

TAQA DTS Solutions

Distributed Temperature Sensing

Enhanced well and reservoir understanding with TAQA Distributed Temperature Sensing (DTS).

TAQA has successfully completed over 200 fibre optic installations around the world and have been a pioneer in developing methods to use this technology to optimise reservoir productivity.

Distributed temperature sensing (DTS) gives the ability to continuously obtain measurements in real-time along the entire length of the wellbore. Based on analysis of Raman Backscatter signals in an optical fibre, DTS systems use a combination of back-scattered light intensity and time domain reflectometry to create temperature against distance profiles. The fibre acts as both a sensing element and transmission medium. TAQA DTS Solutions lead the way in terms of performance in DTS technology, with the fastest measurement speeds available and a wide coverage range of up to 50km from a single channel.

Data Analysis and Visualisation

Data analysis and visualisation is provided through TAQA's FloQuest software. FloQuest is a user-friendly and extremely powerful Windows application for interfacing with production sensor data. The application allows the wellbore to be accurately defined, modelled and matched using distributed and point sensors all the way from the sandface to the wellhead. Its multiphase modelling capability and flow allocation algorithms are used to perform real-time zonal virtual flow metering and automated event detection.

Features

- 1m resolution 0.01°C accuracy
- Up to 200°C operating envelope
- Up to 16km fibre length downhole

Benefits

- Identify well integrity issues and locations
- Monitor well performance
- Determine inflow contribution

