

CWE - Clear Water Extractor

Decanters from <math><100\text{ m}^3/\text{h}</math> up to $>1500\text{ m}^3/\text{h}$



Product description

- Designed for flow rates of <math><100</math> to $>1500\text{ m}^3/\text{h}$
- Clear water weir based below an unsinkable float, including support legs and a guiding system
- Also available with electromechanically closing system (type CWE-EMC) and/or pump (type CWE-P)

Applications

- SBR WWTP up to 15.000 PT
- Sludge settling tanks
- Continuous surface water extraction
- General decanting purposes

Advantages

- Floating construction means always in best position in the clear water layer below the water surface.
- The float works as a baffle and prevents discharge of floatables.
- Discharge either gravitational or with pump
- No wearing parts and extended unit lifetime
- Ideal for SBR-applications
- Robust design and simple installation

Materials

- Float, discharge weir, support legs: AISI304 (other materials and coatings on request)
- Standard discharge system: Flexible PVC hose (Hinged arm or telescopic discharge system on request)



Type CWE-EMC

Accessories

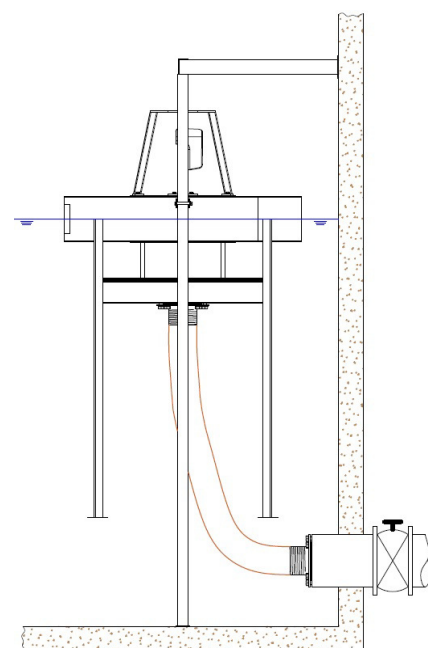
- Guide rails
- Wall brackets
- Mooring cables
- Springs
- Discharge collectors

Working principle / Different executions

The CWE is designed to discharge the clear water layer below the surface and block bulking sludge and floatables. The float is positioned by a guiding system with optional wall brackets. The attached limiting legs prevent damage to the discharge system when emptying the tank. To exclude full emptying of the tank, the length of the legs can be dimensioned in such a way, that the CWE weir stops at the lower trigger point.

In case the discharge under gravity is not possible the pump extractor type CWE-P has to be used.

The electromechanically closed type CWE-EMC is equipped with a linear actuator which closes the weir watertight to the bottom of the float. Intrusion of sludge into the decanter during aeration and mixing periods is excluded.



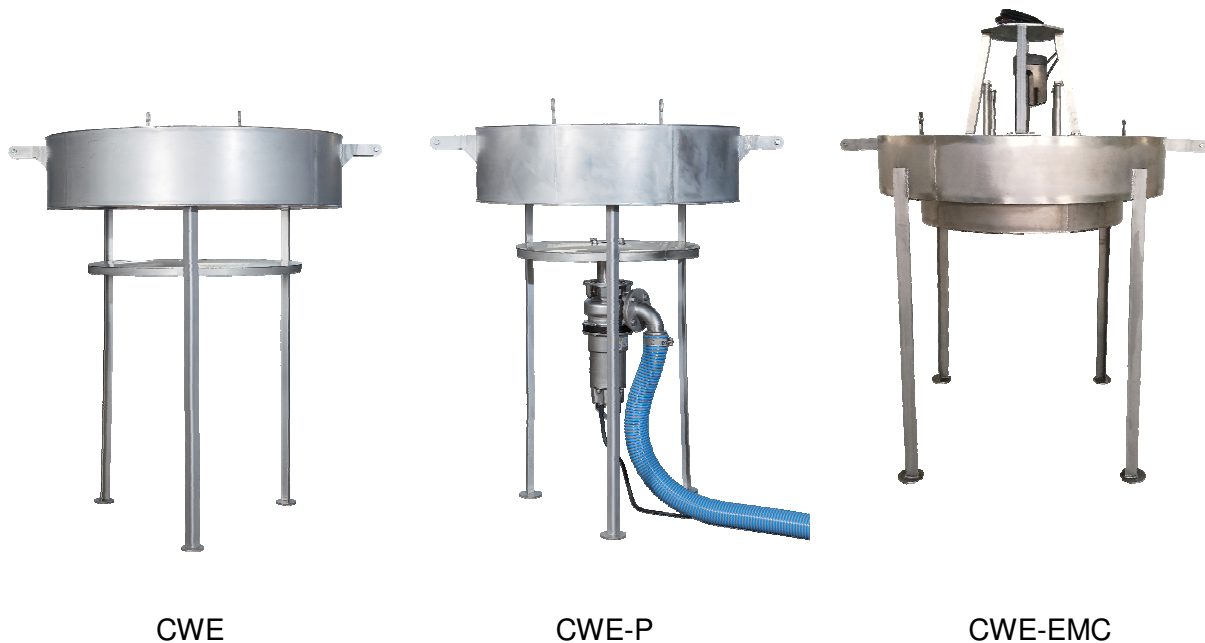
CWE-EMC with vertical guiding system

Dimensions¹

Extractor Type	Flow ² [m ³ /h]	Dimensions of the float ³ [mm]	Diameter of the weir [mm]	Discharge pipe ⁴ [DN]
CWE-100(-EMC)	100	Ø 1100	600	125
CWE-200(-EMC)	200	Ø 1300	950	2 x 150 / 200
CWE-300(-EMC)	300	Ø 1500	1100	2 x 150 / 200
CWE-500(-EMC)	500	1800 x 1800	1500	3 x 150 / 250
CWE-700(-EMC)	700	1800 x 2000	1600	4 x 150 / 300
CWE-1000(-EMC)	1000	On request		
CWE-1500(-EMC)	1500			

Linear Actuator Data¹ (only for CWE-EMC)

- Voltage: 24V DC (12 V on request)
- Protection Class: IP 69K
- Type: Thomson Electrak LLX
- With integral end position switches
- Adjustable top fixation system



¹ All values are indicative and refer to execution without pump. Data for CWE-P and CWE-EMC-P on request (depend of the chosen pump). ATB WATER GmbH reserves the right to adjust these values at any time without prior notice.

² Maximum flow depends on the hydraulic conditions = water level to discharge height in the tank.

³ Sizes refer to CWE-EMC type. In case of CWE the float diameter will be reduced.

⁴ Dimensions for maximum flow at standard conditions