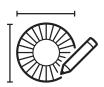
# AN APPROVED SOLUTION

The Junker test is the most severe vibration test for bolted joints. During the Junker test\* the graph shows that the clamping load of all solutions drops dramatically apart from the Nord-Lock washers.





# Pegular nut M8 on bolt with Nord-Lock washers at 70% of yield point



### **NEED A CUSTOM SOLUTION?**

If you cannot find the washers you are looking for in our standard range, we will be happy to customize a solution for you.

### Possible customization options:

- Coatings with improved corrosion resistance
- Colored coatings
- Custom inner and outer diameter
- Left-handed washers

- Custom thickness
- Custom materials
- Added chamfers
- Unique laser marking

# NORD-LOCK GROUP HOME OF INNOVATIONS AND ENGINEERING









Nord-Lock Group is a global leader in bolted solutions. In 1982, the original Nord-Lock® wedge-locking technology that safely secures bolted joints was developed. Since then, our range of innovative bolting technologies and expertise has grown to be the most comprehensive on the market, incorporating Superbolt™ mechanical tensioners, Boltight™ hydraulic tensioners and Expander System® pivot pins.

All solutions are developed and manufactured in-house, ensuring they meet the highest standards in the industry. Our team of dedicated experts work closely with customers all over the world.

Nord-Lock Group www.nord-lock.com Tel: +46 40 602 46 00 Email: info@nord-lock.com





# NORD-LOCK WEDGE-LOCKING WASHERS

PREVENTS BOLTS FROM LOOSENING





### THE CHALLENGE

# TO TIGHTEN AND SECURE BOLTED JOINTS IN CRITICAL APPLICATIONS

Billions of bolts literally hold our modern society together. Due to its design, it has an unfortunate weakness: it can loosen.

### THE SOLUTION

### NORD-LOCK WASHERS PREVENT BOLTS FROM COMING LOOSE

Nord-Lock washers cannot loosen unintentionally as a wedge-effect is created underneath the bolt head/nut. They are recognized around the world for their ability to secure bolted joints exposed to severe vibration and dynamic loads.





### How it works

Because the cam angle ' $\alpha$ ' is greater than the thread pitch ' $\beta$ ' a wedge-locking effect secures the fastener against rotational loosening, even under the most severe conditions.

# WASHERS FOR THE WORLD'S TOUGHEST WORKING ENVIRONMENTS



**STEEL** M3-M130 #5 to 5"



**254 SM0**® M3-M39 #5 to 11/2"



STAINLESS STEEL M3-M80 #5 to 31/8"



ALLOY C-276 & 718 M4-M20 #5 to 11/2"

## NORD-LOCK ORIGINAL WASHERS

Nord-Lock washers increase operational reliability and lower your maintenance costs, while significantly reducing the risks of unplanned production stops, accidents and warranty claims.

All Nord-Lock steel washers promise highest salt spray resistance on the market — 1,000 hours.



Scan QR-code to access the torque guidelines

### **Tested and Certified**

Nord-Lock washers are produced to the highest specifications and quality standards and they have been approved by independent institutes as well as certification authorities.











### **TORQUELATOR**

Calculate preload and corresponding torque of Nord-Lock washers

Use the app at torquelator.nord-lock.com



Gather fastener data while performing bolted joint calculations

Use the app at fastener-standards.nord-lock.com

