

Diatomaceous Earth Filter Press

Compact, modular solution for optimized filtration

APPLICATIONS

Offshore and land operations in which clear fluids are expected to have variable loading of contaminants

BENEFITS

- Streamlines operations with improved ease of use and accessibility
- Minimizes exposure to HSE risk
- Enhances versatility with modular packaging to meet operational demand

FEATURES

- High tolerance in processing variable levels of contamination in a single pass
- Removal efficiency up to 20,000 ppm (2% solids)
- Filter membrane hydraulically held within recessed chambers
- Regeneration capability up to 8 times the original filter area
- Permeability and porosity regeneration capability with the addition of diatomaceous earth (DE) into fluid stream
- Compact transit frames and modular packaging
- Ergonomically positioned pipework and valves
- Modularity that enables full adaptation to different rig shapes, sizes, and footprints
- Full system redundancies
- Full compliance with independent and standardized equipment maintenance (STEM) regulations

The size of conventional filtration packages can pose challenges, particularly in deepwater and ultradeepwater operations. Offshore equipment must be compact, versatile, and streamlined. In response, M-I SWACO designed compact, modular service equipment with optimized packaging that significantly reduces footprint and minimizes flowlines and connections.

The DE filter press is recommended when processing wellbore fluids to overcome potential filtrate throughput dropoff. The unit is an effective, cost-efficient solution to conventional filtration and is available in sizes from 800 ft² to 1,800 ft² [74.3 m² to 167.2 m²].

Improved safety, efficiency, and reliability

The DE filter press features an optimized design that decreases the number of flowlines and minimizes connections for improved personnel safety. By removing solids such as scales, clay, and rust from fluid at optimal flow rates, the filter press also helps to increase operational efficiency. Further, it features the ability to regenerate permeability and porosity, extending filtration cycle performance.

Operational integrity

All DE filter press units come with passports of conformity and certificates of declaration that the unit meets stringent STEM and independently approved compliance for asset integrity. M-I SWACO also provides standard work and maintenance instructions.

Effective service delivery

The advantages of the DE filter press system are particularly apparent with variable contamination loading of scales, clay, rust, and other materials. Single- and dual-press packages come with a slurry tank, dual-vessel cartridge unit, and all necessary ancillary equipment to run an efficient, self-contained filtration job. Filter press equipment can be purchased or rented.



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