Temperature-Sensor-Measurement

Approach

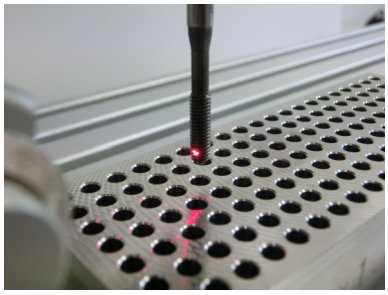
At the time of the greatest heat build-up the exact temperature at the tip of the tool can be measured only with an enormous effort.

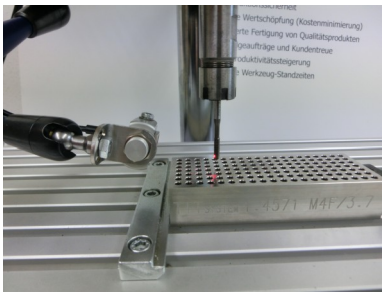
Temperature Value ΔT

As a possible solution the temperature value Delta T (ΔT) is computed

Procedure

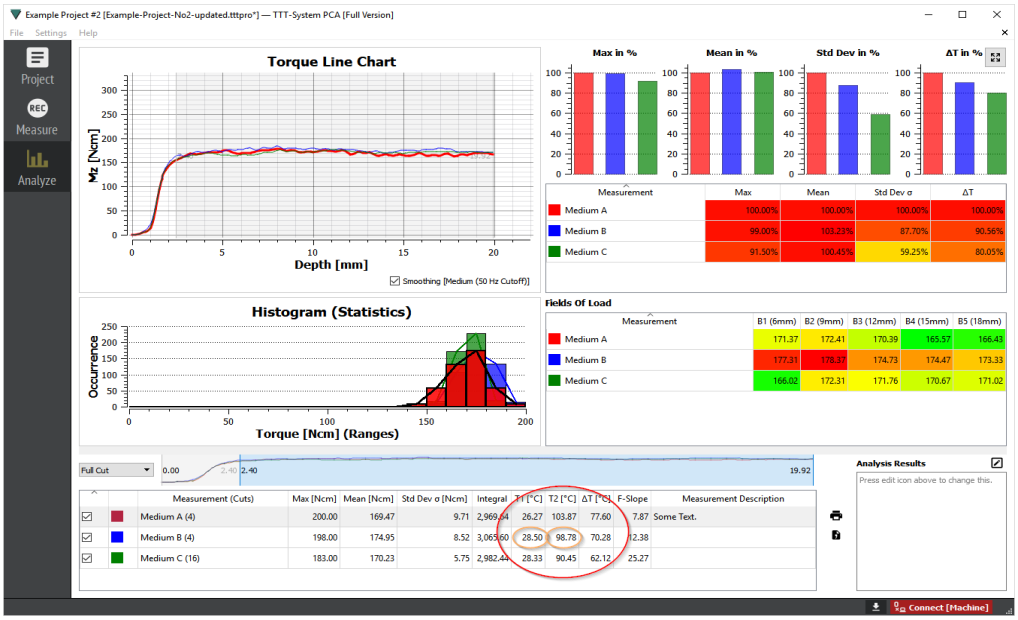
Employing infrared thermometry by use of the Temperature-Sensor-Equipment TSE the temperature is determined at the tip of the tool right before measurement...





... and compared with the determined temperature value right after measurement.

The difference results in the temperature value ΔT.



Result

Temperature mean values and ΔT supplemented to torque values of series of measurements. With the implementation of the Temperature-Sensor-Equipment TSE another evaluation factor in addition to the torque data is given.