

Bridge Construction with EvoTorque® Battery Tool (EBT)



The construction of bridges and other steelwork projects often involves complex bolting practices, most of which are specified by national or international standards. Structural steelwork specifications state what materials and products should be used, and how work (fabrication and erection) should be carried out. Due to the complexity of many steelwork structures there is often a range of contractual documents, including drawings and general specification with technical requirements for the supply of materials, products and workmanship. Typically, each project has its own unique set of requirements suitable for the individual structure.



The connected steelwork must be within certain tolerances on position and straightness, but must also conform in terms of the bolting process used. The EvoTorque® Battery Tool can perform a multi-stage tightening sequence, where

a combination of snug-torque, angle and final torque targets can be set by the operator for execution within a specified tolerance. In this project EvoTorque® was used to tighten M39 bolts to 2008 N-m followed by 65° to deliver a final torque of value 4000 N-m. The 2-speed nature of the tool guaranteed rapid run-down leaving the low speed mode to perform final tensioning of the fasteners. The tool's data logging technology ensured that each tightening operation was successfully recorded into the tool's internal memory storage. The industrial brushless motor allowed for multiple consecutive bolting operations, whilst the internal transducer helped with maintaining accuracy and repeatability.

The customer commented on how simple the tool was to operate, especially when compared to previous bolting solutions. The 3-bay charger supplied as standard helped ensure a seamless supply of power, with up to three batteries being charged simultaneously, ready and waiting for use.



Application

Fastening of Steelwork to aid construction of bridge over the river Rur in Germany

Solution

Norbar EvoTorque® Battery Tool EBT-92 Auto 2-Speed with standard cranked reaction arm



Within our family of distributors we share applications and can often recommend solutions that have been tried and tested elsewhere.

