



TIRRENIA DOUBLES THE TIME BETWEEN COMPRESSOR OVERHAULS WITH SHELL CORENA S4 P

TOTAL REPORTED ANNUAL CUSTOMER SAVING
US\$50,000¹

COMPANY: Tirrenia Compagnia Italiana di Navigazione
COUNTRY: Italy
APPLICATION: Reciprocating air compressors
KEY EDGE: Shell Corena S4 P with technical services



By changing to Shell Corena S4 P, Tirrenia was able to double the interval between air compressor overhauls from 300 to 600 hours. This helps Tirrenia to save US\$50,000¹ a year by lowering compressor oil consumption, reducing maintenance time, cutting waste oil disposal volumes and improving maintenance practices.

Tirrenia Compagnia Italiana di Navigazione is Italy's leading maritime transport company. It keeps the islands of Sardinia, Sicily and Tremiti connected with the Italian mainland and major Mediterranean ports by operating cargo and passenger ships throughout the year. The company has a fleet of 10 roll-on, roll-off ferries with passenger accommodation (RORO PAX). In the busy summer season, the vessels' reciprocating air compressors operate continuously and at high intensities.

Tirrenia was dissatisfied with the high cost of running the air compressors of its RORO PAX fleet. Each vessel has five compressors, two starting and two service, plus a spare. The compressors' low-pressure/high-pressure valves needed replacing after just 300 hours of operation. The need for frequent overhauls to replace these valves was attributed to the compressor oil's poor thermal and oxidation stability.

Shell's technical team recommended switching to Shell Corena S4 P, a synthetic ester-based fluid with a unique high-performance additive system. With the new oil, Tirrenia had the confidence to double the interval between compressor overhauls from 300 to 600 hours.

Tirrenia reports saving US\$50,000¹ a year across its RORO PAX fleet by lowering compressor oil consumption, reducing maintenance time, cutting waste oil disposal volumes and improving maintenance practices.

¹The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site and from time to time, depending on, for example, the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.

1

CHALLENGE

Tirrenia was dissatisfied with the high cost of running the air compressors on its fleet of 10 RORO PAX ferries. The low-pressure/high-pressure valves needed replacing after just 300 hours of operation owing to the compressor oil's poor thermal and oxidation stability.

2

SOLUTION

Shell's technical team recommended switching to Shell Corena S4 P, a synthetic ester-based fluid with a unique high-performance additive system.

3

OUTCOME

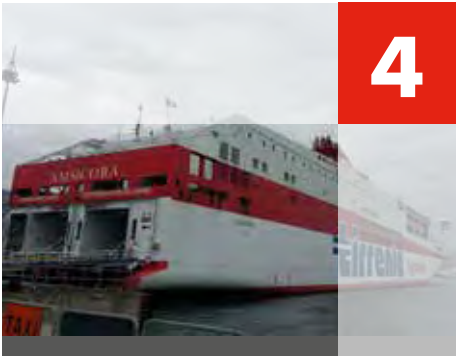
By changing to Shell Corena S4 P, Tirrenia was able to double the interval between compressor overhauls from 300 to 600 hours.

4

VALUE

Tirrenia reports saving US\$50,000² a year by lowering compressor oil consumption, reducing maintenance time, cutting waste oil disposal volumes and improving maintenance practices.

²The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site and from time to time, depending on, for example, the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.



SHELL CORENA S4 P

Advanced, synthetic reciprocating air compressor oil

Shell Corena S4 P is the ultimate Shell reciprocating air compressor oil. It uses an advanced, synthetic, ashless-technology formulation to provide extended oil and equipment life. It is an oil that you can rely on to help keep your highest temperature and pressure reciprocating air compressors working efficiently for longer and thus provide enhanced compressed air availability for increased productivity. It is widely recognised by leading equipment manufacturers.

Applications

- Reciprocating air compressors – designed to help prevent the build-up of potentially hazardous deposits in air lines, which can increase the risk of explosion. Suitable for use in nearly all reciprocating air compressors
- High-temperature applications – long-life, synthetic formulation for use in high-pressure applications where air discharge temperatures are above 220°C
- Breathing-air compressors – when used with oil separation apparatus
- Exceptional stability – for up to 4,000 hours of oil life, depending on the operating conditions

Performance features and benefits

- Extended oil life. Shell Corena S4 P is designed to help your equipment operate for longer without interruption for reduced maintenance requirements and enhanced productivity. It delivers up to 10 times longer oil life than Shell Corena S2 P in industry-standard oxidation tests.³

- Engine protection. Shell Corena S4 P offers excellent protection across a wide temperature range. Compared with a conventional oil, it is 19% thinner at low temperatures, which helps it flow to where protection is needed, and 10% thicker at high temperatures, which offers protection in hot, extended operating conditions. The oil also passes the four-ball wear test at 170 kg, which demonstrates its excellent protection under high load.⁴
- System efficiency. Shell Corena S4 P helps to keep compressors clean for safe and efficient performance. It has up to 85% less carbon deposits than the maximum allowed under the industry-standard requirements.⁵

Specifications and approvals

Shell Corena S4 P is suitable for compressors from a wide range of manufacturers, and is available in viscosity grades ISO 68 and 100. It meets requirements DIN 51506 VDL ISO/DP 6521-L-DAB – medium duty; ISO 6743-3:2003 DAB – severe duty; and EN 12021.

³ASTM D2272 test method

⁴IP 239 test method

⁵DIN 51352 part 2 test method, against DIN 51506 VDL requirements

