

#### Reliable

Reliable measurement independent of process conditions

#### Cost effective

plics® concept: short delivery time and standardized operation

#### **User friendly**

Simple installation and commissioning

# **Evaporator**

## Density and pressure measurement during spice slurry thickening

In the production of spices, the spices are first mixed with water and oil to form a slurry. This is fed into an evaporator, where water is removed to turn it into a kind of syrup. The thickened spice syrup must have exactly the right density - so that it can be spread thinly onto metal sheets for oven drying, ready to be ground into powder. To ensure the optimal density of the spice syrup, it requires a continuous measurement during manufacture. The pressure in the feed pipe leading to the evaporator also requires careful monitoring to ensure a smooth-running production process.

#### More details



#### **MINITRAC 31**

Radiation-based sensor for density measurement in the evaporator

- External non-contact measurement through the pipeline regardless of process conditions and product properties
- Small, compact design enables space-saving installation
- PLICSCOM display and adjustment module for quick setup and on-site display of measured values

### **Show Product**



#### **VEGABAR 82**

Pressure transmitter for monitoring pressure in the evaporator feed pipe

- Wear-resistant CERTEC® ceramic measuring cell is non-sensitive to abrasion
- Absolutely front-flush ceramic diaphragm avoids sticking and abrasion damage
- Long service life thanks to the robust measuring cell

#### **Show Product**



# MINITRAC 31 Show Product



Measuring range - Distance

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Process temperature

-40 ... 60 °C

Process pressure

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

**VEGABAR 82** 

**Show Product** 



Measuring range - Distance

-

Measuring range - Pressure

-1 ... 100 bar

Process temperature

-40 ... 150 °C

Process pressure

-1 ... 100 bar

Accuracy

0.05 %

Materials, wetted parts

PVDF

316L

Alloy C22 (2.4602)

PP

1.4057

1.4410

Alloy C276 (2.4819)

Duplex (1.4462)

Titanium Grade 2 (3.7035)

Threaded connection

≥ G½, ≥ ½ NPT

Flange connection

≥ DN15, ≥ ½"

Hygenic fittings

Clamp ≥ 1" - DIN32676, ISO2852

Slotted nut ≥ DN25 - DIN 11851

hygienic fitting with tension flange  $\ensuremath{\mathsf{DN32}}$ 

hygienic fitting F40 with compression nut

DRD connection ø 65 mm

SMS 1145 DN51

SMS DN38

Swagelok VCR screwing

Varivent G125

Varivent N50-40

for NEUMO BioControl D50 PN16 / 316L

Seal material

EPDM

FKM

FFKM

