# LORD® Isolators for Downhole Tools

# **Creating Solutions to Your Most Demanding Challenges**

Do you want to extend the life of your downhole tools? Are your downhole electronics suffering from excessive shock and vibration?

#### A COLLABORATIVE PARTNERSHIP

LORD Corporation has the solution to your demanding challenges. We learned of the need for longer-lasting downhole tool isolators that can protect against shock and vibration, and applied our aerospace technology to address the needs of the downhole community. With LORD isolators, you no longer have to compromise between reliability, durability and performance. First commercially introduced in 2012, LORD isolators have been outperforming any snubbers available on the market. In outcomes from customer and lab testing, LORD isolators have demonstrated significant reduction in shock and vibration, resulting in improved reliability.

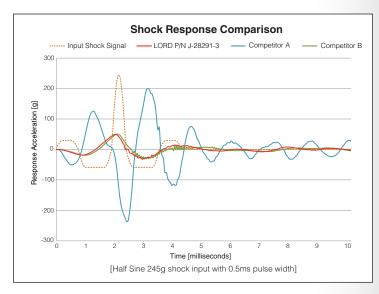
LORD isolators can be designed to meet your unique downhole conditions:

- Extreme environments
- · High shock loads
- Broad frequency range isolation
- · Custom connection geometry available

### **Enhanced reliability lowers costs**

- Demonstrated more than 1,800 hours service life downhole with no maintenance required
- Estimated more than \$2,000 savings over the life of the snubber compared to alternatives





Snubber	Extrapolated Hours Downhole	Accelerated Endurance Test Results*		
		Time to Failure	Failure Mode	Failure Description
LORD Snubbers	> 1,800 hours	> 40 hours	N/A	40 hours completed without failure
Competitor A	22.5 hours	30 minutes	Chassis	Cap screw failure
Competitor B	< 3 hours	4 minutes	Snubber	Catastrophic elastomer failure

<sup>\*</sup> Input: 0.81 g<sup>2</sup>/Hz, Test Mass: 4.75 lb



#### ABOUT LORD CORPORATION

LORD provides valuable expertise in adhesives and coatings, vibration and motion control, and magnetically responsive technologies. Our dedicated teams work in collaboration with our customers to increase the value of their products. Innovative and responsive to the ever-changing marketplace, we are focused on providing product and process solutions for our customers worldwide ... Ask Us How.

Employees: More than 3,100 worldwide

Annual Sales: \$890 Million

**Operations:** LORD has manufacturing facilities in eight countries and more than 90 sales and support centers. Dedicated teams provide customers with easy access to products and technical expertise — whenever and wherever they are needed.

History: Founded in 1924 by Hugh C. Lord

President & CEO: Ed Auslander

#### **TECHNOLOGIES**

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

- Elastomeric Vibration Isolation and Damping
- Elastomer Bonding and Coating
- Structural Bonding
- Active Vibration Control
- Magneto-Rheological (MR)
- Fluid Vibration Isolation and Damping
- Balancing
- UV-Cured Coatings
- Electronic Thermal Management
- Electronic Device Protection
- Health Usage and Monitoring Systems Wireless Technology

#### MORE INFORMATION

To learn more about LORD Oil & Gas products, visit LORD.com/oilandgas. Or, contact Customer Support at +1 (855) 796 1595; oilandgas@lord.com.

## RELIABLE. TRUSTED. INNOVATIVE.

For more than 90 years, LORD Corporation has been providing innovative solutions that address the needs of the transportation and energy markets. We can help ... Ask Us How.

