

Application description

Fastening large numbers of big bolts in bridge construction.

Bolting process for this application:

Some examples of typical torque values in bridge building are 800 Nm, 1.150 Nm, 2.200 Nm.

The conventional methods and drawbacks:

Slow hydraulic torque wrenches and noisy and inaccurate impact wrenches.

RAD solution and USP's:

B-RAD 1400 or 2000 for smaller bolts,
B-RAD 4000 or E-RAD 3400 for larger bolts.
Much more accurate than impact wrenches,
and many times faster than hydraulic torque
wrenches.

Specification of RAD tools and accessoires:

B-RAD SELECT 1400 (PN: 28266)
B-RAD SELECT 2000 (PN: 28268)
B-RAD SELECT 4000 (PN: 28270)
Or
E-RAD BLU 3400 (PN: 21986)

Sliding reaction arm PN: 25243 (for B-RAD 1400)
Sliding reaction arm PN: 25242 (for B-RAD 2000)
Sliding reaction arm PN: 25987 (for B-RAD 4000)
Sliding reaction arm PN: 23472 (E-RAD BLU
3400)

Examples of manufacturers:

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Target customers:

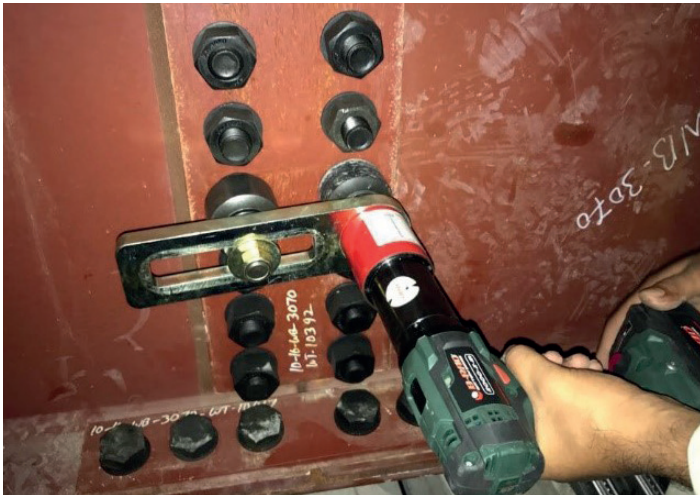
Retro Bridge, Jannasch, Structures XL, Copasa,
Veneta Montaggi 2001, Skanska



Bridge with thousands of big bolts.



Traditionally bolts on bridges are fastened with noisy impact wrenches and slow hydraulic torque wrenches.



B-RAD with sliding arm.



E-RAD 3400: on this particular bridge more than 4.000 bolts had to be fastened at 2.200 Nm.



For an emergency repair on a bridge on one of the busiest highways in the Netherlands, thousands of bolts on specially made connecting plates were fastened with the torque and angle method. A large number of B-RAD tools were used for this job.



A B-RAD on one of the connecting plates. Thanks to the use of fast and accurate B-RAD tools the emergency repair was finished, and the bridge was reopened for heavy traffic, more than 2 weeks ahead of schedule. This drastically reduced the economic damage caused by the forced shutdown of the bridge.