

PRTPC1 Clariflocculator with turbine peripheral drive type

The clariflocculator with turbine peripheral drive PRTPC1 type is installed on medium and large size treatment plants and consists of a mobile girder used as walkway, a lateral traction trolley, a control unit, a gear motor, a slewing ring unit, a central cylinder defining the flocculation compartment, a turbine with exclusive airfoil blades, a logarithmic airfoil bottom scraper blade, a scum box, a skimming blade, a peripheral deflector and a notch weir. The control unit, placed at the periphery, drives the walkways around a central axis, in correspondence of which the slewing ring-turbine assembly will be fitted on. The presence of a suitable central recycle zone and of the flocculation compartment allows the adequate coagulation and flocculation of the water which completes the clarification in the most external area.

The sludge scraper blades remove the sludge precipitated on the sloping bottom of the tank and gather it into a toroidal ditch wherefrom it will be removed. The system, consisting of skimming blade, scum baffles and scum box, allows the removal of any floating materials.

It is also possible to request the type PRTPC1 whose bridge is diametral type and therefore controlled by two trolleys placed in diametral peripheral locations. It supplies a double bottom and surface scraper.

The protection against overloads can be carried out by a dynamometric torque limit switch, duly set, complete with alarm signals displayed on the control panel.

The standard construction is in carbon steel protected by hot dip galvanization; on request, the construction in stainless steel or aluminium is possible.

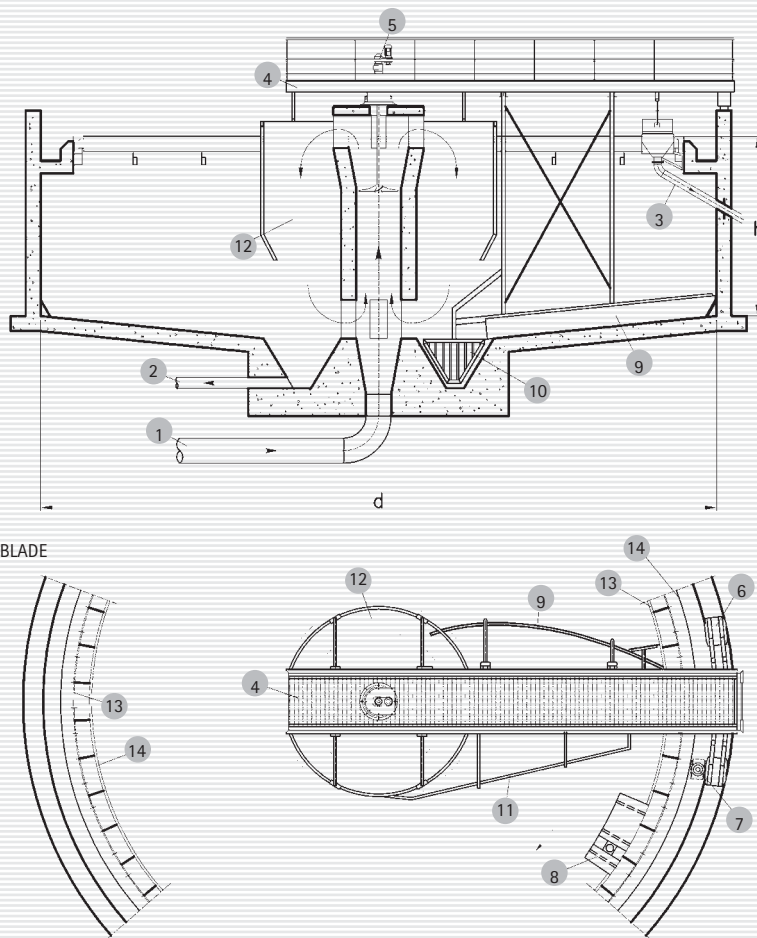
Strengths

- TURBINE WITH HIGH HYDRAULIC EFFICIENCY.
- PREFABRICATED FLOCCULATION CHAMBER.
- SIMPLICITY OF THE CIVIL WORK EXECUTION.



Legend

- 1 WATER INLET
- 2 SLUDGE OUTLET
- 3 OILS AND SCUM OUTLET
- 4 MOBILE BRIDGE
- 5 SLEWING RING
- 6 DRIVING TROLLEY
- 7 GEARMOTOR
- 8 SCUM BOX
- 9 SLUDGE SCRAPING BLADE
- 10 DITCH SLUDGE SCRAPING BLADE
- 11 SKIMMING BLADE
- 12 FLOCCULATION CHAMBER
- 13 NOTCH WEIR
- 14 PERIPHERAL DEFLECTOR



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TYPE	MAIN FEATURES	UNIT	DIMENSIONAL DATA																							
			6	10	12	16	18	24	28	30	32	34	40	46	50	56	60									
PRTPC1	TANK DIAMETER (d)	m	6	10	12	16	18	24	28	30	32	34	40	46	50	56	60									
	TANK HEIGHT (h)	m	1,8			2,2			2,6			3,0			3,5			4,0			4,5			5,0		
	MAX TANK VOLUME	m ³	50 ÷ 14000																							
	PERIPHERAL SPEED	m/min	1,9 ÷ 3,3																							
	POWER SUPPLY	kW	0,18						0,37						0,55											
	STEEL PARTS WEIGHT	kN	31	58	78	90	94	135	152	183	194	210	244	271	316	369	411									
	TURBINE POWER SUPPLY	kW	0,5	0,5	0,7	1,5	1,5	3	3	3	4	4	4	7,5	7,5	7,5	11									

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	MAX TANK VOLUME	m ³	50 ÷ 14000																							
	PERIPHERAL SPEED	m/min	1,9 ÷ 3,3																							
	POWER SUPPLY	kW	0,18x2						0,37x2						0,55x2											
	STEEL PARTS WEIGHT	kN	34	62	82	73	98	139	156	187	198	216	255	285	332	407	453									
	TURBINE POWER SUPPLY	kW	0,5	0,5	0,7	1,5	1,5	3	3	3	4	4	4	7,5	7,5	7,5	11									



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