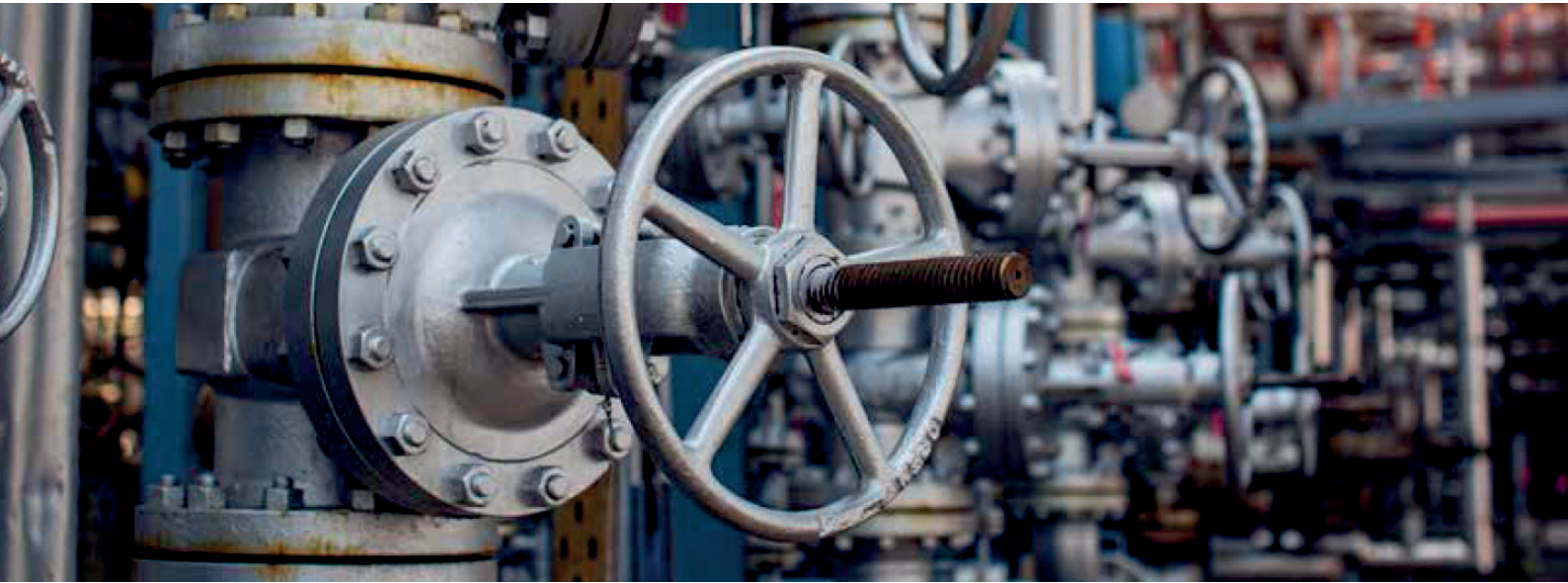


SAFETY BACKUP WASHERS



THE INNOVATIVE SAFETY BACKUP WASHER

The Safety Backup Washer are the ideal solution for counter-holding large bolted joints that are tightened with RAD Battery, electric, or pneumatic torque tools. This innovative 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.
- Prevention of accidents, no spanners or backup wrenches needed!

TECHNICAL DATA

- Backup-washer for use with Reaction Lock Washer.
- 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.
- Available dimensions: M16 - M48 (5/8" - 1 3/4")
- Other sizes, materials and coatings available on request.

DESIGN AND FUNCTION

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



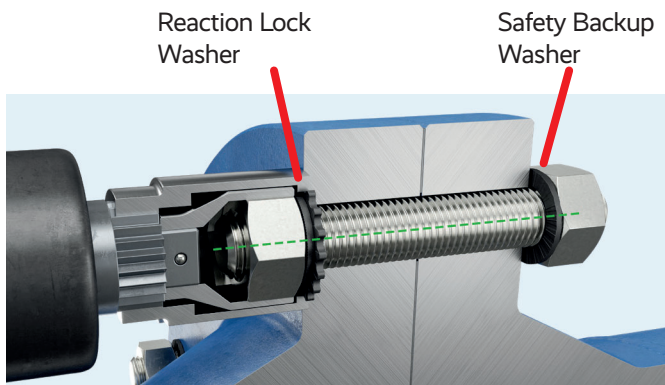
Due to the arrangement of the locking ribs and the wave-shaped design of the Safety Backup Washer, a positive friction/form fit is created even with low tightening forces.

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 unnecessary thanks to the use of the Safety Backup Washer therefore making it safer as well.



SAFETY BACKUP WASHERS

Safety Backup Washers			Reaction Lock Washers		
Prod.No.	Model	A/F	Prod.No.	Model	A/F
222640	BUW M16 - A/F 24MM	24MM	222620	RRW M16 - A/F 24MM	24MM
222641	BUW M18 - A/F 27MM	27MM	222621	RRW M18 - A/F 27MM	27MM
222642	BUW M20 - A/F 30MM	30MM	222622	RRW M20 - A/F 30MM	30MM
222643	BUW M24 - A/F 36MM	36MM	222623	RRW M24 - A/F 36MM	36MM
222644	BUW M27 - A/F 41MM	41MM	222624	RRW M27 - A/F 41MM	41MM
222645	BUW M30 - A/F 46MM	46MM	222625	RRW M30 - A/F 46MM	46MM
222646	BUW M33 - A/F 50MM	50MM	222626	RRW M33 - A/F 50MM	50MM
222647	BUW M36 - A/F 55MM	55MM	222627	RRW M36 - A/F 55MM	55MM
222648	BUW M39 - A/F 60MM	60MM	222628	RRW M39 - A/F 60MM	60MM
222649	BUW M42 - A/F 65MM	65MM	222629	RRW M42 - A/F 65MM	65MM
222650	BUW M45 - A/F 70MM	70MM	222630	RRW M45 - A/F 70MM	70MM
222651	BUW M48 - A/F 75MM	75MM	222631	RRW M48 - A/F 75MM	75MM



Use of Safety Backup Washer in combination with a Reaction Lock Washer.

