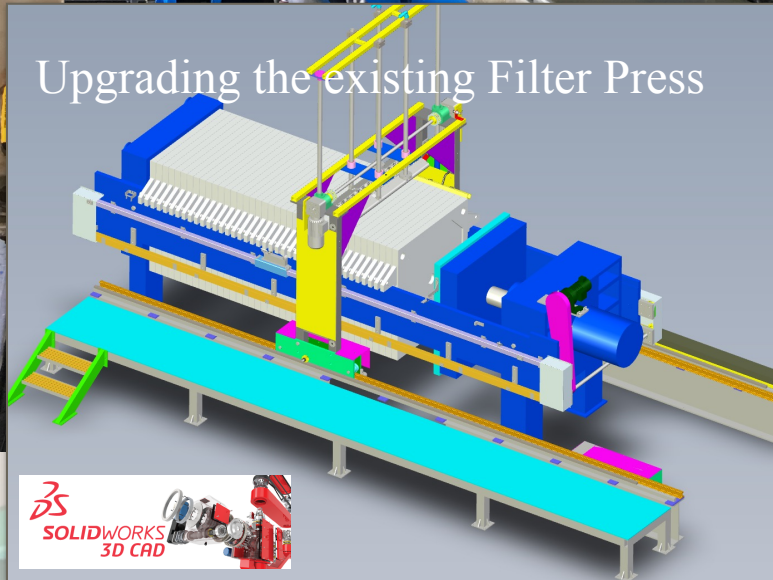




Upgrading the existing Filter Press



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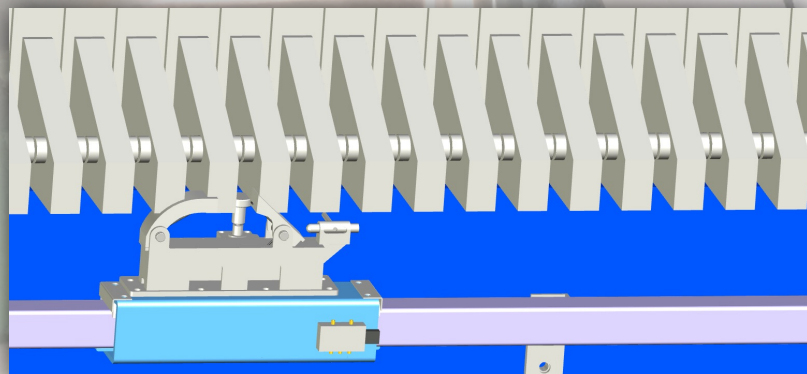
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Replacement of the existing accessories

The project is to upgrade the existing 1300mm x1300mm mixed pack filter press, by dismantling everything from the hydraulic pack, the old filter plates, plate shifting system, cloth washing facility and the core blow system, leaving the Main frame for retrofitting.

The job is a challenging task which we overcome the restricted height of the existing structure. And modifications involved to retrofit to the existing frame. The filter press components are all designed via Solid Works software and shipped to site by pieces and reassembled at the plant.

The retrofitted filter press each batch is designed to handle 2150L dry cake at 30% solid content by weight and 15 bar air squeezing pressure can be sustained.



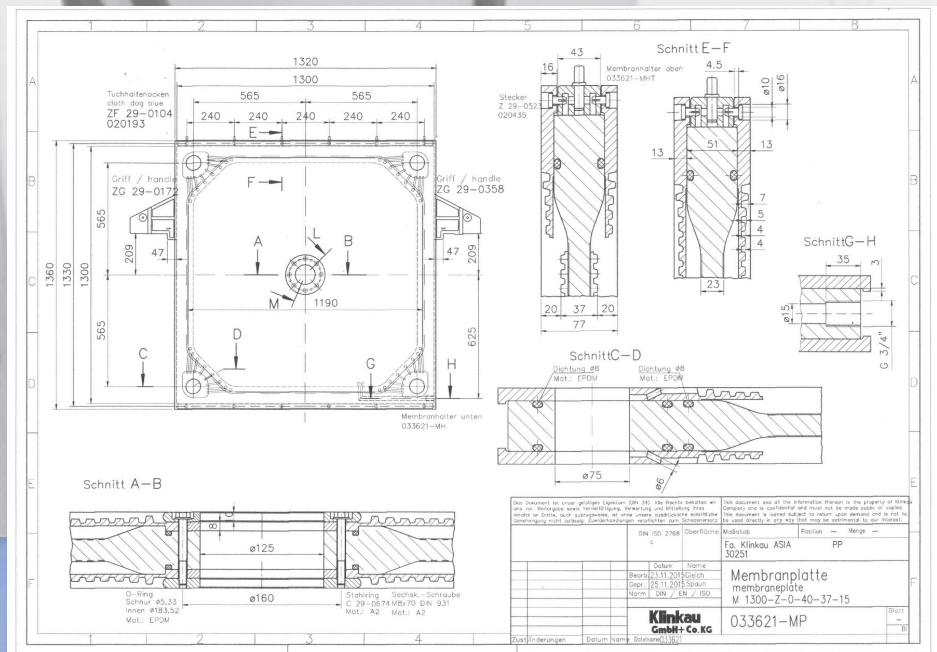
Automatic electric driven plate shifting device with build in pneumatic vibrator to enhance cake shaking and discharge.



Advanced Germany Filtration Technology Assures Squeezing Pressure is maintained

klinkau filtration systems

Overhanging membrane skin allows operator to replace the leaking skin within 10 mins on the press machine.



Klinkau Filter Plates are Fully made in Virgin Polypropylene, each plate is provided with a central sludge feed orifice and peripheral filtrate drainage ports allowing the maximum discharge and free flow of filtrate. The membrane diaphragm is manufactured in PP and its overhanging design provides an immediate replacement of membrane even the plate is hanging on the machine. This shortens any downtime for the replacement of membrane.

All filter cloths employed are from SOLAFT Albany textile which is a sophisticated and delicate filter cloths readily robust and resistant for long operating lifetime.

SOLAFT



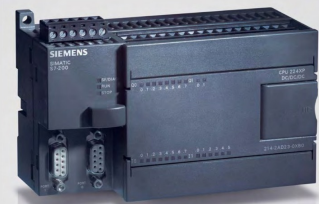
Sophisticated Control via SIEMENS SIMATIC PLC and HMI with handy operation

SIEMENS



SIMATIC S7-200

Control technology a class of its own



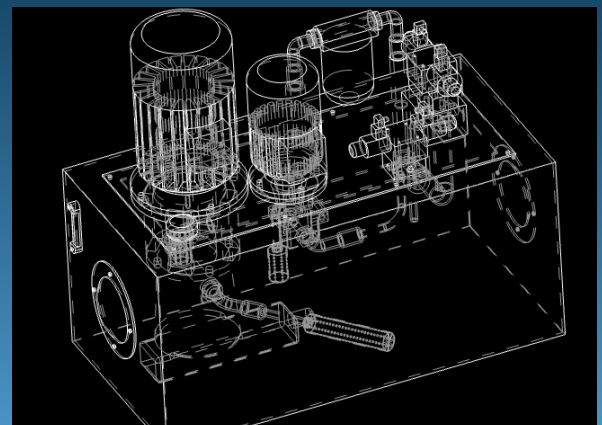
SIMATIC Controller

Answers for industry.

SIEMENS



Each hydraulic power unit comprise a variable volume pressure compensated piston pump driven by ABB electric motor (IE2) topicalised complete with anti condensation heaters vertically on Cast iron Oil reservoir. The hydraulic pump is to pressurise the Piston to desired pressure after the filter plate pack is fully closed, and to maintain the pressure. The pump will be then cycle off and recharge the hydraulic pack when the hydraulic pressure falls below a preset value.



Hydraulic Power Pack

Enviro Process Engineering



Hydraulic Pump Motor now available in IE2 High Efficiency or IE3 Premium Efficiency Standard



Automatic cloth washing facility

The patient design of double cloth washing driving stems, are automatically moving upward and downward to wash each cloth of an individual plate thoroughly in unmanned operation. Our programme allows the operator to determine the frequency and travelling speed of the washing time, optimises the water consumption and saves labour time.

Enhances the Overall Filter Press performance by extending cloth filtration performance, extending lifetime and reducing the chance of clogging .

Simultaneously washes both sides of the same plate individually, while separating the plate out away from the pack by proximity switches .

Wrap around design mechanically onto the cloth surface , can minimise the unnecessary wastage of washing liquid and any chance of over spraying and misting around lead to any chance of pollution .

Variable number passes of wrapping to be set via HMI, especially good for the end of work with more thorough washing.

Enviro Process
Newsletter 2017



New Sludge feed pumps 25m³/HR at 10 bar were repalced.



Per each filter press, it is fitted with 0.6m³ Air receiver rated to 10 bar, for core blow and necessary pneumatic valves and instrumentation. And One set of air dryer.

The project is also involved with an upgrading of all sludge feed pumps, polymer dosing pumps, all air receivers and the air compressor for best air squeezing performance.

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