



CASE STUDY

SermaLon® delivers more off-shore



SermaLon® fouling-resistant coating improved efficiency and increased service life in a challenging deep sea environment

Improving gas compressor performance and service life

BACKGROUND AND CHALLENGES

At Nippon Oil Exploration (Malaysia) Ltd., iron carbonate and haematite deposits were accumulating in the flow path of a 2 x 2 stage wet gas compressor, causing decreases in compressor performance, triggering increases in fuel gas consumption and limiting average service life to less than 12 months.

PRAXAIR SOLUTION

Coating the rotor and aerodynamic bundle with a SermaLon® fouling-resistant coat hindered deposition of corrosive products, reduced surface roughness and improved efficiency. After 15,000 run-hours, polytropic head loss was reduced by 4.3%, and overall efficiency loss was reduced from 9.8% to 3.8%. The cost of the coating was recovered in less than a year through these efficiency gains as well as a 10% reduction in fuel gas consumption. Rotor and bundle service life was extended from less than 1 year to more than 2 years, lowering downtime lost to maintenance.

Find out how Praxair can help your company improve efficiency and save money at praxairsurfacetechologies.com, or call us at **1-317-240-2500**.



Economic effects

- Reduced fuel gas consumption by 10%
- Extended service life from less than 1 year to more than 2 years
- Cost of coating recovered in less than a year



Operational effects

- 4.3% reduction in polytropic head loss after 15,000 run-hours
- Efficiency loss reduced by 61.2% after 15,000 run-hours

