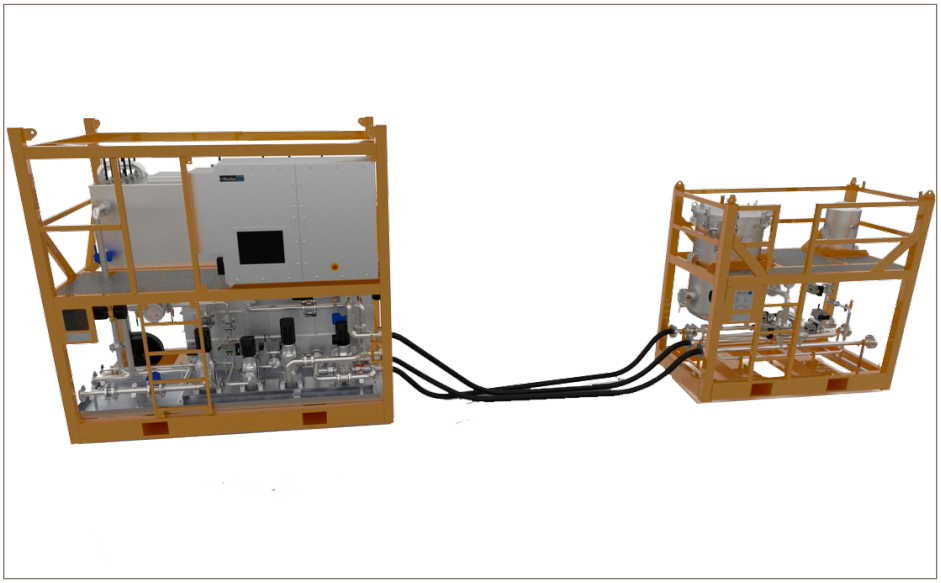
TwinZapp

The solution for separating (chemical) emulsions.

Emulsified water does not easily separate under the influence of gravity and time (Stokes' Law). TwinZapp is a new field-tested process which treats emulsified water. In an offshore environment the challenges multiply as time, footprint and manpower are restricted. The TwinZapp solution consists of a three stage process Stage 1: Electro Oxidation (Elox), using multiple pairs of electrodes. Stage 2: Separation, where the emulsion is broken. Stage 3: Polishing, where further hydrocarbon removal occurs and typically 5 to 10 ppm is achieved through either a Media Filter or a Dual Vessel Cartridge Unit.



Contact Information

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Benefits

- No chemicals or absorption cartridges required
- Mobile system that allows work on platforms and work-over projects
- 40-50% reduction of dissolved fraction (BTEX)
- Connections SS316L unions fig. 100 fitted with o-ring for easy and 100% leak-proof sealing
- New electric design
- Small footprint
- Longer lasting interfield pipelines
- Easily installed, operator friendly
- Low maintenance
- Also available as rental unit

Applications

- Produced water (gas)
- Bilge and slop water
- Run off water
- Well testing
- Frac flow back
- Corrosion inhibitor
- Foam lift
- Methanol upset
- Mud chemicals

Options

- Sensor system to fully automatic unit
- Offshore support crew available
- Field lab testing possibilities

ENGINEERING YOUR SUCCESS.

TwinZapp

SPECIFICATIONS

Filter Construction

Material Frame
- Carbon Steel
- Powder Coated

Material Wetted Parts
- SS316L

Design Code Frame
- DNV 2.7-1 / EN 12079

Explosion Proof
- ATEX Compliance Zone II

Control System
- Electrical / PLC, 380V AC, 3 ph

Utility Consumption
- <5 Nm3 instrument or work air at (6 bar)
- 5-15 kW

Operating Conditions

Maximum Water Temperature
- 120°F (50°C)

Operating Pressure
- Atmospheric

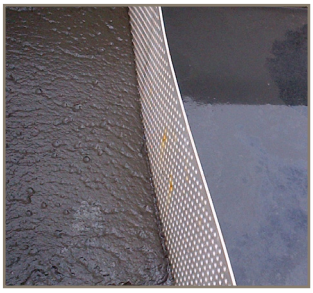
Outlet Pressure
- Atmospheric to 43.5 psi (3 bar)

Flow Rate
- 100-300 bbl/hr (5-15 m^3/hr)

Cleaning Flow
- Typically 98% of total flow rate

1ST STEP: ELOX
Electrical destabilisation of the emulsion.

2ND STEP: SEPARATION
Skimming tank for bulk separation of oil / water.



3RD STEP: POLISHING
Fine filtration for last traces of oil by a Media Filter or Dual Vessel Cartridge Unit.

Article description

TFZ

Elox Skid	
Code	**Amps**
60	60
480	480
960	960

Polishing unit	
Code	**Unit**
TFZM700	Media Filter
TDW610 50/40	TDW