

**MADE IN
GERMANY!**



HEICO-LOCK®

WEDGE LOCK NUT

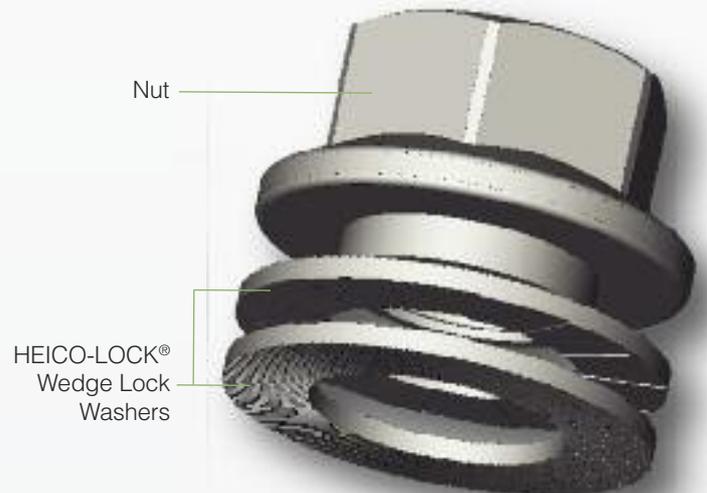
HEICO-LOCK® WEDGE LOCK NUT



The HEICO-LOCK® Wedge Lock Nut provides a high-quality, user-friendly bolt securing system for the most demanding of applications and is ideal for repeated use. The captive and rotary combination of the nut and the original HEICO-LOCK® Wedge Lock Washers makes securing your bolted joints more efficient, effective and easier even under the most extreme vibrations and dynamic loads.

DESIGN OF THE WEDGE LOCK NUT

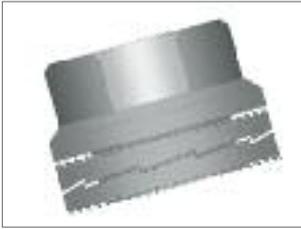
The HEICO-LOCK® Wedge Lock Nut is supplied pre-assembled. The nut and the HEICO-LOCK® Wedge Lock Washers are combined in a captive and rotary way, ensuring the HEICO-LOCK® Wedge Lock Washers and the nut are fixed permanently in the correct position with the wedge lock washers securing your bolted joint using the proven HEICO-LOCK® principle without loss of quality or function.



ADVANTAGES FOR YOU

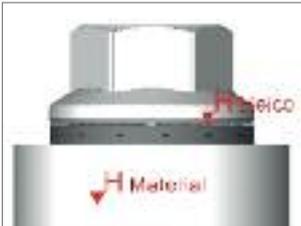
- The one piece design eliminates the risk of misuse.
- Minimized risk of operating and production breakdowns caused by faulty bolted connections
- Easy handling especially in hard to reach locations
- Fixed permanently in the correct position
- Reduction of assembly time and effort
- Reduced complexity of the component due to less individual parts
- Easy, safe and fast installation even for non-specialist users
- Can be re-used without any reduction in function or quality

TECHNICAL SPECIFICATIONS



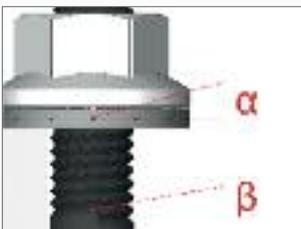
1. Pre-assembled locking system

- The HEICO-LOCK® Wedge Lock Nut is supplied pre-assembled and provides the user the clear benefit of always being in the correct locking position – particularly important if being installed and removed repeatedly



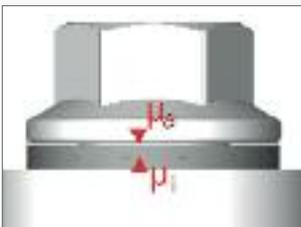
2. Difference in hardness: $H_{HEICO} > H_{Material}$

- In comparison to the surface of the HEICO-LOCK® Wedge Lock Nut the surface hardness of the clamped parts has to be lower (class 8, class10)
 - Steel (through hardened) $485 \pm 25 \text{ HV}0.3$



3. Difference in angles: $\alpha > \beta$

- The wedge angle (α) between the HEICO-LOCK® Wedge Lock Washers is greater than the pitch (β) of the bolt thread
- This angle means the expansion in thickness of the HEICO-LOCK® Wedge Lock Washers is greater than the possible longitudinal movement of the bolt along the thread



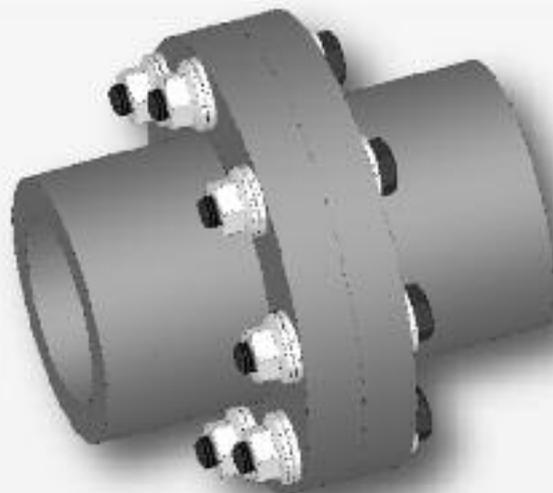
4. Difference in friction: $\mu_a > \mu_i$

- The wedge-shaped surfaces have a considerably lower friction coefficient μ_i than the toothed outside of the washers (friction coefficient μ_a)
- Loosening due to dynamic loads causes movement between the two washers in the region of the wedged shaped surfaces



5. Difference in preload: $F_{dyn} > F_{stat}$

- An expansion in thickness of the HEICO-LOCK® Wedge Lock Washers as a result of loosening leads to an increase in the clamping force
- This causes an increase in the preload compared to the static state and thus causes the bolt to self-lock.



PRODUCT OVERVIEW

M	STEEL ITEM.NO	OUTSIDE DIAMETER [MM]	BOX QUANTITY
6	HLM-6	14,2	100
8	HLM-8	17,9	100
10	HLM-10	21,8	50
12	HLM-12	26,0	50
16	HLM-16	34,5	25
20	HLM-20	42,8	10
22	HLM-22	46,5	10

FINE THREAD	STEEL ITEM.NO	OUTSIDE DIAMETER [MM]	BOX QUANTITY
20 x 1.5	HLM-20x1.5	42,8	1 / 10
22 x 1.5	HLM-22x1.5	46,5	1 / 10

FIELDS OF APPLICATION



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HEICO-LOCK® WHEEL NUT

The HEICO-LOCK® Wheel Nut is the reliable solution for the problem of self-loosening of wheel nuts on both roads and rough terrain. The captive and rotary combination of the nut and the established HEICO-LOCK® Wedge Lock Washers provides ideal protection for securing your wheels.



MORE INFORMATION: WWW.HEICO-LOCK.COM

HEICO-GROUP

Since 1900, the HEICO Group has been providing reliable and high-quality solutions in the field of fastening technology and can thus draw on over 100 years of expertise. With more than 400 employees, the company manufactures a wide range of products which are distributed via our branches located throughout the world. Our global customer services and in-house laboratories offer a high level of technical advice as well as individual testing facilities.



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