



# FILTER PRESS FEEDING

› FULL AUTOMATION IS KEY TO OPTIMUM FILTRATION RATES AND COST SAVINGS

MINING AND MINERALS

A typical Filter Press Feeding cycle begins with a high flow rate and low pressure filling followed by a low flow rate with increasing pressure generated by the cake formation in the chambers.

PCM fully automated skid brings **SIMPLICITY** and **HIGH PERFORMANCES** at each cycle step:

- High flow-rate filling with minimal shear
- Constant sludge pressure for optimum cake consolidation and superior filtrate quality
- Flow regulation according to pressure variations
- Reduced press cycles
- Polymer injection proportional to sludge flow rate
- **PLUG AND PLAY**
  - Programmable Touch Screen feed controls for optimum filtration
  - Full data display (flow-rate, pressure, filtration curves, cycle time, alarm logs,...)
  - Press cycles according to sludge origins





### PERFORMANCES

#### › PERFORMANCES (more upon request)

- Flow rate: 200m<sup>3</sup>/h
- Pressure: 40 bar

### PCM SELECTION

#### › PCM FULLY AUTOMATED SKID INCLUDES:

- **Sludge feeding pumps:** 1 or 2 Progressing Cavity EcoMoineau™ pumps, depending on the filter-press size
- **Polymer dosing pump:** 1 Progressing Cavity EcoMoineau™ pump
- Touch Screen Control Cabinet
- Process control accessories

#### › PCM FILTER PRESS FEEDING SELECTION

- Feeding up to 25m<sup>3</sup>/h

With 1 high pressure EcoMoineau™ pump for the whole press cycle

- Feeding over 25m<sup>3</sup>/h

With 2 EcoMoineau™ pumps; one high flow rate pump to ensure short press cycles and one low flow rate/high pressure pump to maintain sludge pressure



### ADVANTAGES

#### › PCM MOINEAU™ TECHNOLOGY

- Transfer **abrasive fluids with varying solids content** with minimal equipment wear
- **Constant** and non-pulsating flow rate regardless pressure changes
- Gentle conveying technology to transfer fragile fluids with **low shearing**
- **Volumetric accuracy** as the flow rate is proportional to speed
- **High efficiency**
- No seal water required

#### › LOW LIFE CYCLE COSTS FROM ECOMOINEAU™ DESIGN

- Reduced footprint
- Reduced installed power
- Easy and fast maintenance



#### › HIGHER PERFORMANCES, LOWER COSTS

A quartz quarry was experiencing costly and unscheduled downtimes with a centrifugal filter press feeding pump operating at 110m<sup>3</sup>/h.

The replacement with PCM skid allows to maintain a constant sludge pressure at 15 bar (vs 8 bar) significantly enhancing the cake quality and associated costs. Designed for heavy duty fluids, it dramatically reduces maintenance times and costs and only requires 37 kW instead of the 100 kW previously required.