



# **HEICO-ONE**SAFETY-WASHER





## THE INNOVATIVE BACKUP WASHER FOR USE WITH HEICO-LOCK® REACTION WASHERS

The HEICO-ONE Safety-Washers are the optimal solution for locking/counter-holding large bolted joints that are tightened with HEICO-LOCK® Reaction Washers using electric, hydraulic or pneumatic torque tools. The innovative backup washer prevents the bolt/nut from turning on the passive side during the tightening process.



#### **ADVANTAGES**

- No additional counter-holding measures or second person required for bolted joint assembly
- Immediate, effective locking even at low preload forces
- Ideal for installation in confined spaces
- Tightening and loosening possible with access from only one side
- Friction based positive locking
- Effectively prevents turning on the passive side
- Prevention of accidents at work by eliminating reaction arms
- Protection against self-rotation when combined with HEICO-LOCK® Reaction Washers



Further information on the HEICO-ONE Safety-Washers can be found here!

### FIELDS OF APPLICATION









#### **DESIGN AND FUNCTION**

The HEICO-ONE Safety-Washer is a single washer with wave-shaped locking ribs on both sides, which was specially designed for use with HEICO-LOCK® Reaction Washers to prevent the passive side from rotating in through-bolt connections during torque tightening.

Due to the arrangement of the locking ribs and the wave-shaped design of the HEICO-ONE Safety-Washer, a positive friction/form fit is created even with low preload forces. The backup washer is placed on the passive side between the bolt head/nut and the clamped part bearing surface and can also be pre-assembled for areas of application that are difficult to access.

The bolted joint is tightened from the active side. Additional locking with a wrench by a second person or with the help of special tools is no longer necessary thanks to the use of the HEICO-ONE Safety-Washer.



Use of HEICO-LOCK® Reaction Washers and HEICO-ONE Safety-Washer in a through-hole.





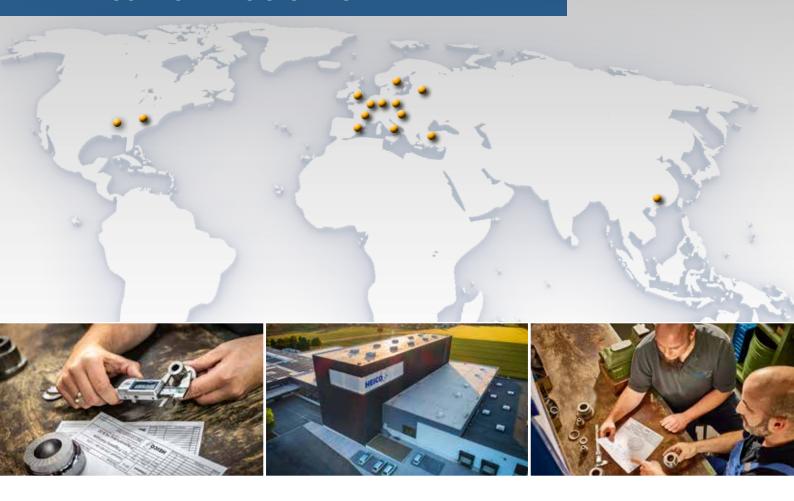
Further information on the HEICO-LOCK®
Reaction Washers can be found here!

#### TECHNICAL DATA

- Backup-washer for use with HEICO-LOCK® Reaction Washers
- Material: 1.1191 (C45E) with black zinc flake coating (flZnnc)
- Hardness: 485±25 HV0,3
- Corrosion resistance: min.1,000 h in NSS-test according to ISO 9227
- Suitable for high-strength bolts and nuts up to strength class 12.9 or 12
- Available dimensions: M16 M48 (5/8"- 1 ¾")
- Other nominal sizes, materials and coatings available on request



### **HEICO FASTENING SYSTEMS**



### A STRONG GROUP BEHIND STRONG PRODUCTS

The HEICO group, based in the town of Ense in Westphalia, Germany, is a family-owned business with a long tradition. The company has been working passionately in the field of fastening technology since 1900. HEICO operates internationally with multiple company sites strategically located throughout the world. The group offers the highest degree of technical support and individual testing options.

Find out more about us: www.heico-group.com



## HEICO-LOCK® WEDGE LOCKING SYSTEMS AND HEICO-TEC® TENSIONING SYSTEMS

The HEICO Group offers a broad portfolio of fastening solutions for a wide range of bolted connections.

With our HEICO-TEC® Tensioning Systems, large bolted joints can be easily pre-tensioned by hand - a simple torque spanner is all that is needed. In addition to the HEICO-TEC® Tensioning Systems, the HEICO-LOCK® Wedge Locking Systems offer a reliable solution against self-loosening in demanding bolted joints – especially under dynamic loads!

You can find more information about our products at **www.heico-group.com**.

