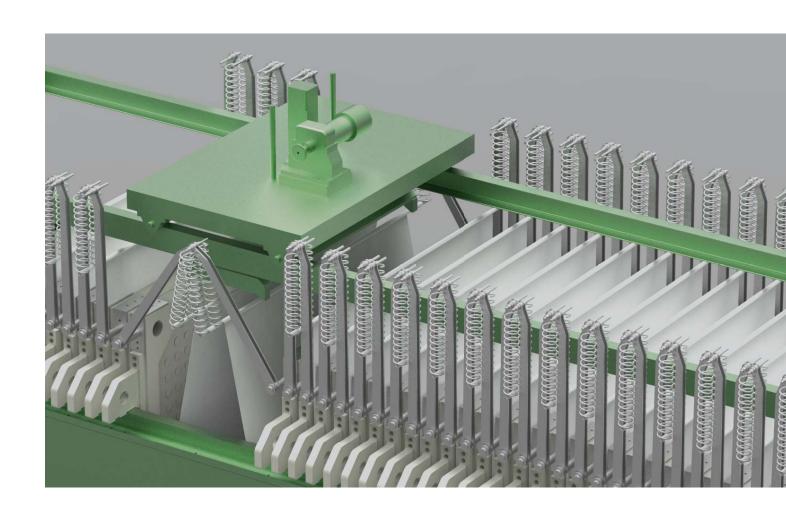
## **CF Type Fully Automatic Filter Press**

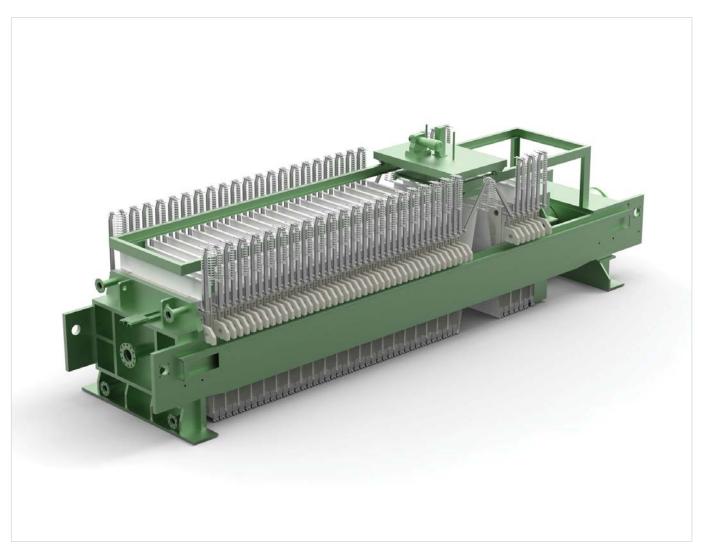
Center Feeding Filter Press





# YUCHEON ENGINEERING Filter Press Fully Automatic Filter Press

The Center Feeding Filter Press(Fully Automatic Filter Press: CF Type) of YUCHEON ENGINEERING is a fully automatic driving system. We could offer equipment optimized for your specific requirements according to your industry characteristics, individual specifications, usage, and etc. such as customized solutions for sludge treatment and sludge dehydration.

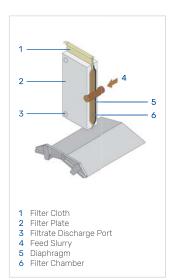


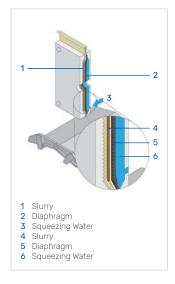
## Features of CF Type - Center Feeding Filter Press

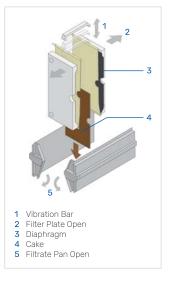
- Fully automatic operation.
- Cake is generated from each space between plates and the chamber is cleaned by filter cloth vibration(or Air).
- Cleaning process is done one by one space when plates open.
- Sludge feed is located at the center.
- Automatic cleaning system makes cloth maintenance easier, prevents clogging, and extends cloth life.
- Injecting water between a plate and diaphragm gives additional pressure on cake, minimizing water content of cake.
- Open-structure enable simple and easy maintenance.
- Dehydration efficiency is increased with high efficiency and stable operation.
- Low level of water content(solidification) from high pressure.

#### **How It Works**

#### **Mechanism**









#### **Filtering**

With start switch activated, the hydraulic cylinder moves to the hydraulic pump. The hydraulic cylinder clamps the filter plate to form a filter chamber. Then, slurry is fed through the feed port at the middle of the filter plate. The solid materials of the feed are accumulated as cake and the filtrate is discharged through the filtrate port.

#### Compression

Upon completion of the feeding process, diaphragm is inflated by water and compresses the accumulated materials in the filter chamber.

#### **Cake Discharge**

After compression process, discharge process begins. As plates open one by one, most cake between plates come off and drop to the conveyor. Then filter cloth up-down vibration bar removes the rest of cake from plates.

#### Cloth Wash

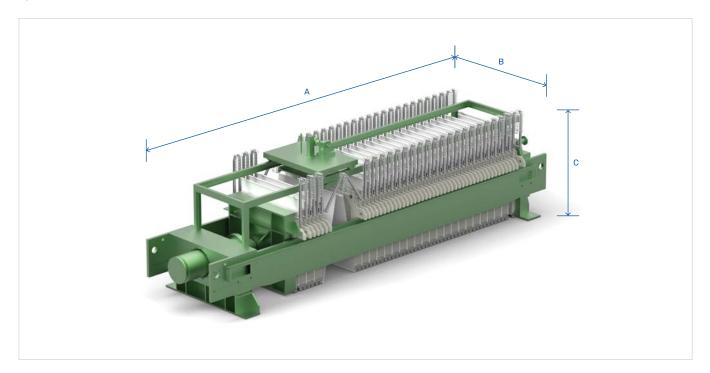
Washing(water or air) pipe moves up and down between open plates to completely get rid of remaining

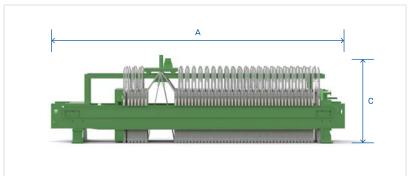
## **YUCHEON's Fully Automatic Filter Press and Control Device**

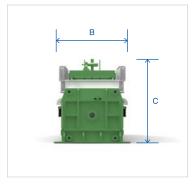
- Select among TF Type, BF Type, and CF Type according to the usage.
- Hydraulic pump unit compresses, opens, and closes filter press.
- Slurry pressurized pump presses(4-15kg/cm²) of slurry for solid-liquid separation into the filter press.
- Compression pump further lowers moisture content of slurry in the press after the solid-liquid separation. (Air compression for lower than 9kg/cm² of compression pressure and water compression for over 10kg/cm²)
- Air compressor/chamber tank cleans the liquid supply hole, compresses air and control the air-operating valve of Air Blow.
- Cake Discharge system discharges dehydrated results out of filter press using the belt conveyor.
- Filter cloth cleaning pump: Automatic cleaning system in the filter press cleans filter cloth with high-pressure water to prevent clogging.
- Automatic control panel for automation of the entire system.

## **Detailed Description of CF Type**

CF Type filter press has a simple structure as slurry feed is located at the center and filter cloth is fixed. Automatic filter cloth cleaning system makes cloth maintenance easier, prevents clogging, saves energy and manpower, and enables fully automatic operation.







- A Max. Length B Max. Width C Max. Height
- A(Max, Length) Filter Press B(Max, Width) Filter Press C(Max, Height) Filter Press Filter Press Weight Empty CF Frame Size Number of Chambers Filtration Area CF 2000 CF 1000 CF 1500 lbs 30 49.5 532.8 5,600 18.4 1,540 5.1 2,278 10,000 22,046.2 7.5 20.7 40 66.0 710.4 6,300 1,540 5.1 2,278 7.5 11,000 24,250.8 50 82.5 888.0 7,000 23.0 1,540 5.1 2,278 7.5 12,000 26,455.5 7.900 25.9 1.540 5.1 13,500 29,762.4 60 99 N 1,065.6 2,278 7.5 154.0 40 1,657.6 8.300 27.2 2,260 7.4 3,005 99 26,000 57,320.2 231.0 2,486.5 10,000 32.8 2,260 7.4 3,005 9.9 32,000 70,547.9 60 80 308.0 3,315.3 12,000 39.4 2,420 7.9 3,005 9.9 40,000 88,185.0 385.0 4,144.1 14,000 46.0 2,420 7.9 3,005 9.9 46,000 101,412.6 60 405.6 4,365.8 14,000 46.0 3,200 10.5 4,200 13.8 79,000 174,165.2 5,821.1 97,000 213,848.4 80 540.8 16,500 54.1 3,200 10.5 4,200 13.8 3,200 115,000 253,531.6 100 676.0 7.276.4 19.000 62.3 10.5 4.200 13.8 811.2 8,731.7 21,000 120 68.9 10.5 4,200 135,000 297,624.1 3.200 13.8

## **High Efficiency**

## **Higher Performance, Lower Cost!**

YUCHEON's Filter Press maintains the stable and continuous dehydration, production and waste management in a wide range of areas such as sewage, water purification, activated sludge, beverage manufacturing factory, mining, mineral, chemistry, and other application areas.

We add decades of expertise to CF Type filter press and offer a superior product to our competitors with excellent throughput, lowest cost and the lowest level of residual moisture required.

## **Advantages of Operation**

- Very simple to operate
- Fully automatic operation
- Modular design and easy to access and maintain
- Minimal employee required

#### **Economy**

- Saving on final disposal costs
- Low maintenance costs
- Reduced labor costs
- Low energy consumption

#### **Application**

- Sewage treatment
- Activated sludge
- Harbour sludge
- Sludge in food and beverage manufacturing plant
- Contaminated soil
- Dredging
- · Residue from quarries
- Various industrial sludges
- (Cement, Coal, Mineral, Concentrates, Copper, Zinc, Iron, Nikel, Silver, Gold Etc.)

### **Pilot Testing**

Sludge test can be done to decide the right model of filter press and expect the best output of water content from all different types of sludge. Please send us your sludge sample if necessary as we offer sludge test service using our pilot machine at out site.

