



Radar level measurement for the Water/wastewater industry

VEGA Inc.

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WWOA Conference – Green Bay, WI

Who Is VEGA?

Cincinnati



Local customer service, field service, experts to help



Why Partner With VEGA? (RADAR)

- Largest radar product offering
- Class 1 Div 1 / Ex proof
- Bluetooth
- 6.3 GHz, 26 GHz, 80 GHz
- High sensitivity electronics
- Loop powered



Measuring level in water and wastewater:

What technologies are used?



Measuring level in water and wastewater:

Floats

Pressure Transducers

Ultrasonic

Bubblers

MultiTrobe / Candycane

Capacitance/Conductive

Laser



Measuring level in w/ww: FLOATS



Measuring level in w/ww: Pressure Transducers



Measuring level in w/ww: Ultrasonic



Measuring level in w/ww: Bubblers



Measuring level in water and wastewater:

RADAR

What techniques are used?



VEGAPULS WL 61 – optimized for the water/Wastewater industry



NO Maintenance!

No Calibrations!

- 49' measuring range
- +/- 2mm accuracy
- C1D1 (IS)
- Housing
 - Submersible (water tight)
 - Protection IP 66/68 (2 bar)
- Temperature range
 - -40 ... +80 °C

Measuring level in water and wastewater:

Four applications: Problem solving by utilizing simple and accurate technology

- Lift Stations; heavy maintenance (poor visibility, sludge, foam/condensation)
- Chemical tanks; poor accuracy, poor visibility
- Open channels; Flow (poor accuracy & temp changes...)
- Bulk tanks, scum pits, Digesters; foam, dirt, condensation and temp changes hurt accuracy



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Main applications...

Lift Stations / Wet wells

Looking Forward

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Lift Stations:



Lift Stations:



Lift Stations:



Lift Stations:



Lift Stations:



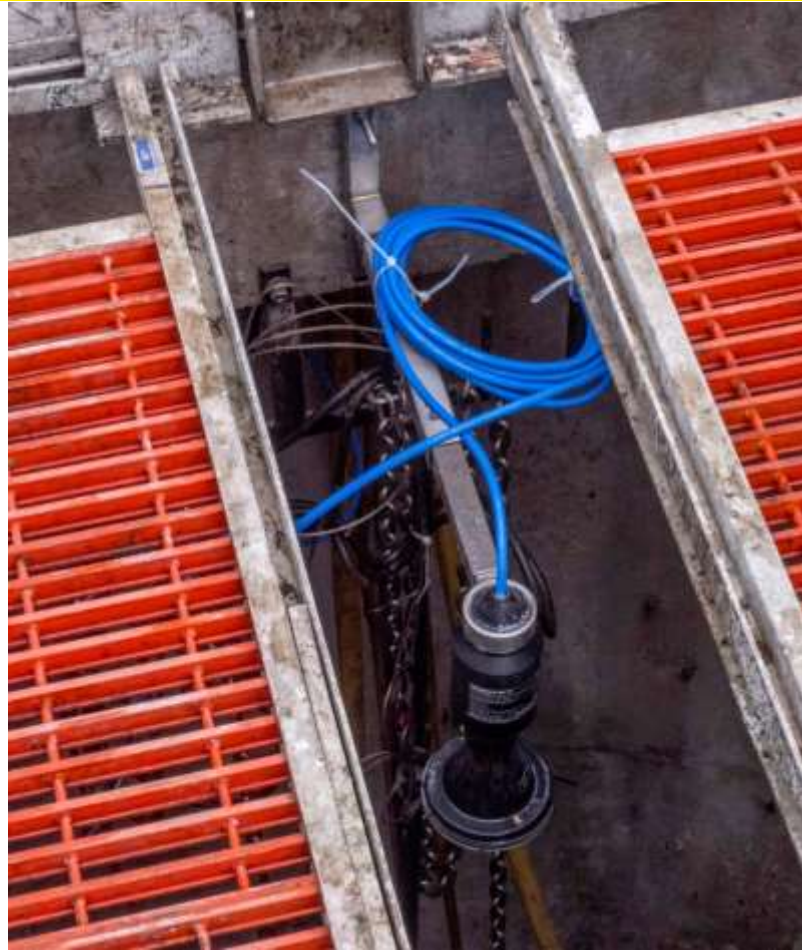
Lift Stations:



Lift Stations:



Lift Stations:





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Main applications...

Chemical tanks – drinking water / waste water

Looking Forward

VEGA

Chemical tanks



Chemical tanks

Double walled Poly (plastic) tank



Chemical tanks



Chemical tanks



Chemical tanks



Sharpie vs WL 61

Sharpie didn't do a good job of sending a signal back to the main SCADA system!

Customer has purchased 3 more.

Chemical tanks





Chemical tanks



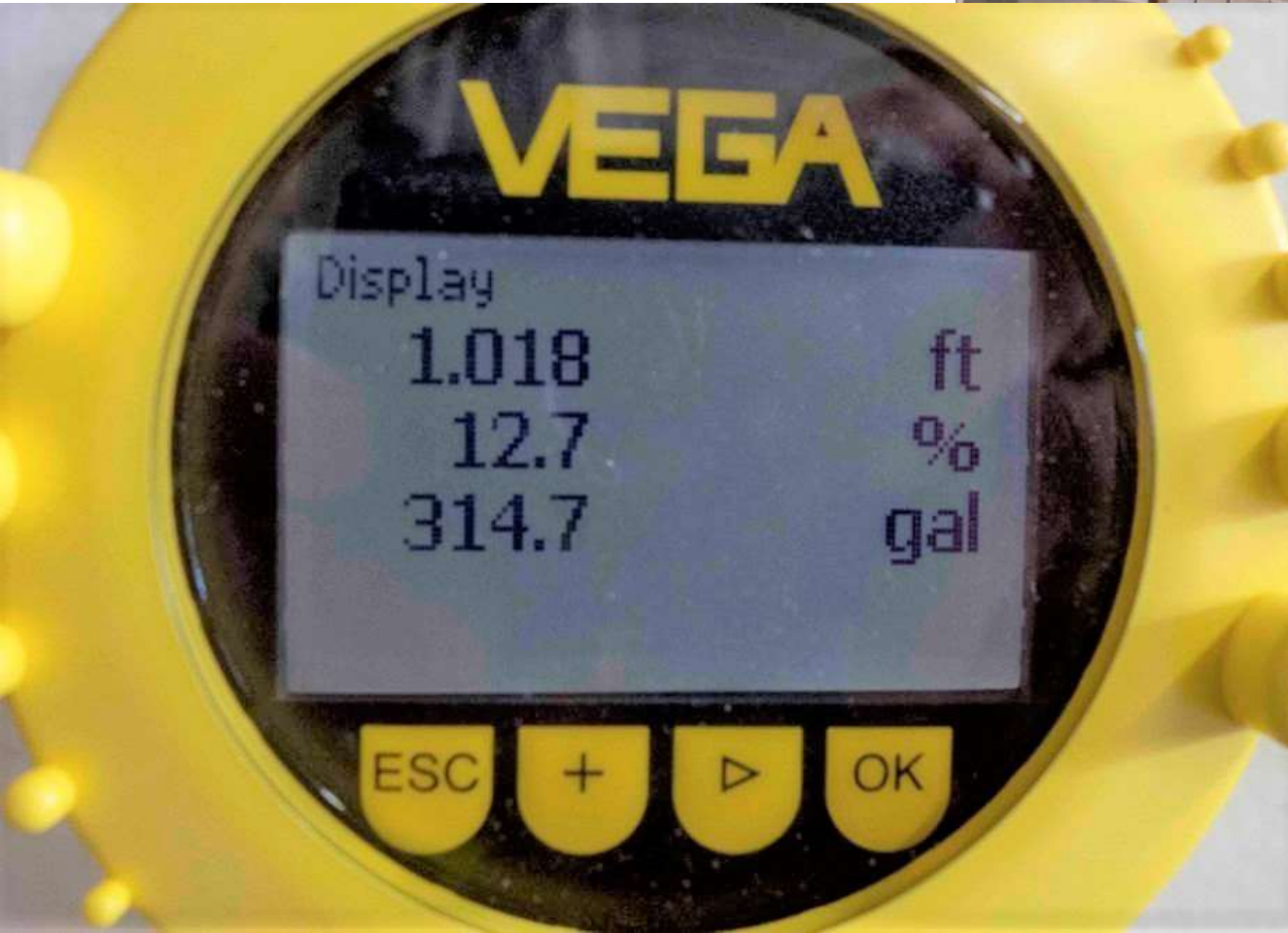
Chemical tanks



Chemical tanks



Chemical tanks



Mounting



Any Questions?





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