

BRIDGE CONSTRUCTION: HIGH SPEED BOLTING WITH alkitronic[®]

alkitronic[®] CASE STUDY

In modern bridge and road construction, expansion joints are used to bridge abutment gaps. The **TRANSGRIP[®]** finger expansion joints bridge the gap with cantilever fingerplates. These massive and fatigue-proof finger elements are bolted to a solid foundation.

INITIAL SITUATION

In former times, bolting connections were often done with the help of manual torque wrenches. The work strained the backs and knees of the specialists.



Figure 1: The ECip 100N at bridge construction

THE SOLUTION

Nowadays, our alkitronic **ECip 100 N** handles this task faster and more comfortably. The output extension of this specialized electric torque wrench makes it the appropriate tool for tightening low-lying bolted connections. Working in crouched positions or on one's knees becomes unnecessary.

**alkitronic ECip N100 im Brückenbau:
Your back is thankful – not to mention
the time saving.**

Traffic and temperature fluctuations put high stress on these particular components. Additionally, bridge construction must meet strict security standards. We developed our torque wrenches with these requirements in mind. For instance, our tools allow predefining a specific shut-off torque level. Connected to any international electricity grid or to a portable generator, the wrenches achieve these forces precisely at any time.

FURTHER INFORMATION

You can also find out more about **TRANSGRIP[®]**, road and bridge construction at the Swiss company Hebag AG at www.hebag-ag.ch.



Figure 2: ECip-N by alkitronic

TECHNICAL DATA OF THE ECip-N

- ✓ Innovative motor protection with automatic switch-off to secure bolting quality.
- ✓ Intelligent automatic shut-off system for constant and exact reproduction of the pre-set torque (repeat shut-off accuracy $\pm 3\%$ for the same bolting application).
- ✓ Extraordinary robust aluminum motor housing.
- ✓ Specifications: all alkitronic electric torque multipliers come with CE-certification.
- ✓ Electrical data: Universal AC Input 100V - 253 V, frequency 45 Hz - 66 Hz Power max. 2000 W, protection category I, protection class IP 54