

ABB MEASUREMENT & ANALYTICS | APPLICATION NOTE

# **LMT100**

# Level measurement of CO₂ storage



High accuracy non-intrusive liquid level and interface level detection

## Measurement made easy

Using LMT100 magnetostrictive transmitter for level management of CO<sub>2</sub>

### The application

The customer is a CO<sub>2</sub> plant in Virginia, USA. The application is a cryogenic CO₂ storage tank.

- Ambient Temperature: -26 to 40 °C
- Fluid SG: 0.90
- Process Temperature: -40 °C
- Process Pressure: 2.4 Barg

#### The Problem

The storage tank is a 4.0 m tall horizontal cylinder used for storing CO2 inventory. The customer wanted a solution which the sensor could be removable without requiring evacuation of the storage tank and would not be susceptible to freezing and icing of the sensor or electronics.

The application requires accurate measurement and uses a 2 out of 3 voting system with two AT100 magnetostrictive transmitters which are installed into the two interconnecting tanks.

#### The solution

The customer installed the LMT100 with a 34 in. sensor well so that the sensor could be removable while the vessel is under pressure. The transmitter installed easily and indicated accurately as soon as it was installed. The vertical head rotation and waveform display made installation and calibration verification easy.



