Application Note AN/LMT100-PropaneStorage-EN

LMT100

Level measurement of propane storage tanks

High accuracy non-intrusive liquid level and interface level detection K-TEK Level products

Measurement made easy



The Application



The customer supplies propane storage tanks and monitoring services to oil compressor stations.

- The vessel is a 3302mm tall horizontal bullet tank with roughly 110 m3 storage capacity.
- Ambient and Process Temperature Range: -23°C to 46°C.
- Maximum Pressure: 6.8 barg

The Problem

Initially, the customer wanted to use a LevelMaster in the application, but it could not perform under the pressures. Having only one vessel entry for vapor recovery, pressure relief and level measurement, the options were limited. To further complicate the application, the filling and emptying of the vessel is very turbulent and propane tends to flash at higher temperatures when emptying the vessel.

Additionally, the customer was also looking for a technology which would not require special equipment to install and which could be removed while the vessel was under pressure.

The Solution

Other level technologies were considered, but none were as capable as the LMT100 Insertion Magnetostrictive Transmitter. The LMT100 was selected because it is not affected by nozzle or vessel geometry and could easily perform in the ambient and process conditions. Furthermore, with the Sensor Well Option, the device is able to be installed and removed while the vessel is under pressure.

The Result



The LMT100 has worked flawlessly since installation July 13, 2015.

Since the device is calibrated with the same float that ships with the device, no field setup was required. The customer simply installed the sensor well and transmitter. Done.

Since the LMT is a digital transmitter and the sensor element is not a wearing component, no additional calibration routines will be required for years to come.

Contact Us

ABB Inc.

17100 Manchac Park Lane (Suite B) Baton Rouge, LA 70817 USA

Phone: +1 225 408 0800 Service: +1 225 408 0898 Fax: +1 225 408 0899

Service e-mail: ktek-service@us.abb.com

ABB Engineering (Shanghai) Ltd.

No. 5, Lane 369, Chuangye Road Kangqiao Town, Pudong District Shanghai, 201319, P.R. China

Phone: +86 10 64231407 Service: +86 21 61056421 Fax: +86 10 64371913 E-mail: shan.li@cn.abb.com Service e-mail: rola.li@cn.abb.com

www.abb.com/level

Note

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents - in whole or in parts - is forbidden without prior written consent of

Copyright@ 2016 ABB All rights reserved







Power and productivity for a better world™