

Tensioning Every Single Stud in a Joint Simultaneously



▲ *Multi-Stud Tensioning Set-Up.*

MULTI-STUD TENSIONERS

Enerpac Multi-Stud Tensioning (MST) systems are capable of tensioning every single stud in a joint simultaneously. By applying a predictable and accurate pre-load to all studs, problems associated with conventional bolt tightening techniques are avoided. Typical Enerpac Multi-Stud Tensioning applications include:

Manway, Hand Hole & Inspection Covers

MST systems are the fastest and most accurate means of loosening and tightening studs on Primary and Secondary Manway Covers, Hand-Hole and Inspection Ports in nuclear facilities. Using special ram areas and strong lightweight materials, the MST's reduce bolting time by as much as 75%.

Coolant Pump

A custom slimline tensioning system for a Nuclear Reactor Coolant Pump, using six equally spaced tensioners and tightening studs in four passes, has reduced bolting times by 25% and significantly increased tensioning accuracy.

Wind Turbine Blade Assembly

Using an Enerpac MST has allowed wind turbine blade assembly times to be reduced by approx. 65% while bolt load accuracy and consistency have improved, resulting in better joint life and reduced maintenance requirements. The MST, comprising four tool segments, is capable of simultaneously tensioning up to 88 bolts connecting a 125 ft. long blade to a bearing slew ring.

MST - Multi-Stud Tensioners

This tool can be custom designed, and built, for virtually any nuclear facility. We specialize in addressing difficult projects that demand accurate loads within tight space envelopes, while also seeking ease of operation and performance.

- Designed in segments enabling the operator to easily and quickly connect each segment to the joint and link together to provide simultaneous loading.
- Very accurate and fast closure system for large tensioning applications on pumps, valves, and steam generators, for example.
- For ease of handling on-site, Enerpac MST systems can be supplied with an integral lifting frame and trolley.



▲ *Multi-Stud Tensioner.*



▲ *Multi-Stud Tensioning application.*