CASE STUDY

+ NUFLO Scanner 2000 Series flow computers help optimize production from 650 wells in North Africa

Reliable measurement and reporting of gas lift injection data across more than a decade

CHALLENGE
Provide continuous measurement of gas injection rate in 650 North African wells with no mains power supply.

SOLUTION
Install robust NUFLO Scanner* 2000 Series flow computers, which have low power requirement.

RESULTS
Produced wells successfully for more than a decade.

OPERATOR REQUIRED GAS INJECTION FLOW DATA IN REAL TIME

Effective operation of a gas lift system requires measuring the injection gas flow rate and regulating it to a target value. A customer in North Africa was finding it challenging to maintain the predetermined injection rate and required its continuous measurement in real time to enable prompt remedial action when required.

The injection data—together with production test data and well design information—is fed into the PIPESIM* steady-state multiphase flow simulator to continuously update the model and calculate a revised optimal injection rate. With 650 unmanned production wells spread over a large area, a reliable measurement device was crucial. Moreover, because the well sites did not have an electrical power supply, a solar-powered SCADA system had to be deployed and hence, low-power devices were preferred.

NUFLO Scanner flow computers have enabled reliable remote monitoring of gas lift injection in a harsh environment.

NUFLO Scanner 2000 computer

NUFLO Scanner 2100 and 2105 computer

NUFLO Scanner 2200 computer

RELIABLE SENSIA FLOW COMPUTER WAS AN OPTIMAL SOLUTION

The customer chose field-proven NUFLO Scanner 2000 Series flow computers, which are among the most versatile flow measurement devices on the market. With industry-leading low power requirements and an integrated sensor for differential pressure, absolute pressure, and temperature measurements, these self-contained flow computers are an efficient alternative to chart recorders. They comply with the API 21.1 standard, which defines the minimum requirements for electronic flow metering, from sensing to record keeping.

In addition to transmitting real-time flow data via FOUNDATION™ Fieldbus technology, the NUFLO Scanner flow computer has extensive data logging features and long-life battery power capability. If the onsite solar power or communication fails, the flow computer will continue to measure flow and accumulate vital injection flow data records.

DECADE-LONG UNINTERRUPTED PERFORMANCE ENABLED SUCCESSFUL PRODUCTION

The flow computers have been operating continuously on these 650 wells in the harsh environment of the Sahara desert for more than 10 years. Sensia provides a range of flow computer models to monitor or control gas lift injection systems. Thousands are deployed worldwide and have proven to be extremely reliable, enabling automation with confidence.

sensia
Rockwell Automation + Schlumberger