

Post Treatment Unit (PTU)

The Post Treatment Unit (PTU) as part of your Hydraloop Cascade setup is the combined external storage tank, polishing and disinfection station, and distribution unit.

Using the PTU ensures enhanced water quality, even when the greywater input to the Hydraloop devices might be suboptimal. This creates further stability to the complete system and ensures long-lasting durability of your water recycling system.

Abbreviations

- PTU = Post Treatment Unit
- GAC = Granulated Activated Carbon
- AFM = Activated Filter Media
- AUX = Auxiliary
- WC = Water Closet

PTU-Polishing-Disinfection-Booster



Integrated Pump				
Voltage		Power		
230V	50/60 Hz	0.85 kW		

Water Connections				
Recycled inlet	Backup inlet	AUX output	Main output	Drain
DN15 (1/2" male)	DN15 (1/2" male)	DN15 (1/2" male)	DN20 (3/4" male)	40 mm (OD)

Details			
1. Physical Properties	Length	800 mm	
	Width	695 mm	
	Height	1900 mm	
	Weight	Dry = 240 kg, Wet = 510 kg	Dry weight includes AFM and GAC media
2. Performance & Capacity	Internal storage volume	210 L	Net usable volume ≈ 195 L
	Output flow rate (max)	4.8 m³/h	Integrated booster pump: DAB Eskybox Mini3
	Output pressure rate (max)	55 m head (7.5 bar)	Integrated booster pump: DAB Eskybox Mini3
	Recycled water inflow rate	6 L/min	Maximum inflow from Hydraloop device into PTU
	Back up water inflow rate	9 L/min	Maximum inflow from Hydraloop device into PTU
3. Electrical Specifications	Voltage (frequency)	240 V AC, internal 24 V DC (50/60 Hz)	
	Peak power consumption	1200 W (1.2 kW)	
	Typical Operating Consumption	100 W (0.1 kW)	
4. Connectivity	Internet connection	Ethernet (RJ45) or 2.4 GHz Wi-Fi (WPA/WPA2 compatible)	Connection to internet is required to communicate with Hydraloop Device Manager (HDM)
5. Water Input Sources	Recycled water	Hydraloop "AUX" outlet	Connect Hydraloop device(s) "AUX" outlet(s) to PTU Recycled inlet
	Backup water	Hydraloop "WC" outlet	Connect Hydraloop device(s) "WC" outlet(s) to PTU Backup inlet
6. Acoustic Specifications	Pump noise level	~48 dB(A)	
7. Polishing System	Filtration technologies	AFM filtration & GAC filtration	Automated backwash system for AFM filter included
	AFM cylinder weight	~50kg	Cylinder volume = 37.6 L. Dry bed density uncompacted = 1.33 kg/l (± 0.03)
	GAC cylinder weight	~32 kg (medium) or ~57 kg (large)	Cylinder option 1: ≤ 5x H600: 60.7 L (medium) Cylinder option 2: > 5x < 10x H600: 105.9 L (large)
	AFM particle size	0.4 - 0.8 mm	Dryden Aqua AFM®s/ng Grade 1 media
	GAC particle size	0.8 - 1.0 mm	AquaSorb™ CS 4x8 mesh size
8. Disinfection System	Residual disinfection method	Peristaltic dosing pump	
	Required disinfectant	12.5% Sodium Hypochlorite	NOTE: Chemical not supplied with unit
	Dosing Concentration	Standard setting = 2 ppm (0.2 mg/L)	Dosing is programmable
9. Operating Conditions	Operating temperature	Average ambient temperature 5 - 35 °C.	PTU must be placed Inside. Unit is not UV and IP rated
PTU Water Quality Output			
Parameters		Values	Details
CBOD5		≤ 10 mg/L	Output values are according to NSF 350 Class C effluent water quality
TSS		≤ 10 mg/L	
Turbidity		≤ 2 NTU	
E.coli		≤ 2.2 MPN/100 mL	
Ph		6.0 – 9.0 SU	