

MULTI STUD TENSIONERS FOR NUCLEAR STEAM GENERATOR



FAST & SIMPLE

bolt tensioning method to comply with ALARA objectives

CUSTOM DESIGNED

to accommodate clients exact specification

COMPREHENSIVE TESTING

certificates and operational specifications delivered

THE CHALLENGE

Boltight were challenged to design a hydraulic tensioning solution which was needed to tighten multiple bolts in a high radiation environment on primary, secondary and hand hole manway covers.

The application was safety critical so high accuracy, ease of operation and time saving were key objectives.

THE SOLUTION

A combination of Multi Stud Tensioners (MST) was developed.

The package included a whole ring system to fit $8 \times 1.0^{\circ}$ bolts for a hand hole manway flange, two larger MST systems one with four segments to fit $16 \times 1.875^{\circ}$ bolts on a primary manway cover and one with five segments to fit $20 \times 1.25^{\circ}$ bolts on a secondary manway flange.

The whole ring and each individual segment was fitted with a single hydraulic inlet connection.

Each ring system was designed with handles to make it easy to lift and install by a reduced workforce. The larger tools were designed to be in portable segments so that no rigging was needed for lifting the tensioners onto the application.

Boltight also provided whole ring segment test blocks for each MST, to allow pre-operation checks and operator training.

This solution provided high and accurate preloads to eliminate the possibility of leaks with a fast and simple bolt tensioning method to comply with ALARA objectives of making every reasonable effort to ensure exposures to ionizing radiation are as far below the dose limits as practicable.







MST to fit 20 x 1.25" bolts supplied in five segments



MST to fit 16 x 1.875" bolts - supplied in four segments

LOCATION

Spain

APPLICATION

Nuclear Steam Generator

CUSTOMER

ENWASA SA

PRODUCT

Multi Stud Tensioners (MST)

THE SOLUTION DELIVERED PROVIDES GREATER SAFETY, SIGNIFICANTLY REDUCED DOWNTIME DURING OUTAGES AND LESS MANPOWER IS

REQUIRED.



THE OUTCOME

CUSTOMER SATISFACTION - Delivery of a bespoke fast and simple tensioning method for a safety critical environment.



Boltight standard bolt tensioning tools

FIND OUT MORE

Founded in the United Kingdom, in 2001, Boltight is the creator of the original hydraulic bolt tensioning technology that permanently eliminates the risk of loose or over tightened bolts. We have the largest standard range on the market as well as an unlimited capacity to create custom solutions to solve our customers' unique challenges. The result over an entire lifecycle is increased uptime, savings on maintenance costs and a safer work and public environment.

Boltight is part of the Nord-Lock Group, a world leader in secure bolting solutions that offers a range of innovative technologies including Nord-Lock wedge-locking, Superbolt multi-jackbolt tensioning, Boltight hydraulic tensioning and Expander System pivot pin technology.

Find out how Boltight can solve your bolted challenges at Boltight.com

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