Jet A-1 Fuel Tank Level Monitoring Solution

Precision Digital ProtEX-MAX Paired with the ABB LLT100







Moderator



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Owen Peters is a Regional Field Sales Manager at Precision Digital. He has frequent in-person and virtual engagement with distribution partners, original equipment manufacturers, systems integrators and end users to ensure projects meet technical and economic requirements for all parties. Poll Question

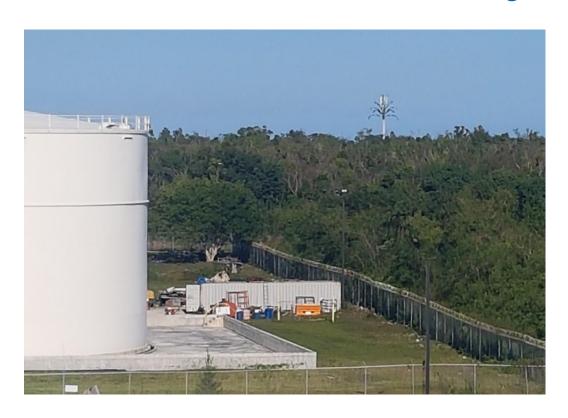
Have you ever sold a Precision Digital meter with an ABB transmitter? If so, which meters?



Application

- A contractor supplying an airport with a large storage tank to hold jet A-1 fuel needed a lower-cost, more reliable method to display level in this 48 feet (15 meter) tank than the mechanical float type tank level devices they had used in the past.
- They also needed a ground level display of the tank volume that was big and bright enough to be read outdoors in direct sunlight.

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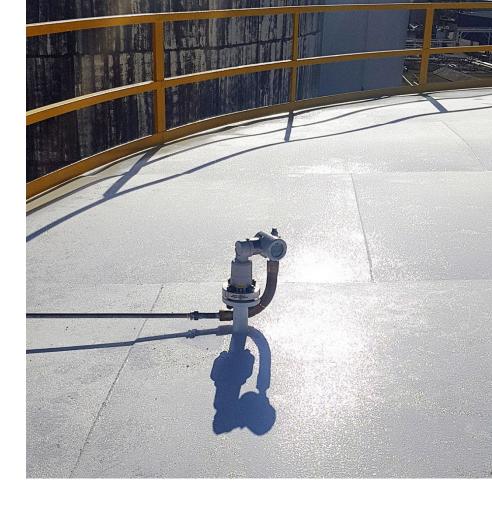
Challenges

- The physical size of this large storage tank presented a challenge as to what level technology could be used.
- Temperature variations and condensation in the tank mandated the use of a heated lens.
- Intense direct sunlight would make it difficult to read a ground level display of storage tank volume.

Solution - Transmitter

An ABB LLT100 laser level transmitter was installed that has a 100 ft (30 m) maximum measuring range.

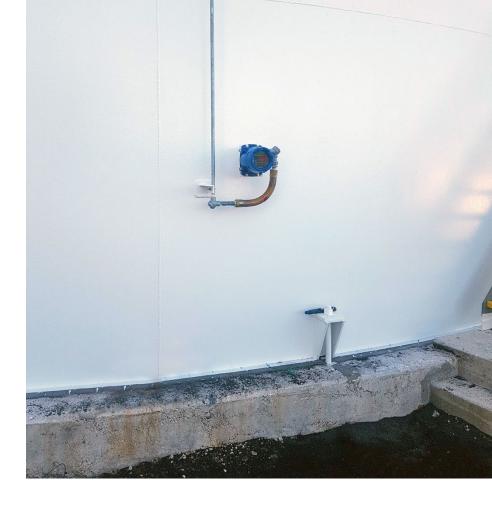
- The transmitter resolution of just 0.2" (5 mm) provided for an accurate volume measurement of this large fuel storage tank.
- A heated lens option was used to keep condensation off the laser sensor head.
- The ABB LLT100 laser level transmitter provides noncontact level measurement with no moving parts and a very narrow (< 0.3 degrees) beam angle.



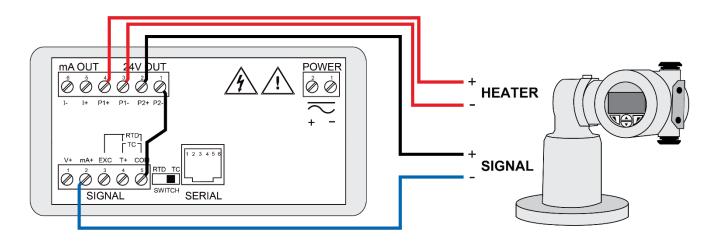
Solution – Display

Mounting the ProtEX-MAX PD8-765 meter at eye level allowed airport personnel to have a constant visual of the storage tank volume.

- The ProtEX-MAX PD8-765 has a rugged die-cast aluminum IP68 NEMA 4X enclosure and can be installed in hazardous areas with FM, CSA, ATEX and IECEx approvals..
- The large 1.2" (30.5 mm) high LED characters enable the meter to be read from distances of 30 feet (9 meters) away.
- Dual 24 VDC transmitter power supplies provide power for both the 4-20mA process loop and heated lens option



Solution – Display with Dual Power Supplies



A ProtEX-MAX PD8-765-6X3-20 explosion-proof meter was connected to the ABB LLT100 laser level transmitter.

- This meter has dual 24 VDC power supplies.
- One provides power to the laser level transmitter and the other to the 3-watt heated lens.

Featured Products

Precision Digital



PD8-765 **Explosion-Proof** Meter

ABB



LLT100 Laser **Level Transmitter**

Solution Key Features

- Explosion-proof process display meter
- Bright sunlight readable display
- Large 1.2" (30.5 mm) high LED characters
- Dual 24 VDC transmitter power supplies
- Isolated 4-20 mA transmitter output
- SafeTouch thru-glass button programming

Poll Question

What do you think is the most useful feature on the PDC meter for this application?



Questions?

If you have any questions or would like to discuss an application, then feel free to reach out to us.



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