

#### Reliable

External detectors provide a high-resolution density profile without being exposed to process conditions

#### **Cost effective**

No shutdown required for maintenance

#### **User friendly**

Standard instruments without PLC or special tools

### Interface profiler

# Multi-phase oil/water interface measurement in separator tanks with emulsion layers

Separation tanks on the deck of an FPSOs contain oil and water as well as other products. Mixing hydrocarbons with water can form an emulsified layer that makes it extremely difficult for operators to detect and control the water level. This can lead to loss of hydrocarbons when the water is drained or even damage to the electrostatic grids in desalination tanks due to the salty feed water. Multi phase density profiling is required to identify the different layers, including sand, for reliable, efficient process control. Level measurement is also required to ensure redundancy.

#### More details



#### **VEGAFLEX 86**

Level and interface measurement in the bypass

- High accuracy of the level in an external bypass chamber
- Shortenable rod probe allows great flexibility in project planning
- Reliable measurement, independent of process density, temperature and pressure

#### **Show Product**



#### **VEGAPULS 6X**

Level measurement with radar through isolation valve in the interface profiler.

- High-precision measurement independent of pressure, temperature or density
- SIL conformity according to IEC 61511 for functional safety
- High dynamic range independent of dielectric constant, foam or varying hydrocarbons

#### **Show Product**



#### **MINITRAC 31**

Radiometric multiphase interface measurement in oil separators

- High-resolution density measurement with scintillation detectors that can detect the smallest changes in radiation absorption by different media
- Maintenance-free and accessible, as the sensors are installed outside the vessels

**Show Product** 



## **VEGAFLEX 86 Show Product**



#### Measuring range - Distance

75 m

#### Process temperature

-196 ... 450 °C

#### Process pressure

-1 ... 400 bar

#### Accuracy

±2 mm

#### Version

Coax version ø 21.3 mm with multiple hole Coax version ø 42.2 mm with single hole Coax version ø 42.2 mm with multiple hole Exchangeable rod ø 16 mm Exchangeable cable ø 2 mm with gravity weight

Exchangeable cable ø 2 mm with gravity weight Exchangeable cable ø 4 mm with gravity weight

Exchangeable cable Ø 2 mm with centering weight Exchangeable cable Ø 4 mm with centering weight

#### Materials, wetted parts

316L

Alloy C22 (2.4602)

316

#### Threaded connection

≥ G¾, ≥ ¾ NPT

#### Flange connection

≥ DN25, ≥ 1"

#### Seal material

FFKM

graphit and ceramic

### Housing material

Plastic

Aluminium

Stainless steel (precision casting)

Stainless steel (electropolished)

### **VEGAPULS 6X**

**Show Product** 



#### Measuring range - Distance

120 m

#### Process temperature

-196 ... 450 °C

#### Process pressure

-1 ... 160 bar

#### Accuracy

± 1 mm

#### Frequency

6 GHz 26 GHz

80 GHz

#### Beam angle

≥ 3°

#### Materials, wetted parts

PTFE

PVDF

316L

PP PEEK

#### Threaded connection

≥ G¾, ≥ ¾ NPT

#### Flange connection

≥ DN20, ≥ ¾"

#### Hygenic fittings

Clamp ≥ 1½" - DIN32676, ISO2852

Slotted nut ≥ 2", DN50 - DIN 11851

Varivent ≥ DN25

hygienic fitting with tension flange DN32

hygienic fitting F40 with compression nut

Hygienic screw connections  $\geq$  DN50 tube ø53 -

DIN11864-1-A

Hygienice flange connection ≥ DN50 DIN11864-2

Hygienic clamp connection ≥ DN50 pipe Ø53 - DIN11864-

3-A

DRD connection ø 65 mm

SMS 1145 DN51

## MINITRAC 31 Show Product



#### Measuring range - Distance

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#### Process temperature

-40 ... 60 °C

#### Process pressure

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#### Accuracy

0.1 %

#### Materials, wetted parts

No wetted material

#### Seal material

no media contact

#### Housing material

Aluminium

Stainless steel (precision casting)

#### **Protection rating**

IP66/IP67

#### Output

Profibus PA

Foundation Fieldbus

Four-wire: 4 ... 20 mA/HART

#### Ambient temperature

-40 ... 60 °C

