

BOLT TENSIONING Solutions

WHATEVER YOUR BOLTING CHALLENGE, WE HAVE THE SOLUTION





Wide range of products for all market segments

Latest technology and innovation



Controlled tightening procedure



Simultaneous tightening of bolts



Significant time and labour savings



MECHANICAL TENSIONING



TIGHTEN WITH SIMPLE HAND TOOLS

Superbolt mechanical multi-jackbolt tensioners (MJTs) are an innovative way to tighten large bolts safely and accurately with the use of simple hand tools. Actual tensioning is achieved by tightening the jackbolts that encircle the nut body. Superbolt tensioners are designed as a direct replacement for conventional nuts and bolts. There is low risk of galling, even in space-restricted areas.

BOLTIGHT

HYDRAULIC TENSIONING



TIGHTEN SINGLE BOLTS OR MULTIPLE BOLTS SIMULTANEOUSLY

Boltight hydraulic bolt tensioners are high quality tools especially useful for tightening flanges or other critical bolted connections. Multiple tensioners can be used to deliver an even and accurate pre-load. A wide range of products are available for all market segments and custom products can be designed and manufactured to the client's exact specification.

WHATEVER **COMES ALONG** WE HOLD IT TOGETHER

MECHANICAL TENSIONING

Superbolt tensioners are designed as direct replacements for conventional nuts and bolts to be threaded onto a new or existing bolt, stud, threaded rod or shaft. The main thread serves to position the tensioner on the bolt or stud against the hardened washer and the load-bearing surface.

Once it is positioned, tensioning is accomplished with simple hand tools by torqueing the jackbolts which encircle the main thread.

Having developed a deep understanding of bolt tensioning, Nord-Lock can offer a choice of mechanical or hydraulic bolt tensioning for your application in industries including oil & gas, mining, power generation, wind and heavy industry.

Superbolt revolutionised the world of nuts and bolts with the multi-jackbolt tensioner (MJT) and since then has proven its technology with multiple successful installations.

Boltight hydraulic bolt tensioners are used extensively across many industries and projects where bolt load accuracy is critical.

WHATEVER THE TASK, WE HAVE THE RIGHT TOOL FOR ANY CHALLENGE

HYDRAULIC TENSIONING

When tightening a bolt by any method, the operator is aiming to achieve the correct bolt load. Due to friction, this can be challenging to accurately control when using traditional torque tightening methods.

Using determined pressures, our bolt tensioners axially stretch the bolt. The nut is then rotated down the joint face, accurately locking in the bolt load.



Tightening the jackbolts generates a strong thrust (axial) force directed against a hardened washer. Jackbolts have a small friction diameter and can create a high thrust force with relatively little torque input.

Loads are transferred through the nut body positioned on the main thread by hand.

A hardened washer is used to transfer the force while protecting the flange face.

The thrust (axial) force of jackbolts and the opposite reaction force from the main bolt head create a strong clamping force on the flange.

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The thrust (axial) force from the jackbolt creates an equally strong reaction force in the main bolt

Hydraulic oil flows into load cell

Load generated by hydraulic load cell is tranferred into the puller

Puller transfers the load directly into the bolt.

The nut lifts clear of the flange surface due to the stretch of the bolt and joint compression.

The socket is used to turn the nut down to the joint face.

The axial load retained in the bolt ensures the correct clamping force is achieved



Nord-Lock Ltd Tel: +44 (0)1264 366667 Email: sales.uk@nord-lock.com www.nord-lock.com

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