# ABEL HM Hydraulic Membrane Pumps Capacity up to 500 US GPM, Pressure up to 1450 PSI

# Versatile modular construction

# Optimum membrane performance

### ABEL HM in action for

- Filter press feed
- Sludge transfer
- Spray dryer feeding
- Furnace feeding
- Metering

#### Markets:

- Water and
  wastewater industries
- Ceramic industry
- Mining industry
- Cement industry
- Chemical and petrochemical Industry
- Automobile industry

### Wet-end construction:

- Nodular cast iron
- Nodular cast iron/rubber lined
- Stainless steel
- Polypropylene (PPH)
- Other materials on request

ABEL Hydraulic Membrane Pumps are equipped with newly designed, preformed membrane and pressure-balanced membrane positioning. During the suction as well as the pressure stroke the membranes are not loaded with pressure peaks; This ensures membrane positioning with optimal membrane end positions.

### Single or double acting

ABEL HM is available in simplex single or double-acting design. In addition to the attributes of piston membrane pumps such as self-priming and dry running resistance, the pumps are characterized by high efficiency, quiet running and availability.

#### Design advantages side by side

The hydraulic side is equipped with tested safety valves to safeguarde the maximum allowable pressure. The product side is equipped with a preformed membrane adapted to the operating conditions. The drive side, consisting of the reduction and eccentric gear, ensures an optimum power transmission even at lower speed – and all that without external oil lubrication.

A significant reduction of the energy costs is achieved by using frequency converters in filter press operation. No heating and thus, no energy losses, occur on the hydraulic side of the pump.

The ABEL HM are controllable in compliance with the present technical status.

## **Energy Reduction by Control:**

#### **Example Filter Press**

#### Control:

- Filtration cycle 1,5 hEnergy consumption:
- conventional 7,08 kWhHM-Pump 4,46 kWh
- Energy saving: 2,62 kWh or approx. 37%



