



[BACK TO INDEX](#)

CASE STUDY

SIMPLIFIED PUMP PROTECTION FOR PLAN 66A



ONE SERIES SAFETY TRANSMITTER (2SLP48)
WITH SAFETY RELAY OUTPUT (SRO)



Industry
MIDSTREAM OIL & GAS

CHALLENGE:

Pump stations are critical for maintaining stable flow in midstream pipelines. A major oil company required a process transmitter for final element control to monitor seal cavity pressure and prevent cavitation-related failures. The application needed to meet API Plan 66A requirements, which call for detecting pressure buildup behind the mechanical seal.

The operator's challenge was to reliably detect excessive seal leakage and overpressure events without adding system complexity. Traditionally, achieving API Plan 66A compliance required wiring the transmitter to a PLC and programming logic to trigger alarms, consuming additional engineering time and budget and requiring controls expertise.

SOLUTION:

The major oil company selected the ONE Series Safety Transmitter (2SLP48) with Safety Relay Output (SRO) — the industry's first and only SIL-rated pressure transmitter with an integrated relay. The 2SLP48 is compliant with API Plan 66A and provides self-contained pump seal monitoring.

With the ONE Series installed, normal seal leakage drains through the restriction bushing, while excessive pressure buildup triggers the integrated relay initiating an alarm signal and automatically shutting down the pump — all without requiring PLC programming.

- Enhanced Pipeline Safety – Accurate pressure monitoring ensures stable flow, minimizing the risk of leaks and spills.
- Operational Reliability – The 2SLP48 delivers continuous, trustworthy data that helps optimize pump performance, maintain crude oil throughput, and allow smarter maintenance planning
- Simpler system design with less components and programming: the installation does not require the involvement of a PLC engineer.



ENHANCED SAFETY



SIMPLIFIED INSTALLATION



OPERATIONAL RELIABILITY

[BACK TO INDEX](#)