

Nivoradar in oil-based drilling mud



The challenge

This oil-based drilling mud is stored in the silos and used for drilling activities off-shore. The main functions of drilling fluids include providing hydrostatic pressure to prevent formation fluids from entering into the well bore, keeping the drill bit cool and clean during drilling, carrying out drill cuttings and suspending the drill cuttings while drilling is paused and when the drilling assembly is brought in and out of the hole. For this tanks

a continuous level sensor was needed. The challenge is also the aggressive atmosphere in this ship industry.

Our solution

For this level measurement a compact sensor NR3100 with radar technology was used. This FMCW sensor has a transmission frequency of approx. 78GHz, which ensures optimum reflection from the drilling fluid and also has the best mechanical conditions for use at sea. Stainless steel housing with protection class IP68 and PEI lens antenna. This guaranteed a high resistancy to the aggressive salt water atmosphere.

Products



NR 3100

Content measurement

- 78GHz FMCW-Radar Level transmitter
- Suitable for use in almost all solids
- Fixed flange and adjustable flange option
- Measuring range up to 100m
- Connection to our user-friendly visualisation systems Nivotec 3500/4500 possible using 4-20mA signal