

LORD® Telescopic Joint Packers

API 16F Certified

Telescopic Joint (or Slip Joint) Packers

LORD® Telescopic Joint (TJ) Packers seal against the inner barrel of the slip joint. Our expertise in rubber-to-metal bonding, and process and quality controls, ensure each part is manufactured consistently, with a strong bond. This attention to detail, coupled with our elastomeric formulation capabilities, makes LORD TJ packers the reliable choice for rig contractors. More reliable seals allow longer drilling without interruption, eliminating the need to change out packers in the middle of a well.

BENEFITS

- Field-proven: wear-resistant nitriles outlast the standard nitriles employed in most TJ packers today
- Low actuation pressure enables operating primary packer on rig air supply
- Compatible with water: retains 90% of tensile strength in swell testing, compared to only 10-15% for polyurethanes
- Improved quality via our manufacturing techniques, process control, and rigorous quality standards
- Stable, reliable elastomer-to-metal bonds
- Our hyperelastic FEA modeling optimizes design
- Inner and outer packers stocked for all OEM riser styles for quick turnaround
- 12-month in-service warranty
- In-house API 16F TJ packer test capabilities

API 16F CERTIFIED

LORD wear-resistant TJ packers have passed the rigorous requirements of the second edition of API 16F. During the abrasive 50,000 cycle wear test, LORD packers lost less than 0.75% elastomer mass, representing more than a 13x margin to the 10% pass/fail criteria in Standard 16F.

Wear Test Results

Chart represents full API 16F 50,000 wear test cycles.

TJ Packer Type	Elastomer Wear	Pass/Fail Criteria	Status
Vetco Gray/GE-style	0.72%	< 10%	PASS
Aker/MH Wirth-style	0.72%	< 10%	PASS
NOV-style	0.35%	< 10%	PASS
Cameron-style	0.30%	< 10%	PASS



In-house test fixture for certifying TJ packers to API 16F and for durability testing

LORD

COMPARISON

Laboratory and field-tests confirm our wear-resistant TJ packers last longer than the standard nitrile packers used in many slip joints today. In abbreviated wear testing to 6,300 of the 50,000 cycles specified in Standard API 16F, our packer had no measurable wear, whereas a standard packer lost 7% of its thickness. Field-test results demonstrated that the wear-resistant TJ packer lasted 20 times longer than a standard TJ packer. The table below presents a summary of the full-scale test data.

Abbreviated Wear Test Results

Chart represents 6,300 API 16F wear test cycles.

Test Specimen	Soft Wear-Resistant Nitrile Packer 1	Soft Wear-Resistant Nitrile Packer 1	Standard Nitrile Packer 1
Change in Weight (lbs)	—*	—*	0.46
Maximum Decrease in Thickness (%)	—*	—*	7

*The difference between the pre-test and post-test condition was not large enough to determine the change in thickness or weight.



ABOUT LORD CORPORATION

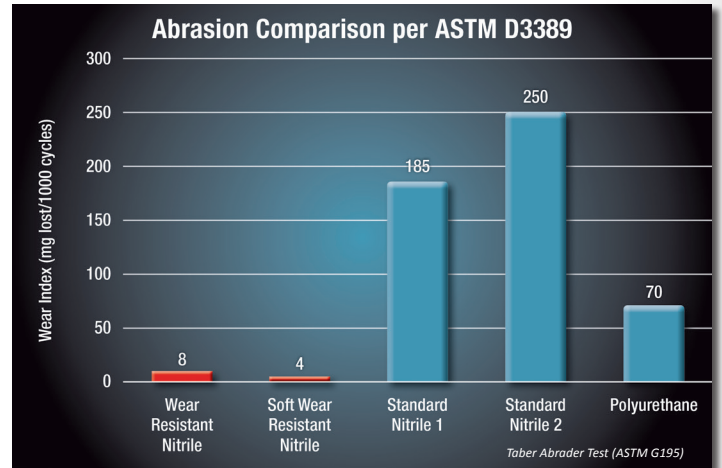
Founded in 1924, LORD Corporation is a diversified technology and manufacturing company commercializing highly reliable adhesives, coatings, vibration control and motion management devices and systems, and sensing technologies. Our dedicated teams collaborate with customers to provide innovative solutions, reduce risk and increase the value of their products.

Employees: More than 3,000 worldwide

Operations: LORD operates 19 manufacturing facilities and 10 R&D centers worldwide. Dedicated teams provide customers with easy access to products and technical expertise — whenever and wherever they are needed.

Elastomer Level Taber Abrader Testing

Abrasion-resistant elastomer compounds outperform standard nitriles and urethanes.



CORE SCIENCES AND TECHNOLOGIES

Continuing the company's tradition of ingenuity and inventive spirit, we continue to develop technologies to meet the needs and challenges of an ever-evolving global marketplace.

- Surface Science
- Polymer Science
- Material Science
- Mechanical Design
- Dynamic Systems
- Control Systems
- Wireless Sensing
- Energy Harvesting
- Inertial/Orientation Technologies
- Displacement Sensing

MORE INFORMATION

To learn more about LORD Oil & Gas products, visit LORD.com/OilandGas. Contact Customer Support at +1 855 796 1595 or OilandGas@lord.com.

