HEICO Fastening Systems:
Superior Engineered Fastening Products

NCMS Technology Showcase
Puget Sound Naval Shipyard

PROBLEM STATEMENT

Large diameter bolted joints (>1"), can be a challenge to tighten to the correct preload without cumbersome, fragile, and expensive hydraulic or powered torque drivers.

These challenges are compounded when access space is limited.

Small fasteners are often subject to vibration leading to bolt loosening. Split lock washers, tooth washers, and plastic insert nuts loose preload and simply do not do the job.

Critical naval/marine assemblies depend on accurate and reliable fastener connections.

BENEFITS

Using our HEICO-TEC tension nuts results in accurately, easily, and safely tightening large bolted joints in tension instead of imparting torsional influence of the main bolts through more traditional tightening methods. Only readily available manual torque wrenches are needed.

Using our HEICO-LOCK wedge locking systems secures the bolted joints using preload force (tension) rather than friction.

TECHNOLOGY SOLUTION

HEICO-TEC mechanical tensioners provide several solutions and technology improvements over current MJTs including:
- Two-piece pressure bolt system ensures a more elastic joint; therefore, increasing resiliency and reliabilty
- Factory prelubricated, internally protected from harsh environments
- Larger bolt circle, provides uniform wall strength and does not require special sockets
- Compatible with ISO 898-2, heavy hex direct replacement

HEICO-LOCK wedge locking systems secure bolted joints, working at low and high preloads. Suitable for dynamic vibration loads.

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