



VEGA sets new standards with VEGAPULS 6X

VEGAPULS 6X: One radar sensor for all applications

With VEGAPULS 6X, VEGA is literally revolutionising radar level measurement. The great advantages of the instrument can be quickly summarised:

- Fast configuration
- Simple setup and commissioning
- Highest security standards
- Simple operation

Is deciding which instrument is the right one, too complicated? No longer!

Whoever has a choice, is blinded by choice – VEGA makes this well-known issue obsolete: The leading manufacturer of level, switching and pressure instrumentation has developed a radar sensor that's a perfect fit for all applications: VEGAPULS 6X.

So, is it "one for all"?

VEGAPULS 6X delivers precise measuring results – no matter whether in liquids or bulk solids, or under adverse conditions like high temperature, dust or extreme pressure. Even

- tight spaces,
- aggressive media like [chlorine](#),
- condensation or
- deposits on the sensor

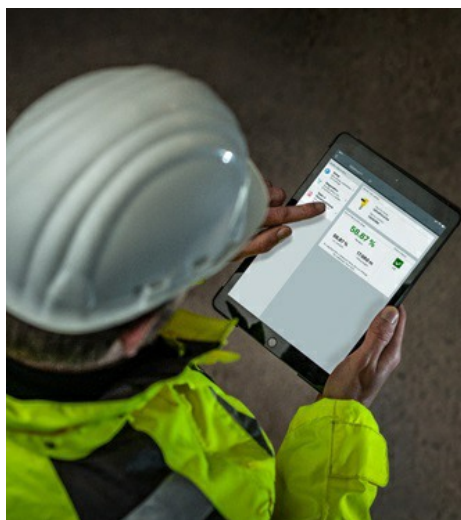
do not affect the measuring result. The instrument is always just right for the application it's needed in: With the help of the [configurator](#), users can easily put together a sensor that fulfils their particular needs with just a few mouse clicks. They don't have to worry about things like operating frequency, suitable connection or DK value of the medium. Setup and commissioning is also simple: If all the details of the application are known, the sensor can be preset so that it only needs to be mounted and electrically connected.

What about safety considerations?

This radar sensor for continuous level measurement is equipped with a comprehensive safety concept. With exceptional safety characteristics and operational reliability, the SIL certified sensor reduces the risks in safety-critical applications. And when it comes to cybersecurity, it meets the highest standards mandated by IEC 62443. All this is possible thanks to the new radar chip developed by VEGA.



How does communication work?



There are several different ways to adjust the instrument: For sensor adjustment directly at the measuring point, VEGA has provided the proven PLICSCOM display and adjustment module, whose menu structure is designed to be clear and easy to understand. The level sensor can also be adjusted via a PC or laptop with PACTware. And lastly, the [VEGA Tools App](#) offers a wireless adjustment option using Bluetooth on a smartphone or tablet.

The most important technical data:

- Process temperature: -196° to +450° C
- Process pressure: -1 to +160 bar
- Measuring range: 120 metres
- Measuring accuracy: +/- 1 millimetre

Does all that make VEGAPULS 6X the ideal sensor for level measurement with radar? Yes, for sure!

The sensor is the result of more than 30 years of experience in radar measurement technology and over one million radar sensors in use worldwide – in industries like chemicals, energy, food, oil, gas and many others. It combines into one instrument the best from all the 80-GHz, 26-GHz and 6-GHz sensors that came before it: VEGAPULS 61, 62, 63, 64, 65, 66, 67, 68 and VEGAPULS 69. [VEGAPULS 6X](#) delivers exact measuring results regardless of the process conditions and, thanks to the non-contact measuring method, enables maintenance-free operation.

Related applications

Level measurement and point level detection in storage tanks for chlorine

Chlorine production and storage places high demands on the chemical and the diffusion resistance of the materials in the production equipment. Extensive process knowledge and experience is required when selecting the sealing materials. In fact it is decisive for the long-term, safe and profitable operation of the plant. Since the processes can only be interrupted at great expense and plant disruption, the reliability of the instrumentation is a top priority.

Measuring task



Level measurement and point level detection

Measuring point

Tank

Measuring range up to
10 m

Medium

Chlorine

Process temperature
-40 ... +80 °C

Process pressure

-1 ... +16 bar

Special challenges

Very aggressive medium with a strong tendency to diffuse

Reliable

All materials are fully chemically resistant

Cost effective

Universal application, independent of product characteristics and process conditions

User friendly

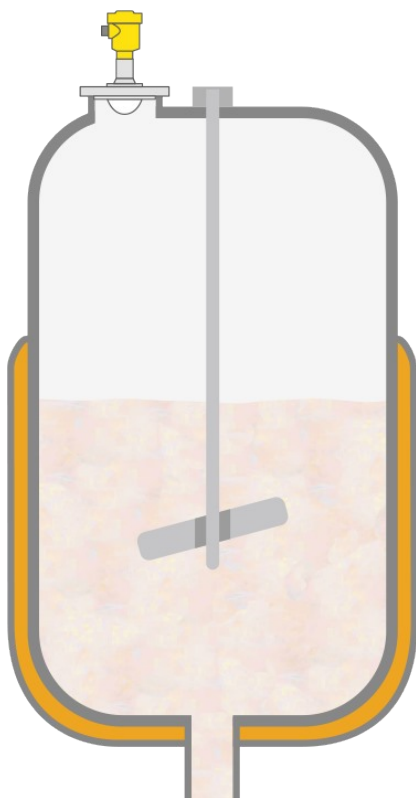
Maintenance-free operation

[See all recommended products](#)

Level measurement in an aluminium powder suspension reactor

Aluminium powder suspension is an intermediate for titanium sponge production. In the reactor, vanadium oxide trichloride is removed from the aluminium powder suspension. When the aluminium powder suspension is fed into the reactor, strong turbulence arises on the product surface. To optimize the process, the level in the reactor must be accurately measured and monitored.

Measuring task



Level measurement
Measuring point
Reactor
Measuring range up to
1.2 m
Medium
Aluminium powder suspension
Process temperature
0 ... +130 °C
Process pressure
0 ... +0.3 bar
Special challenges
Low dielectric constant, confined spaces, strong turbulence on the product surface,
condensation

Reliable

Reliable measurement despite small dielectric constants

Cost effective

Reliable measurement of the entire reactor volume

User friendly

Simple mounting and setup

[See all recommended products](#)

Related products



VEGAPULS 6X

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