

LLT100 laser level measurement

In adhesive medium storage tank



Measurement made easy

Storage tank in
Polytetrahydrofuran
finished product area

Overview

Polytetrahydrofuran is an important raw material for coatings, synthetic leather, binder, polyester and so on. It is a white waxy solid at room temperature with a melting point of 33 ~ 36 °C (91.4 ~ 96.8 °F). When the temperature exceeds room temperature, it will become a colorless viscous liquid. There are several finished material storage tanks at the customer's site, with a height of 13 meters (42.7 feet). The tank body is provided with thermal insulation protection, and automatic liquid level measurement and monitoring shall be realized

The problem

For the liquid level measurement of adhesive materials, the use of contact instruments has always been the difficulty of measurement. There will be various on-site phenomena such as hanging and blocking, so it is impossible to obtain accurate continuous measurement signals. In addition, due to the melting point characteristics of materials in this application, it is very easy to solidify into a solid state at room temperature, which brings another challenge to liquid level measurement.

Solution

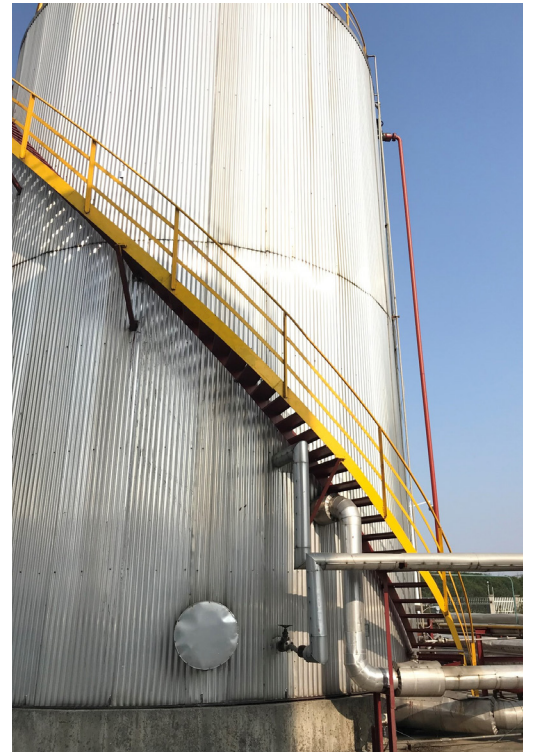
Using LLT100 non-contact laser level transmitter, the continuous liquid level measurement under this working condition can be easily realized. Due to the principle of laser level measurement, it is not limited by the state of the measured target surface. It can work normally even in the state of solid-liquid mixing, and the feedback continuous and stable signal is transmitted to the DCS control room. ABB's latest generation LLT100 laser level transmitter provides flameproof protection, which can be safely applied to the explosion-proof site in zone 1. Its light source has been certified by the explosion-proof authority and can be safely injected into zone 0. While stably measuring and monitoring, it does not pollute customers' products and ensures the quality of finished materials.

—
01 LLT100 laser level transmitter

—
02 Polytetrahydrofuran storage tank



—
01



—
02

—
ABB Engineering (Shanghai) Ltd
No. 4528, Kangxin Highway,
Pudong District, Shanghai, China
Tel: +86 21 6105 6666
Fax: +86 21 6106 6677

abb.com/measurement

—
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 ABB.