Omni-Lok

- Temperatures to 1200°F
- Ideal for short thread engagements
- Wide range of locking element materials

Designed to Improve Product Integrity.

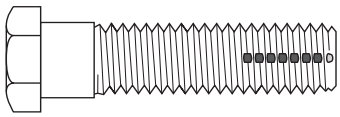
The Omni-Lok process is a patented method to make bolts and nuts stay in place, regardless of the extent of vibration or temperature stress. Omni-Lok fasteners meet all specifications of MIL-DTL-18240, including those requiring as many as fifteen reuses.

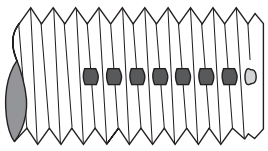
Omni-Lok fasteners incorporate single or multiple pins, fully contained in holes located within the thread, and held parallel to the longitudinal axis. The pin is precisely located in such a manner that the O.D. of the pin extends above the root diameter of external threads–and below the minor diameter of internal threads–at a controlled height. This provides the required torque, creating an effective wedge in the threaded assembly for frictional resistance to rotation, i.e. prevailing torque.

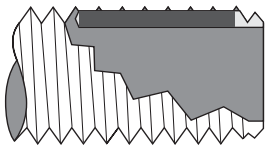
The Omni-Lok process is well-suited for special threaded components which require a locking element but have one or more of the following difficult-to-deal with situations;

- Withstand high temperature (up to 1200° F), or low temperature (cryogenic) requirements.
- Withstand high vibratory and stress conditions placed on external and internal threaded parts.
- Conforms to MIL-F-8961 requirements.
- Enable parts with a short thread engagement to utilize a self-locking feature.
- High prevailing torque requirement.
- Unusual and non-conventional configurations
- Severe corrosion environmental conditions.
- Omni-Lok pins can be fabricated from an almost endless list of materials such as high temperature resisting alloys and soft ductile materials in order to provide a controlled and consistent torque for severe applications.

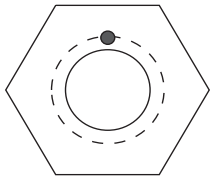
Every Omni-Lok project is special. After discussions between Long-Lok Technical Service personnel and your engineers, a torque requirement specification will be established and a formula developed to control the Omni-Lok process. One or more holes are then formed longitudinally in the bolt at a specified distance inward of the major diameter. One or more pins of proper diameter to fit the hole are then inserted.

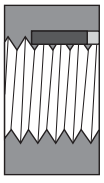






Omni-Lok Bolt Configuration





Omni-Lok Nut Configuration