



## Effective Level Measurement for Steel Sheet Factory

At a Steel Sheet factory in Thailand, they were looking to get accurate and reliable level measurement of their caustic soda tanks throughout the steel sheet making process.

### Caustic Soda Level Measurement

The main problem with caustic soda (NaOH) is that it is highly corrosive. But, it is used in the steel industry for metal degreasing, as well as cleaning processes in a wide range of industry applications so it's an important application for level measurement and control. It particularly presents problems in level measurement as any contacting measurement technologies, like float switches or submersible level, would be highly reactive with the caustic soda. Therefore, for this application it was crucial that the instrumentation was non-contacting. Not only is this beneficial in terms of product life cycle, but it also has health and safety benefits as the engineers at the steel factory

wouldn't need to come into contact with the caustic soda, which can have seriously harmful effects on humans.

### dB10 PVDF Provides Accurate and Reliable Measurement.

The customer had originally bought a dB10 3 inch flange to install by themselves to measure the level in their caustic soda tank, however they encountered a problem with the PTFE insulator as it had swollen, and no longer fitted the application. So, they reached out to Pulsar Measurement partner in Thailand, Microcems. After taking a look at the application and the issues that the end-user was having, Microcems suggested using a PVDF flange, as well as a PVDF dB10 transducer.

PVDF is a thermoplastic semicrystalline polymer and is a material that can retain the majority of its strength at extreme temperatures and is resistant to most acids, bases, organic solvents, chlorine, bromine, and other halogen compounds.

All Pulsar Measurement transducers are available in PVDF, as



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## CASE STUDY: DB10 ULTRASONIC TRANSDUCERS

well as with intrinsically safe options, meaning that there are few applications we can't solve.

After being installed for 6-months, the end user was happy to report that there were no issues with the sensor or flange, and the solution has gained the trust of engineers who are considering Pulsar Measurement equipment across all of their applications.

### More Information

**dB10 Ultrasonic Transducers:** <https://pulsarmeasurement.com/en/db-transducer>

**Partner Locator:** <https://pulsarmeasurement.com/en/partnerlocator>



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