

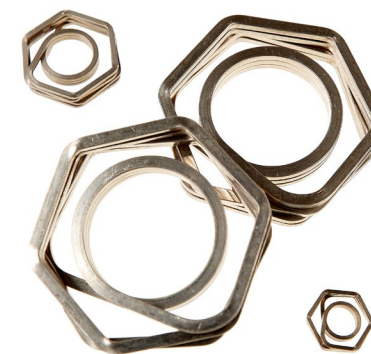


ADVANTEX

**LOCKONE**

# THE NEW REVOLUTION IN THREAD LOCKING

Part of the Advanex Global Network



New from Advanex, LOCKONE is a newly, developed spring that prevents fall and self loosening from a bolt and nut and is available in size ranges M4 to M24.



Advanex are proud to introduce LOCKONE; the new revolution in thread locking. With our spring technology and expertise we have designed a range of special spring devices for preventing nut & bolt joints from loosening through vibration. The spring is applied using a normal spanner or socket wrench and when the nut is tightened onto a bolt, it grips the bolt thread and prevents the nut from loosening.

The performance for the locking function of LOCKONE is certified through testing using impact type vibration testing machine based on NAS3351.

The testing shows that the spring device not only out performs most other locking methods, but is also re-usable and non destructive method of locking and unlocking the nuts and bolt joint.

## LockOne prevents the nut from loosening from the bolt



### Design and Assembly

Designing in LockOne couldn't be easier. Simply account for an extra three threads to the bolt length.

Its compact nature allows for ease of use in designs with weight restrictions and maintenance schedules. When using any fastener with a degrading locking feature such as a locking compound or nylon built into the nut,

replacements are needed during any maintenance as they can only be used once. With LockOne, this positive locking feature can be simply removed and reused.

A standard dodecagonal (12-Point) socket installs the LockOne at the same time as the nut, minimizing installation time. LockOne is adjustable and removable after installation.

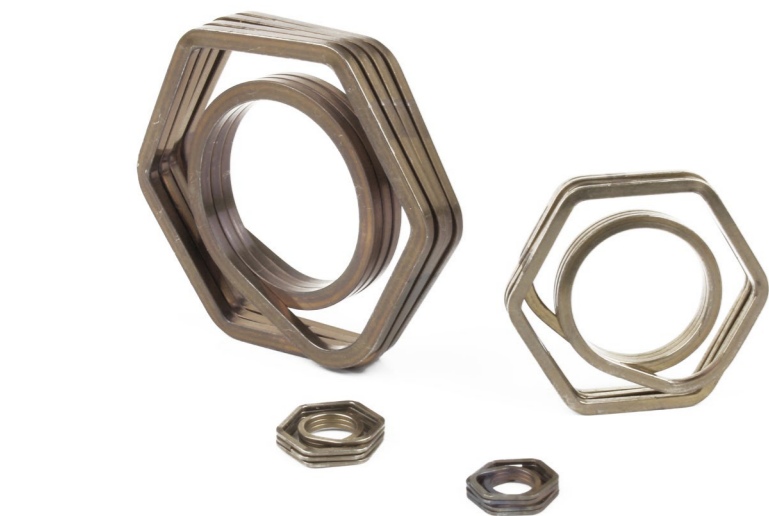
### Made for the Environment

LockOne is designed for harsh environments, without using any hazardous chemical coatings.

Made from 304 Stainless Steel WPB, LockOne is naturally corrosion resistant.

# Comparison Chart

LOCKONE holds numerous benefits over alternative solutions.



	Easy Installations	Re-Usability	Single Component	High Vibration Strength	Low Price	Non-Destructive
 LockOne	✓	✓	✓	✓	✓	✓
 Castellated Nut	✗	✓	✗	✓	✗	✗
 Nylon Nuts	✓	✗	✓	✗	✓	✓
 Pin-Lock Nut	✓	✗	✗	✓	✗	✗
 Jam Nut	✓	✓	✗	✗	✓	✓
 Serrated Face Nut	✓	✗	✓	✗	✓	✗
 Custom Lock Nut	✗	✗	✗	✓	✗	✓
 Locking Compound	✗	✗	✗	✗	✗	✓

# Simple Installation

The installation and removal of LOCKONE is quick, simple and cost effective.



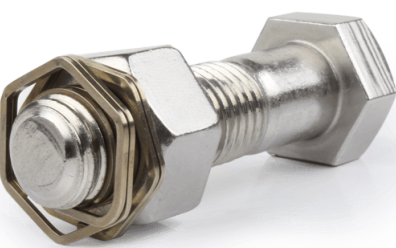
Simply load the LockOne into the 12-Point socket.



Load the standard nut on top of the LockOne.



Tighten as normal.



Load the standard nut on top of the LockOne. If there is a gap between the LockOne and the nut, simply hand tighten the LockOne until it is flush with the nut.



# LOCKONE Benefits

- Time saving
- Quick and easy method
- Free from Foreign Object Debris
- Reusable
- Easy to remove

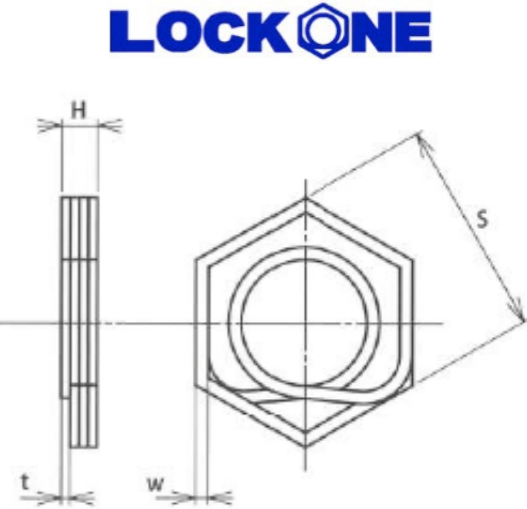
Suitable for a range of industries including:

- Rail
- Transport
- Construction
- Aerospace
- Energy



## Sizes Available

Code No.	Nut class	Flat size (S)	Wire size (w x t)	Height (h)
LockOne -M4	M4	7	0.50 x 0.35	1.40
LockOne -M5	M5	8	0.60 x 0.40	1.60
LockOne -M6	M6	10	0.70 x 0.50	2.00
LockOne -M8	M8	13	0.88 x 0.63	2.50
LockOne -M10	M10	17	1.05 x 0.75	3.00
LockOne -M3/8	M3/8	17	1.05 x 0.75	3.00
LockOne -M12	M12	19	1.23 x 0.88	3.50
LockOne -M1/2	M1/2	21	1.40 x 1.00	4.00
LockOne -M16	M16	24	1.40 x 1.00	4.00
LockOne -M20	M20	30	1.75 x 1.25	5.00
LockOne -M22	M22	32	1.75 x 1.25	5.00
LockOne -M24	M24	36	2.10 x 1.50	6.00



**LOCKONE**

LockOne is relevant to a wide range of industries and applications and has a proven track record in product performance.



Markets & Applications

Market	Application
Rail*	Railroad tie for sleepers
Rail*	Railway bond portion
Construction	Joint portion for pillars and beams
Energy	Solar panel stands
Roads**	Bridge and tunnel joints
Roads**	Optical cable installation

\*LockOne is under comparative study by Railway Technical Research Institute  
\*\*LockOne is authorised by NEXCO Research Institute as an approved product

LockOne is being used across the globe by a range of organisations including:

- Tokyo Subway
- Toyota
- Japan Railway



The performance for the locking function of LOCKONE is certified through testing using impact type vibration testing machine based on NAS3351.



Vibration Test Conditions

Test Piece	
Bolt Size	M16
Material - Plating	SS400 or equivalent, hot dip galvanizing
Material of LOCKONE	SUS304 - WPB
Fastening Torque	75N . M

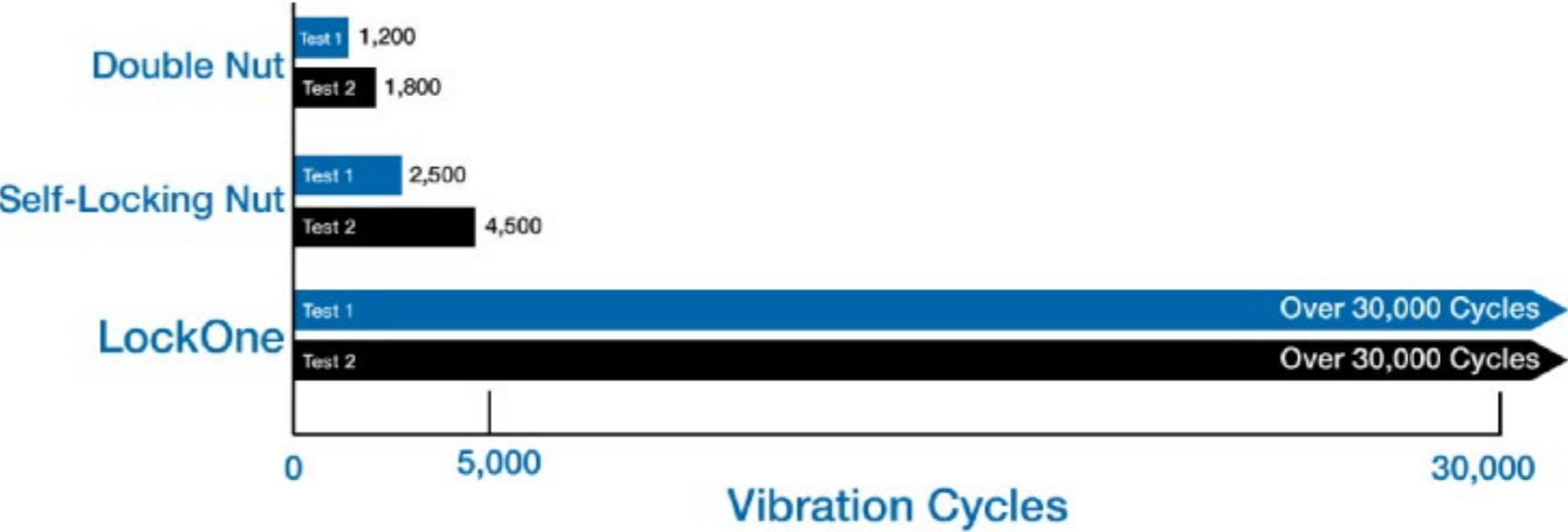
Test Condition	
Direction of Vibration	Right angle against the bolt axis
Number of Vibration & Acceleration	Based on our own standard
Vibration Stroke	11mm
Impact Stroke	19mm
Number of Test Pieces	2pcs
Number of Vibrations	MAX 30,000

LockOne significantly outperforms alternative solutions.

LockOne is authorised by NEXCO Research Institute as an approved product.



Performance Testing





ADVANCE

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