.58	2.5/2.1	100	100	100	100	3900	
IDAF 320H	8.3/6.9	3.1/2.16	2.6/2.2	100	100	100	100	4000	
IDAF 330H	8.7/7.2	3.1/2.16	2.6/2.2	150	150	100	100	4900	
IDAF 340H	10.4/9.0	3.1/2.2	2.95/2.2	150	150	150	100	6500	
IDAF 350H	12.1/10.9	3.1/2.2	2.95/2.2	200	150	150	100	7800	

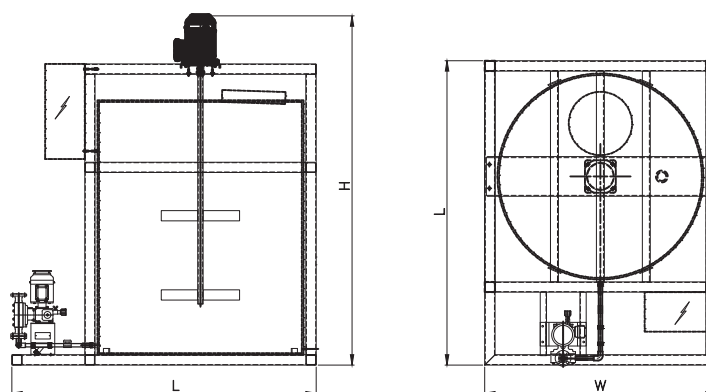


ACCESSORY EQUIPMENT

SJY single tank chemical dosing system

Model	Tank		Mixer		Dosing Pump*		Controller		Dimension		
	Volume (L/tank)	Q'ty	Power (Kw)	Q'ty	Power* (Kw)	Q'ty	Function	Q'ty	Length (mm)	Wide (mm)	High (mm)
SJY 200	200	1	0.4	1	-	1	site control & remote control	1	1226	1016	1273
SJY 500	500	1	0.4	1	-	1		1	1455	995	1578
SJY 1000	1000	1	0.4	1	-	1		1	2298	1232	1984
SJY 1500	1500	1	0.4	1	-	1		1	2502	1436	2091
SJY 2000	2000	1	0.4	1	-	1		1	2582	1516	2203

* Depent to request



DJY double tank chemical dosing system

Model	Tank		Mixer		Dosing Pump*		Controller		Dimension		
	Volume (L/tank)	Q'ty	Power (Kw)	Q'ty	Power* (Kw)	Q'ty	Function	Q'ty	Length (mm)	Wide (mm)	High (mm)
DJY 500	500	2	0.4	2	-	1	site control & remote control	1	1723	2351	2803
DJY 1000	1000	2	0.4	2	-	1		1	1904	2927	3598
DJY 1500	1500	2	0.4	2	-	1		1	2108	3113	3814
DJY 2000	2000	2	0.4	2	-	1		1	2188	3294	4039

* Depent to request

