LLT100 laser level measurement
In adhesive medium storage tank

Measurement made easy

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