

# MULTISAFE Double Hose-Diaphragm Process Pump

## *Evolution*

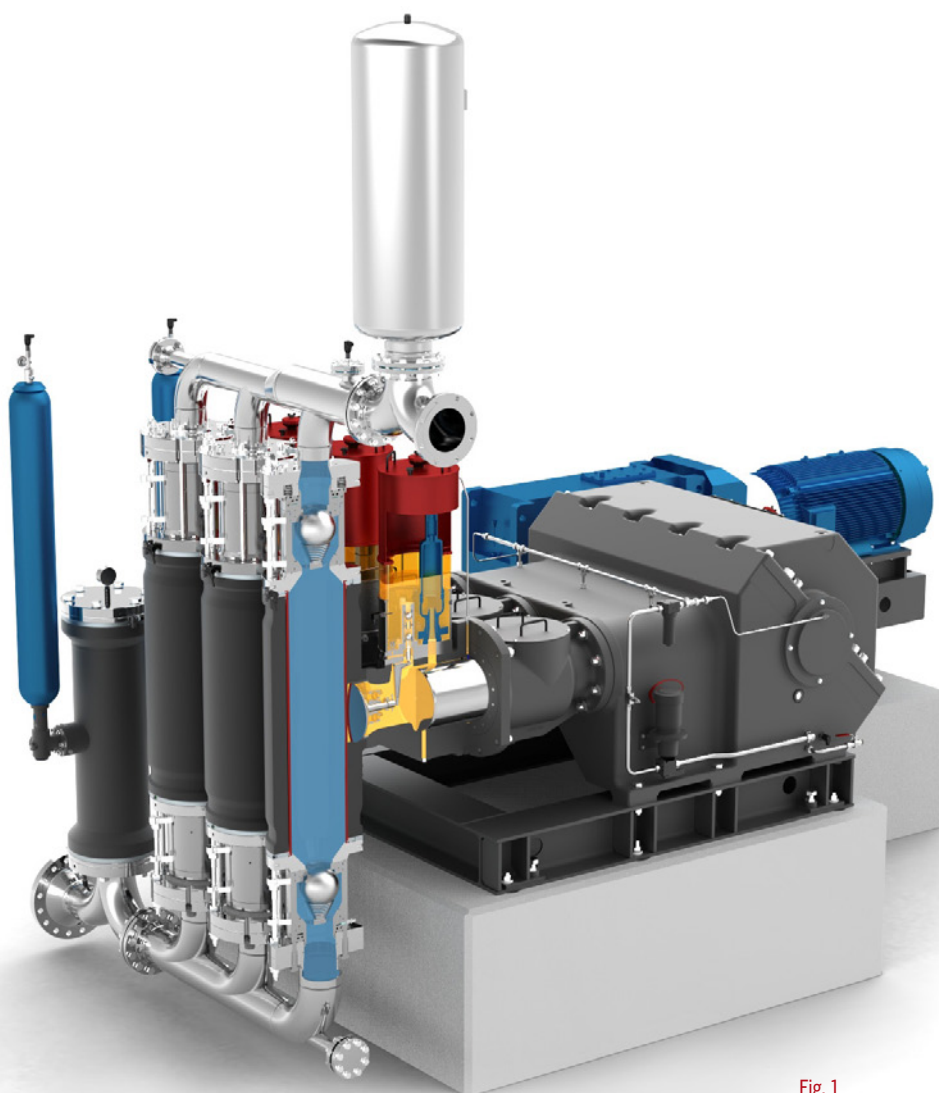


Fig. 1  
MULTISAFE Process Pump with hydraulically  
actuated hose-diaphragms

### FELUWA Diaphragm Piston Pump (Fig. 2)

- Traditional, hydraulically actuated diaphragm pump.
- The elastic flat diaphragm separates the conveyed fluid from the drive end and the sealing elements.
- Disadvantage: In the event of diaphragm failure, the conveyed fluid comes into contact with hydraulic chamber, dynamic sealing elements, excess-pressure safety valve, etc.
- In case of diaphragm failure, the pump normally requires immediate shut-down in order to avoid high costs of repair.

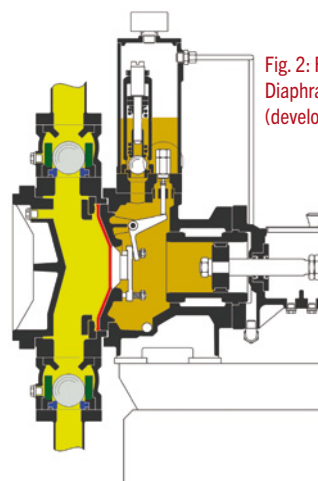


Fig. 2: FELUWA Diaphragm Piston Pump (developed in 1960)

### FELUWA Hose Diaphragm Piston Pump (Fig. 3)

- Modification of the flat diaphragm into a so-called hose-diaphragm.
- Linear flow path, high operating safety.
- In the event of hose-diaphragm failure, the flat diaphragm guarantees continuous hermetical sealing between conveyed fluid and hydraulic end. Pump operation can be maintained until the next planned shutdown of the unit.

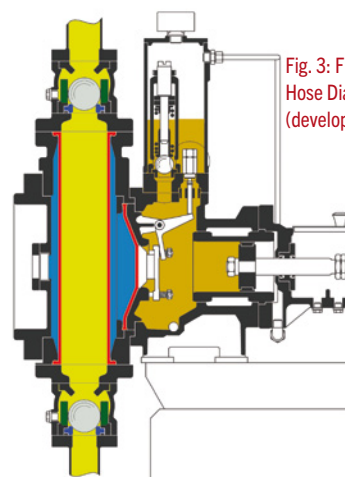


Fig. 3: FELUWA Hose Diaphragm Piston Pump (developed in 1970)

### FELUWA MULTISAFE Double Hose-Diaphragm Pump (Fig. 4)

- At the heart of this pump are two hose-diaphragms which are arranged one inside the other.
- Linear flow path, high operating safety.
- Smooth pump chamber, easy to clean.
- No sedimentations between hose-diaphragm clamping and casing.
- Even if one of the two hose-diaphragms fails, the fluid will neither contact the casing nor the hydraulic area. Functional efficiency is maintained until the unit allows for shut-down and repair.

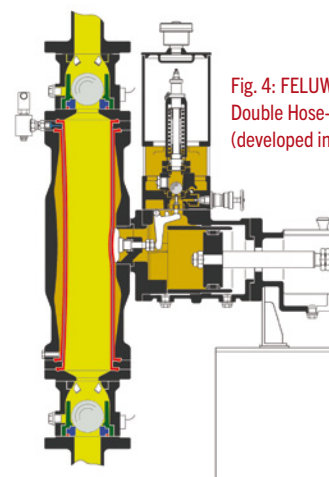


Fig. 4: FELUWA MULTISAFE Double Hose-Diaphragm Pump (developed in 2002)