



A Sulzer Brand

# PWL - SERIES

## DAF System



### OVERVIEW

JWC Environmental's PWL Series FRC DAFs are low-built dissolved air flotation systems designed for high solids loading. The PWL design is optimized for treating wastewater heavily loaded with solids that require significant amounts of free surface area for flotation and separation. PWL Series units are rectangular in shape and built wider and longer as the free separation area requirement increases.

### Features

#### Counter-Current Skimmer

In PWL Series DAF systems, wastewater is introduced into the DAF tank and processed in a flow-through manner – wastewater comes in one side and goes out the other. While many DAF system designs push sludge across the entire length of the tank in the same direction as the wastewater flow, the PWL Series design uses a skimmer assembly that rotates against the hydraulic flow of the water. This design shortens sludge skimming distance and eliminates solids carry-over.

#### Efficient and Economical Whitewater

The PWL Series utilizes non-proprietary ANSI standard pumps and an angled Air Dissolving Tube for whitewater generation.

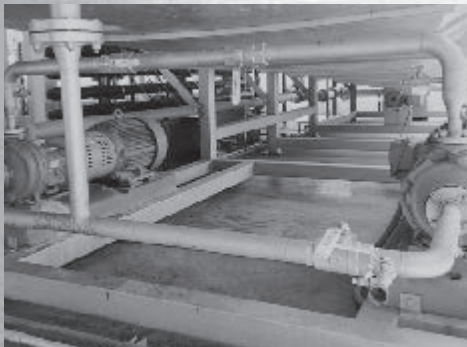
- Eliminate need for costly specialty whitewater pumps
- High tolerance for solids in recycle water
- Angled Air Dissolving Tube for increased air-water interface

#### Sludge Dewatering Grid

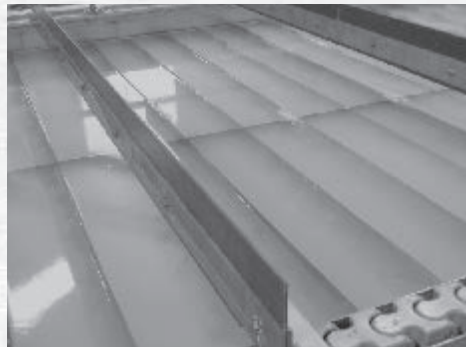
PWL Series FRC DAF systems employ the sludge Dewatering Grid, to hold sludge in place as it thickens and self-dewaters.

The Dewatering Grid helps:

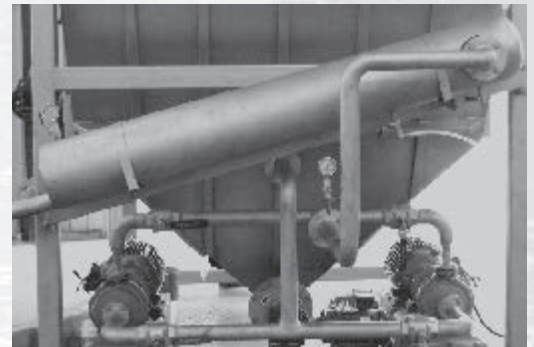
- Operators control sludge thickness
- Eliminate pre-mature removal of solids
- Reduce build-up and/or re-entrainment of sludge
- Generate drier sludge



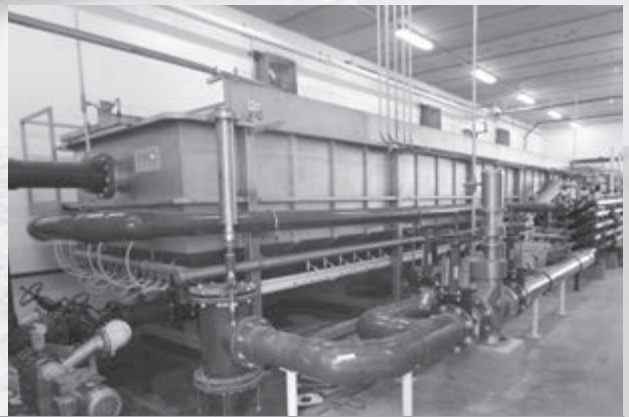
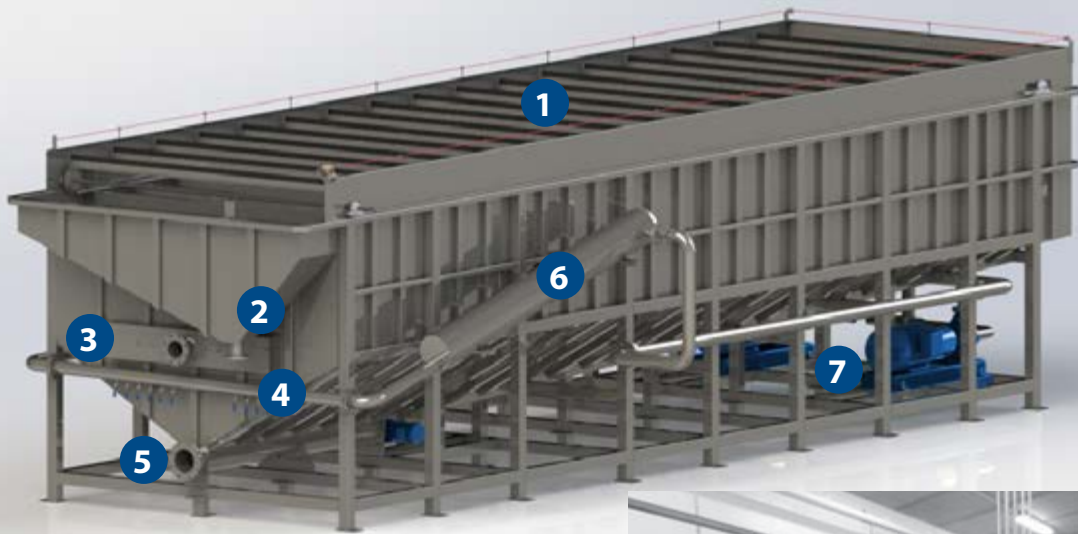
ANSI RECYCLE PUMPS  
CONTINUOUS OPERATION



THE GRID  
SLUDGE DEHYDRATOR



AIR DISSOLVING TUBE  
WHITewater GENERATOR



## PWL DETAILS

1. Skimmer Flights
2. Float Discharge
3. Wastewater Inlet
4. Whitewater Dispersion Manifold
5. Settled Sludge Outlet
6. Air Dissolving Tube
7. ANSI Recycle Pumps

Model	Flow Rate - gpm (m <sup>3</sup> /hr)	Free Area - sq-ft (m <sup>2</sup> )	Dry Weight - lbs (kg)	Wet Weight - lbs (kg)	Dimensions - LxWxH (LxWxH in m)
PWL-5	20 (5)	14 (1,3)	4,000 (1.814)	9,930 (4.504)	8'11" x 4'6" x 8'4" (2,71 x 1,37 x 2,54)
PWL-10	45 (10)	27 (2,5)	4,410 (2.000)	15,190 (6.890)	9'4" x 7'10" x 8'4" (2,85 x 2,39 x 2,54)
PWL-15	65 (15)	48 (4,5)	5,280 (2.395)	22,510 (10.210)	13'4" x 7'10" x 8'4" (4,06 x 2,39 x 2,54)
PWL-30	130 (30)	87 (8)	6,800 (3.084)	30,070 (13.640)	19'5" x 7'10" x 8'4" (5,92 x 2,39 x 2,54)
PWL-50	220 (50)	126 (12)	8,320 (3.733)	38,050 (17.260)	25'6" x 7'10" x 8'4" (7,77 x 2,39 x 2,54)
PWL-65	280 (65)	150 (14)	10,950 (4.967)	44,270 (20.080)	28'11" x 7'10" x 8'4" (8,81 x 2,39 x 2,54)
PWL-80	330 (76)	166 (16)	11,050 (4.559)	46,710 (21.187)	30'9" x 7'10" x 8'4" (9,37 x 2,39 x 2,54)
PWL-100	430 (100)	205 (19)	11,470 (5.203)	54,760 (24.840)	36'9" x 7'10" x 8'4" (11,20 x 2,39 x 2,54)
PWL-120	520 (120)	244 (23)	13,760 (6.241)	63,660 (28.876)	46'9" x 7'10" x 8'4" (14,24 x 2,39 x 2,54)
PWL-80W	520 (120)	260 (24)	14,600 (6.622)	69,400 (31.480)	30'9" x 11'2" x 10'5" (11,20 x 3,40 x 3,18)
PWL-100W	640 (148)	320 (30)	18,130 (8.224)	124,702 (56.564)	36'10" x 11'2" x 10'5" (11,22 x 3,40 x 3,18)
PWL-110W	730 (168)	365 (34)	20,400 (9.253)	137,280 (62.270)	42'11" x 11'2" x 10'5" (13,08 x 3,40 x 3,18)
PWL-120W	830 (190)	415 (39)	22,660 (10.278)	149,860 (67.975)	46'9" x 11'2" x 10'5" (14,25 x 3,40 x 3,18)
PWL-140W	930 (215)	465 (43)	24,430 (11.081)	167,680 (76.058)	51'9" x 11'2" x 10'5" (15,77 x 3,40 x 3,18)
PWL-160W	1,020 (235)	510 (47)	26,200 (11.884)	185,500 (84.140)	56'9" x 11'2" x 10'5" (17,30 x 3,40 x 3,18)

\* Consult JWC Environmental as values may vary based on process circumstances



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