



# FROM PROTECTING YOUR COMPRESSORS TO DRIVING UP YOUR COMPETITIVENESS

SHELL CORENA<sup>®</sup> S5 R MAKES IT  
POSSIBLE **SHELL LUBRICANTS**

TOGETHER ANYTHING IS POSSIBLE



# ASKING MORE OF COMPRESSOR OILS

Compressors are becoming more compact. Power density expressed by the ratio of shaft power to unit plot space is increasing. At the same time, equipment manufacturers expect longer oil service lives. This means that less oil has to work harder for longer.

## REDUCING TOTAL COST OF OWNERSHIP

Compressor reliability and efficiency can be compromised by

- poor wear protection
- oxidation and sludge formation
- foaming and poor air release
- poor water shedding, which can lead to corrosion.

**Shell Corena S5 R** compressor oil is a synthetic PAG fluid designed to provide excellent thermal and oxidative stability, outstanding cleanliness and low sludge formation, a wide operating temperature range, high electrical conductivity and exceptional cooling performance.<sup>1</sup> Furthermore, it is compatible with other typical PAG-based synthetic compressor oils.

You can help to reduce your total cost of ownership further with technical services such as **Shell LubeAnalyst** and **Shell LubeCoach**.

**SHELL CORENA S5 R** IS A SYNTHETIC POLYALKYLENE GLYCOL (PAG) FLUID. IT IS COMPATIBLE WITH OTHER PAG COMPRESSOR LUBRICANTS AND CAN HELP TO REDUCE YOUR TOTAL COST OF COMPRESSOR OWNERSHIP.

UP TO



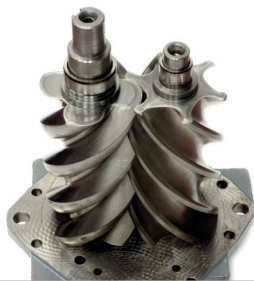
HOUR OIL-DRAIN INTERVALS, EVEN IN REGIONS OF HIGH TEMPERATURES OR HUMIDITY



BIODEGRADABLE

**97%**

LESS SLUDGE<sup>2</sup>



## LONGER OIL LIFE

**Shell Corena S5 R** compressor oil can offer extended oil-drain intervals of up to 10,000 hours, even **in regions of high temperatures or humidity**.

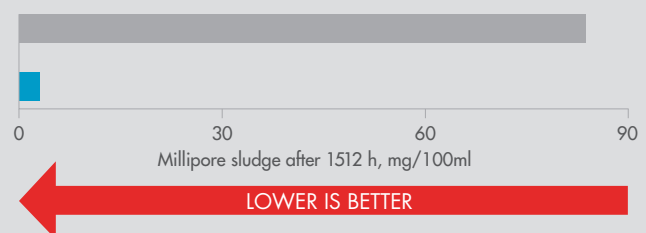
### Designed for low sludge formation

Shell Corena S5 R has demonstrated extremely low sludge formation which provides less deposit and varnish potential, and overall system efficiency.

Low sludge (DRY TOST, ASTM D7873)

Commercial (PAO)

Shell Corena S5 R



<sup>1</sup>Compared with a mineral oil

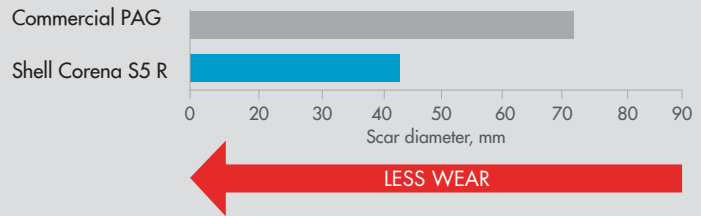
<sup>2</sup>Compared with a competitor's oil in the ASTM D7873 dry turbine oxidation and stability test

## WEAR PROTECTION

**Shell Corena S5 R** helps to protect critical compressor components from wear, rust and corrosion, even in extreme conditions. This can be crucial for compressors operating in harsh environments and remote conditions.

**Outstanding wear protection.** Free water can be harmful to machinery internals, but **Shell Corena S5 R** can keep moisture in suspension while maintaining the fluid film strength, without compromising oil life.

**Less wear** (smaller wear scar in four-ball test, ASTM D4172 B)



## ENHANCED EFFICIENCY

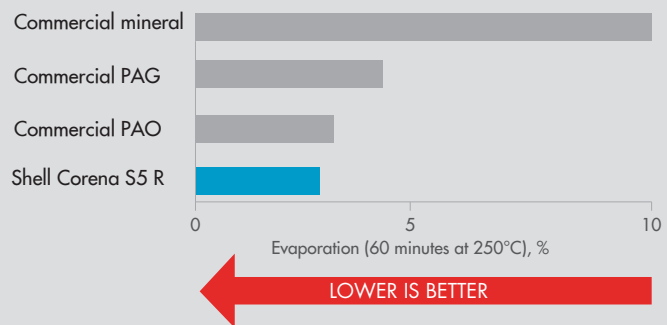
**Shell Corena S5 R has**

- **low volatility and evaporation loss**, which can reduce oil consumption and oil carryover into the utility air system
- **fast air release**, which helps to improve compressor efficiency
- **high viscosity index**, which means the oil remains at optimum viscosity over a wider range of ambient temperatures compared with mineral oils.

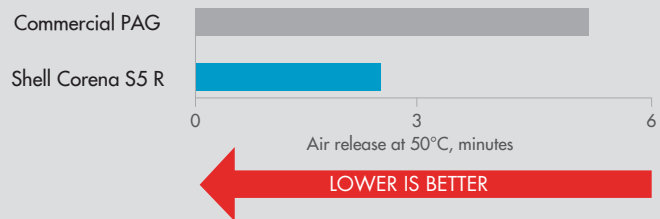


In hydrolytic stability laboratory tests, **Shell Corena S5 R** did not lead to yellow metal corrosion or acid formation.

**Low volatility and evaporation loss** (NOACK evaporation test)



**Fast air release** (ASTM D3427)



### ENVIRONMENTALLY CONSIDERATE:

Long-term laboratory tests have demonstrated Shell Corena S5 R to be readily biodegradable. Furthermore, this facilitates handling of compressor condensate.



### SAFE OPERATIONS:

Shell Corena S5 R has an extra-high flash point for safe operation in extreme conditions such as those in steel mills.

# INDUSTRY-LEADING **PERFORMANCE**

To meet the technically challenging requirements of today's compressor applications, Shell Corena S5 R is formulated to pass an extensive range of rigorous performance tests. It offers outstanding performance in challenging environments.

WHAT SHELL CORENA S5 R OFFERS	HOW YOU BENEFIT	BUSINESS VALUE	LOWER TOTAL COST OF OWNERSHIP
High resistance to oxidation	Extended oil-drain intervals	Increased productivity	
Outstanding wear and corrosion protection	Components last longer	Extended equipment life	
Enhanced hydrolytic stability	Longer oil life, even under humid conditions	Less maintenance downtime	
Excellent cleanliness and low sludge <sup>1</sup>	Prevents the buildup of deposits on components and in the oil/air separator	Lower failure rate and reduced maintenance costs	
High viscosity index	Wider operating temperature window	Lower failure rate and reduced maintenance costs	
High flash point	Resistance against ignition	Improved safety	
Fast air release	Improved system efficiency	Reduced energy use	
Readily biodegradable	Can be used in environmentally sensitive applications	Enhanced environmental performance <sup>1</sup>	



## APPLICATIONS

Suitable for compressors that use PAG fluids, especially in severe operation conditions, including marine applications.



For more information, please contact your Shell Lubricants representative.

[www.shell.com/lubricants](http://www.shell.com/lubricants)

<sup>1</sup>Compared with a mineral oil  
 "Shell Lubricants" refers to the various Shell companies engaged in the lubricants business.