ABOUT THE CUSTOMER
Our customer is a major oilfield services company that operates in over 85 countries and employs over 100,000 workers around the world.

CHALLENGE
During the installation of their small back-up rings, the customer reported frequent breakage. These back-up rings were required to withstand maximum pressures of 25 - 35 ksi and temperatures of 356°F - 401°F (180°C - 205°C). Back-up rings made of a glass- or carbon-filled PEEK material were being used. While these materials provided the desired creep and extrusion resistance, they were extremely brittle – which led to frequent fracture during the back-up ring installation process.

THE CONSEQUENCES OF THE BACK-UP RING BREAKAGE WERE SIGNIFICANT:
- 60-70% Scrap Rate
- Significant Time Loss due to multiple re-installation attempts
- High stock level requirements in order to avoid production delays

SOLUTION
Greene, Tweed was invited to examine the frequent breakage issue and offer a solution that would improve the customer’s back-up ring performance.

The recommendation – replace the back-up rings’ current filled PEEK material with a new virgin material, Arlon® 3000 XT. The high-temperature polymer has an elongation at least 3X higher than filled PEEK and provides superior creep and extrusion resistance. The material can also accommodate the required temperature and pressure range while remaining flexible for easy installation.

RESULTS
AFTER SWITCHING THE SMALL BACK-UP RINGS TO ARLON® 3000 XT, RESULTS WERE FAST AND IMPRESSIVE:
- Installation scrap rate reduced to nearly zero
- The single-material solution has streamlined the customer purchasing process while reducing stock levels and decreasing installation time

Customer has converted all back-up rings to a SINGLE MATERIAL – ARLON® 3000 XT

ARLON® 3000 XT CHEMICAL COMPATIBILITY

TESTING IS BELIEVING
VISIT WWW.ARLON3000XT.COM

CONTACT
GREENE, TWEED
USA - HOUSTON, TX
1930 RANKIN ROAD
HOUSTON, TX 77073 USA
EMAIL: ARLON3000XT@GTWEED.COM
TEL: +1.281.765.4500
TOLL FREE: +1.800.927.3301

© 2015, Greene, Tweed all rights reserved.
All trademarks are property of their respective owners.
01/16-GT     CS-US-OF-014