

THE PIONEERING C2E

Take the Step Towards Efficiency and High-Quality
15 m³/h in Sludge Thickening
10 m³/h in Sludge Dewatering



THE FLOTTWEG C2E

The Efficient, Durable and High-Quality Decanter Centrifuge

Over the last five decades Flottweg has acquired a great deal of expertise in sludge thickening and dewatering. So Flottweg has decided to create a new decanter series specifically manufactured for sludge separation, called the Flottweg C-Series. This decanter series incorporates the latest know-how in mechanical engineering, manufacturing, and control system fabrication. The result is a new series of environmental centrifuges highlighted by Flottweg quality, reliability, and optimal price/performance ratio. Special features in bowl design, drive systems, and control systems assure optimal performance in terms of recovery, cake dryness, capacity, and energy efficiency.

All product-wetted parts are made of high-grade stainless steel including centrifugal cast Duplex. Along with a sound-insulated housing and hinged cover, customers receive with the C2E the most pioneering decanter technology.



Your advantages when choosing Flottweg **Separation Technology**

- · Energy savings of about 20 percent with Flottweg Recuvane® System
- · Best separation results thanks to the Simp Drive® through independent regulation of bowl and differential speed
- · Low operating costs due to reduced flocculant consumption
- · Simple operation and user-friendly controls with the Flottweg Touch Control
- · Minimal supervision needs, up to automatic 24/7 operation (automatic start with a simple push of the button)
- · Long service life due to the use of high-quality stainless steel (superior corrosion resistance) and optimized wear protection measures



Particularly dry solids after being processed using a Flottweg Decanter Centrifuge

FLOTTWEG SEPARATION TECHNOLOGY

Engineered For Your Success





The Simp Drive® regulates the scroll speed automatically and independently of the decanter bowl speed depending on the scroll torque. This happens continuously during decanter operation. At any point, the Flottweg Simp Drive® provides the full torque – both with the bowl at rest and at maximum speed. Any change in sludge compression is detected and the scroll speed automatically adjusted to maximize torque. This adaption to changing product characteristics ensures the highest dryness of the solids discharged.

Customer benefits of the Flottweg Simp Drive®

- High flexibility in the selection of operating bowl and scroll speed (differential speed can be adjusted independently)
- High capacity due to high bowl speed and precisely adjusted differential speed
- High energy efficiency
- Machine can be cleared out at standstill (no need to dismantle system components)



How does Recuvane® work?

Rotational energy is stored within the liquid inside the bowl during acceleration. Normally, the clear liquid phase is simply discharged. This means the energy stored in the water is lost. The optional Recuvane® System uses a directional centrate discharge to support the main drive and recover drive energy. It is possible to reduce energy consumption by 10 to 20%! Also available as retrofit!

Advantages of the Recuvane® System

- Lower energy consumption
- Mechanically robust operating principle
- Payback within 1 to 2 years
- Simple retrofitting
- Adjustable pond depth (eccentric screws)
- Exact separation process

C2E FACTS AND DATA

FLOTTWEG DECANTER C2E			
Rotor	State-of-the-art Flottweg Engineering with optimal scroll and bowl design for highest product compaction, best recovery, reduced energy consumption, and minimal flocculent usage		
	Complete wear protection, Recuvane® Energy Recovery System, use of premium bearings and robust construction, long service life and maintenance friendly design		
Construction Materials	All product wetted parts are made of high-grade stainless steel including centrifugal cast Duplex and 1.4571 (AISI 316 TI) / 1.4404 (AISI 316 L).		
Housing	Hinged cover providing fast access without lifting device, vapor-tight housing preventing aerosol emission		
Base	Compact steel base frame with rubber vibration isolators, protected cable and lubrication supply lines, single-piece belt guard		
Drive	Frequency inverter driven bowl and scroll drive, Flottweg Simp Drive® with independent scroll and bowl operation. high torque with low energy use, easy accessible drive components, off the shelf motors and VFDs		
Machine Design	Ergonomic design for easy access to the motors, drive, housing, and rotor, position of the motors ensuring compact footprint		
Technical Data	Length x Width x Height 2700 mm x 840 mm x 750 mm	Thickening capacity of 15 m³/h Dewatering capacity of 10 m³/h	Maximum of 4765 rpm Maximum of 3800 g

Flottweg Separation Technology – Engineered For Your Success

