

# Sludge Dewatering System Belt Filter Press

Sludge Management



FRC's stainless-steel belt press reduces sludge volume with stacked dewatering zones and continuous belt cleaning for low-maintenance operation.

The FRC Belt Filter Press is a high-throughput, automated dewatering system designed to reduce sludge volume and handling costs in industrial and municipal wastewater treatment. With a compact, vertically stacked design, this press delivers consistent, dry sludge cakes with minimal operator intervention—making it ideal for facilities processing oily, fatty, or particulate-rich sludge.

Conditioned sludge enters the belt press and moves through a series of dewatering zones. It first passes through the gravity drainage zone, where free water drains out. Then it moves into a wedge zone and is gradually compressed between two belts. In the final stage, high-pressure rollers extract the remaining water, producing a dry sludge cake. The belts are continuously cleaned with automated spray bars, allowing for consistent, unattended operation and reduced maintenance.

## **Key Features**

- Vertically stacked gravity and pressure zones for space efficiency
- Continuous dewatering with automated belt cleaning
- Stainless-steel construction resists corrosion in harsh environments
- Available in widths from 0.5 to 3.0 meters
- Integrated control system with HMI and PLC
- Compatible with flocculators, polymer systems, and wash water modules

#### **Specifications**

- Flow Capacity: Up to 350+ GPM
- Effective Belt Width: 24" 120" (600 3,000 mm)
- Effective Dewatering Area: 35 388 sq. ft. (3.3 36 m²)
- Construction: Stainless steel (304, 316, duplex)
- Components: Sludge inlet, thickening belts, roller assembly, spray bar, cake discharge chute

### **Applications**

- Municipal wastewater sludge
- · Food and beverage plant residuals
- Pulp and paper processing
- Industrial and chemical manufacturing
- DAF float and clarifier sludge dewatering

#### Why choose a belt filter press?

FRC's belt press is a proven, efficient solution for high-volume sludge dewatering. It combines compact footprint, robust construction, and fully automated operation—minimizing water, energy, and labor costs while delivering consistently dry sludge cakes.

How can we help you? Contact us today to find your best solution.



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