STATEMENT ON ACCURACY OF KOLVER KDS SERIES TORQUE SCREWDRIVERS

Kolver's KDS torque screwdrivers are tested to ensure they meet the following criteria.

A calibration certificate with all test data is provided with each tool.

Repeatability and performance

The Cmk is calculated on twenty consecutive measurements with a target torque equal to 50% of the maximum torque of the tool.

Acceptance criterion: The Cmk value must be greater than or equal to 1.67.

The tolerance used in the Cmk calculation is 5% for all screwdriver models except for right-angle head (ANG) and KDS-NT70 models, where it is 10%, and for KDS-PL3 inline and pistol models, where it is 8%.

Linearity

Linearity is checked by performing three consecutive measurements each at 20%, 40%, 60%, 80%, and 100% of the maximum torque of the tool.

Acceptance criterion: Every measurement must have a deviation from the target torque lower than 7.5% for the test at 20% of the maximum torque, and lower than 5% for all other measurement points. *KDS-NT series only: deviation for all measurements lower than 5%*

All measurements are performed based on the methods described in ISO 5393 "*Rotary tools for threaded fasteners - Performance test method*", on a semi-elastic test joint, using a torque transducer calibrated at an ISO 17025 accredited laboratory.

To achieve the same or better performance on any given application, it may be necessary to optimize the tightening program parameters on the KDU controller according to the user manual, or with the free assistance of one of Kolver's application specialists.

The performance of any torque tool cannot be properly characterized by a single tolerance value. However, as a practical summary of the test criteria defined above: all KDS screwdrivers are verified to perform within ±5% of the target torque, except for right-angle (ANG) models, which are verified to perform within ±10%.

This document replaces a previous version that referenced performance classes as defined by ISO 5393. It has been rewritten to state Kolver's acceptance criteria more precisely and in more accessible terms.