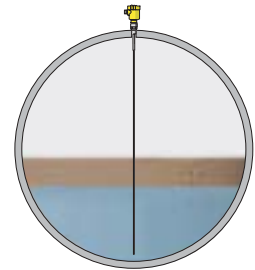




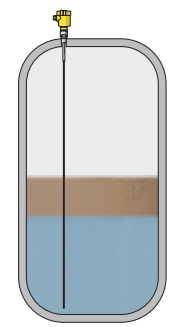
**VEGAFLEX 67: Application examples**

**Separating bottle**  
 Chemical products are very often separated in separating bottles made of glass. For this application VEGAFLEX 67 is used in coaxial version.



- Advantages**
- > Level and interface measurement
  - > No moving parts
  - > Easy set-up
  - > Maintenance-free

**Oil-water separator**  
 Crude oil must be dehydrated prior to distillation. In long settling basins, the oil separates from the water and is removed. For this application VEGAFLEX 67 in rod version is recommended.



- Advantages**
- > Level and interface measurement
  - > Density independent
  - > No moving parts
  - > Easy set-up
  - > Maintenance-free



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**VEGAFLEX 67**

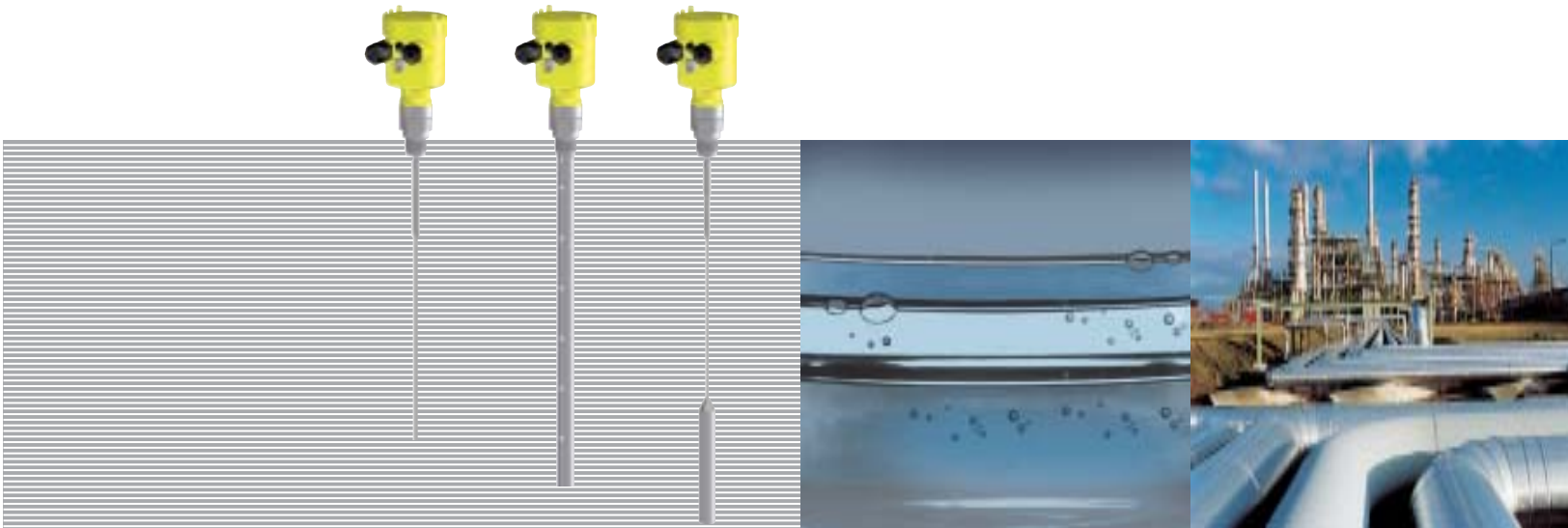
**Interface measurement in liquids**



## VEGAFLEX 67: Interface measurement in liquids

### New application spectrum for the guided microwave

Beside continuous level measurement of solids and liquids, the guided microwave measuring principle has been further developed specifically for the detection of interfaces. VEGAFLEX 67 is the ideal solution for interface measurement of oil and water or solvents and water.



### Change of interface with new technology

For interface measurement of two liquids with varying densities, displacers or floats have primarily been used up to now. Since only one interface can be measured with this method, the buoyant device always has to be completely submerged. A level measurement of the upper phase, i.e. additional layer above, is not possible.

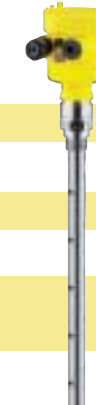
The guided microwave offers essential advantages. The microwave pulse guided down a rod or cable is reflected by an interface with differing dielectric constant or conductivity – the measurement of several layers is thus possible. The sensor doesn't have to be mounted in a reference vessel. Since it can also measure the total level in the separator, an additional level measurement set-up for that purpose is not necessary.

### All advantages at a glance

- › Unaffected by density
- › No moving parts
- › Easy set-up and mounting
- › Maintenance-free

### The electronics facts

Measuring range	max. 32 m
Accuracy	+/- 10 mm
Process temperature	-40 ... 150°C
Process pressure	-1 ... 40 bar
Dielectric constant of the media	rod version from 1.7 coax version from 1.4



### Interface – it depends on the reflection

The dielectric constant or the conductivity of the product is exclusively decisive for the reflection of the microwave pulse on a liquid. The first reflection signal occurs at the transition from the gas space to the liquid. This yields the distance to the product surface. In non-conductive products a part of the transmitted signal penetrates the upper liquid and is reflected at the second surface. This yields the distance to the interface of the two liquids. The only limiting condition: the upper liquid interface must not be conductive and the difference between the dielectric constant values must be at least 10, to ensure a precise evaluation of the interface reflection.

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adjustment  
module



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plics®  
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Plastic



Stainless steel



Aluminium



Aluminium  
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Electronics



4 ... 20 mA/  
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