# **Magnetic Level Gage & Guided Wave Radar**

## **Compact Solution** With Your **Preferred** Radar





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## **The Optimum Solution for Level Indication**

By combining Guided Wave Radar (GWR) with a magnetic level gage, the Magnicator<sup>®</sup> Guided Wave Radar (MGWR<sup>™</sup>) brings a new standard of assurance to level indication. The MGWR seamlessly integrates two independent level technologies off a single set of process taps for true redundant measurement. The Jerguson Magnicator utilizes a wide indicator for superior level visibility, and a unique magnet arrangement, so you never have to worry about skipped or missed flags. The GWR transmitter obtains an independent reading of the liquid level, providing an accurate output even in the case of float failure. The GWR transmitter will read the true level of the fluid even if the density of the product varies.

#### Combining **2** Trusted Level Technologies into a Single Solution!

#### Jerguson Magnetic Level Indicator - Density Based Level Measurement

Chamber contains a sealed float with magnet arrangement that rises and falls as liquid level changes in the process level.

- Strongest magnetic field of any Magnetic Level Indicator
- Highly visible level indication
- NEW! Wide Indicator (1.5" width)
- Indicator flags magnetically coupled together to prevent skipping / missed flags
- Robust Sch 40 (min) chamber standard construction
- Models available for interface applications; both total and interface level can be measured
- Less prone to level fluctuations with foaming applications
- Attractive alternative to glass gages reducing maintenance, eliminating leak paths, and increasing visibility
- ASME B31.1 & B31.3 Design

#### **Guided Wave Radar** – Dielectric Based Level Measurement Various GWR manufacturers available based on customer preference

On-board electronic module sends low-power microwave pulses down the GWR probe which are reflected by the process media. Time of flight is measured to determine the process level.

- Measurement independent of density, conductivity, dielectric constant, and temperature
- Measurement unaffected by foam or turbulent surfaces
- Models available for interface applications; both total and interface level can be provided with one HART signal
- Models available with compensation for steam applications





### MGWRS

#### Single Chamber Design

- A slotted internal baffle plate provides separate compartments for the float and GWR probe in a single chamber
- Compact design minimizes space requirements and potential weight concerns
- Baffle plate provides inherent benefits of reducing the effects of flashing or plugging with build-up in heavy particulate media
- · Variety of custom arrangements available
- True redundant level technologies

#### **Common Applications**



#### Refining / Offshore / Petrochemical Storage Vessels

Hydraulic Reservoirs Oil / Gas Separators Distillation Columns / Trays Isomerization Deethanizer Knockout Drums Desalters Fractionator



#### **Chemical**

Storage Vessels Separation Vessels Chemical Reaction / Injection Solvent Tanks Ammonia Tanks Distillation Column / Trays



#### Power Storage Vessels Steam Drums Feed Water Heating Condensers Deaerators Blowdown Tanks Preflash Drum Reboilers Reflux Accumulator



## MGWRD

#### Dual Chamber Design

- Separate Magnetic Level Gage and GWR chambers
- Ability to add valves to independently isolate either device while maintaining operations
- Arrangements available with process connections off either device
- Reduces potential for build-up in heavy particulate media
- Flashproof designs available for flashing or dirty service
- True redundant level technologies

# MORE Jerguson<sup>®</sup> SOLUTIONS



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