

KROFTA ENGINEERING LIMITED

MEGACELL

Dissolved Air Floatation Unit with Lamella Plates

The application of Dissolved Air Floatation (DAF) is to separate solids from liquid, with the help of micro bubbles. These bubbles formed in the Air Dissolving Tube (ADT), attach themselves to light solid particles and rise to the surface. The solids at the surface are swept by scrapper blades and removed from the top by the paddle wheel. The heavier solid particles settle at the bottom of the main tank and are removed periodically with the help of timer activated purge valves, leaving only the clear water to pass through the middle of the main DAF tank. This method of sludge removal generates a high consistency sludge, making it easier to handle for further sludge treatment. The entire system consists of a recycle pump, air compressor and pressure release valve

The Megacell is designed to sustain high Total Suspended Solids (TSS), Fats, Oils and Grease (FOG) loads and can treat a range of water flow rates with the maximum being 1000 m³/hr in a single unit.



Advantages & Applications of MEGACELL

- Low Operation Cost, low power requirement and minimal manpower intervention required
- Higher capacity product, can handle high flow rates in a single unit
- Low footprint, fully metallic structure with minimal to no civil construction required and is highly compact
- Low installation cost and highly efficient unit
- Popular in Pulp & Paper, Oil & Gas, Desalination, Powerplants and Textile industries, as well as ETP's

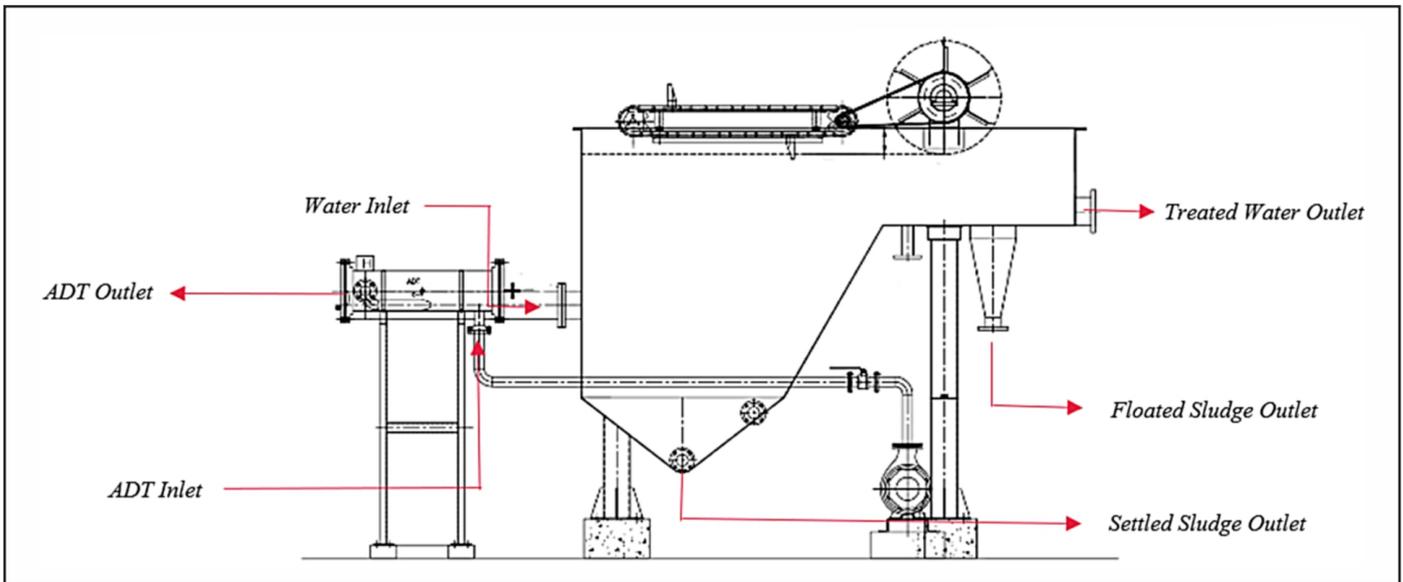




Krofta's patented Air Dissolving Tube (ADT) is used to saturate air into the recycled treated water. At atmospheric pressure, this created millions of micro bubbles in the size range of 30-50 micron.

The benefits of using our floatation unit with our ADT are:

- Entire process of air saturation takes only approximately 12 seconds
- Krofta ADT has a small footprint and easy O&M
- Micro bubbles lead to very high solids removal efficiency
- Other air systems may choke in the presence of TSS > 2000 mg/L



DAF Model	Max Flow (m ³ /hr)	Length (mm)	Width (mm)	Height (mm)	Power (kW)	Machine Weight* (kg)	Weight with Effluent* (kg)
MCH – 1	10	2600	1700	3000	0.37	1600	4300
MCH – 5	50	3800	1700	3000	0.37	1900	5100
MCH – 10	100	4000	2500	3000	0.37	2500	12580
MCH – 15	150	4600	2500	3000	1.1	3100	16400
MCH – 20	200	5600	2500	3000	1.5	3500	21000
MCH – 25	250	6200	2500	3000	1.5	4000	22740
MCH – 30	300	7600	2500	3000	1.5	4700	28250
MCH – 35	350	8600	2500	3000	1.5	5500	32290
MCH – 50	500	10600	2500	3000	1.5	7150	42140
MCH – 65	650	11600	3000	3000	1.5	8750	56270
MCH – 75	750	12600	3000	3000	1.5	9700	72200
MCH – 100	1000	14000	3000	3000	3.0	17800	125800

Table 1 Technical Details, *Approximate Values



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