

STRAIGHT FROM THE LAB

Important information in a calibration certificate



A calibration certificate from an accredited calibration laboratory contains a lot of information about the measuring environment, method, and so on. Despite all this information, almost all the questions we receive involve the table shown below. This is an attempt to answer some of the most frequently asked questions.

Pentronic's laboratory is accredited since 1988

Calibration temperature, °C	Correction, °C	Total expanded measurement uncertainty, ± °C
0	0.0	0.15
100	+0.1	0.15
500	-1	1
1000	-3	1

- The calibration temperature refers to those points at which the calibration has been done.
- The correction is how much the value displayed by the instrument must be corrected at the respective calibration temperatures. The correction term must always be added, together with the appropriate plus or minus sign, to the displayed value. Accordingly, if the display shows 500 °C the "true" temperature will be $500 + (-1) = 499$ °C.
- The measurement uncertainty is only to be used when the customer does an in-depth analysis of his own total measurement uncertainty.

"You are welcome to contact us if anything is unclear," says laboratory manager Lars Grönlund.