



Oil & Gas

EXTEND COMPRESSOR LIFE WITH UCON™ RSC-155 LUBRICANT



**HIGH-PERFORMANCE POLYALKYLENE GLYCOL (PAG)-BASED
SYNTHETIC LUBRICANT FOR ROTARY SCREW COMPRESSORS**

CASE STUDY:

UCON™ COMPRESSOR LUBRICANT RSC-155 YIELDS HIGHER EFFICIENCY AND LOWER MAINTENANCE COSTS FOR PETROBRAS BOLIVIA

Located within one of the largest natural gas reserves in Bolivia, Petrobras' San Antonio gas treatment plant processes over 524 million standard cubic feet per day of natural gas. Since 2002, UCON™ Compressor Lubricant RSC-155 has been used to help keep the plant's five rotary screw compressors operating at peak performance.

The San Antonio plant uses GEA Grasso LT Series Type XD-52 rotary screw compressors, with a brake horsepower rating of 1,089. In this system, pressure is increased in two phases, first from 30 psi (g) to 80 psi (g), and then to 220 psi (g). The total amount of lubricant needed for a single compressor is 1,000 liters.

After 10 years of operation, representing more than 40,000 in-service hours, the five compressors are still going strong. Petrobras representatives report that lubricant consumption has averaged just 16 liters per month, due to the low mixability of UCON Compressor Lubricant RSC-155 with the propane flow. In addition, engine attrition rates have been extremely low and no carbon deposits or signs of corrosion have been found in the compressors' internal parts – translating to lower maintenance costs and higher efficiency of the compressor system.

Bolivian natural gas reserve, Petrobras





THE RIGHT LUBRICANT FOR THE RIGHT PERFORMANCE

Selecting the right lubricant is a key factor in providing a long service life for rotary screw compressors. **UCON™ Compressor Lubricant RSC-155** is designed specifically for rotary screw compressors, where it can help prevent condensation, corrosion and serious damage in high-temperature, high-pressure natural gas pipeline applications. In conjunction with proper use, and good equipment maintenance and operation, it can help deliver exceptional performance and significant cost savings to compressor manufacturers and users.

Part of Dow's extensive portfolio of compressor lubricants, this high-performance polyalkylene glycol (PAG)-based synthetic option offers a broad range of features and benefits, including:

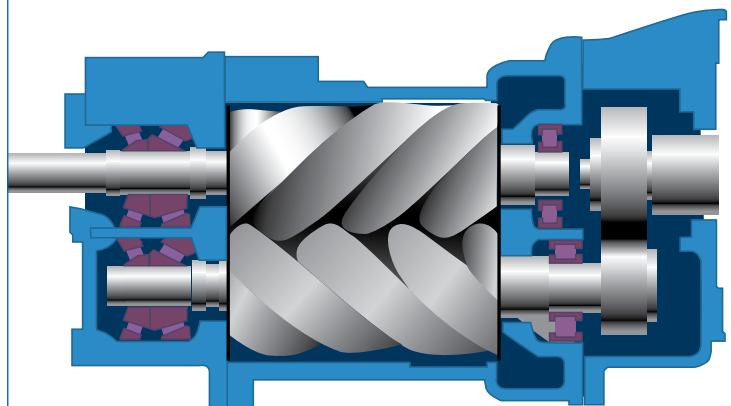
- Wide operating temperature range for easy cold-temperature start-up and exceptional high temperature lubrication
- Excellent lubricity in hydrocarbon compressed gas service
- Easy cleanup
- Reduced lubricant use rate
- Less downstream contamination
- Lower maintenance costs
- Low foaming tendency
- High flash point

Notable for its outstanding film strength and lubricity at high temperatures, UCON Compressor Lubricant RSC-155 also has thermal and oxidation stability and good viscosity/temperature properties. It exhibits exceptional performance compared to hydrocarbon-based oils and other synthetic lubricants, protecting compressor parts from scoring and wear and contributing significantly to increased compressor life.

UCON™ Compressor Lubricant

RSC-155 is formulated with a premium additive package designed to provide optimal performance in compressor applications.

Specifically developed for rotary screw compressor applications, it can also be used in reciprocating compressors.



TYPICAL FLOODED ROTARY SCREW COMPRESSOR

UCON™ Compressor Lubricant RSC-155 lubricates the compressor system, which is utilized to remove natural gas condensates (hydrocarbon liquids in the gas flow) and adjust gas composition dew point. This compressor system prevents contaminant condensation in the transport pipeline, which recovers the heavier hydrocarbons for sale and also prevents downstream problems. The dew point adjustment actually occurs in the propane refrigeration circuit, aided by the rotary screw compressor, which helps to compress the gas, ultimately moving it more efficiently down the pipeline.

A NOTE ABOUT PRODUCT SAFETY

When considering the use of any Dow products in a particular application, you should review the latest Material Safety Data Sheets from Dow and ensure that they are intended for safe use. For other products mentioned in the text, you should obtain the current Material Safety Data Sheet and other available product safety information when reviewing and take necessary steps to ensure safety of use before handling.

No chemical should be used as or in a food, drug, medical device or cosmetic, or in a product or process in which it may contact a food, drug, medical device or cosmetic until the user has determined the suitability and legality of the use. Since government regulations and use conditions are subject to change, it is the user's responsibility to determine that this information is appropriate and suitable under current, applicable laws and regulations.

Dow requests that the customer read, understand, and comply with the information contained in this publication and the current Material Safety Data Sheet(s). The customer should furnish the information in this publication to its employees, contractors and customers, or any other users of the product(s), and request that they do the same.

EXPERIENCE YOU CAN TRUST

Dow has been helping customers in the gas processing market for more than 65 years and has maximized value for our customers through extensive industry experience, application knowledge and chemistry expertise.

UCON™ compressor lubricants are manufactured at a dedicated plant in order to achieve consistent and high-purity products. The additive technology has been drawn from knowledge gained by Dow through more than 60 years of experience with PAG lubricants in a wide variety of applications.





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