



Decision Rules and Statements of Conformity

Pennine Instruments will introduce decision rules in a phased approach during 2021. The decision rules will be as per the guidance document ILAC - G8:09/2019 - Guidelines on Decision Rules and Statements of Conformity, in the determination of the statement of conformity for the calibration service provided by Pennine Instruments unless incorporated in a Specification.

For Pressure and Electrical calibrations, we will use: Non-Binary acceptance based on guard band $w = u$ (reference ILAC - G8:09/2019 Appendix B)

For Airflow calibrations we will use: Simple acceptance (reference ILAC - G8:09/2019 Appendix B)

For dimensional Conformity / nonconformity statements are in accordance with "ILAC G8: 09/2019 Guidelines on Decision Rules and Statements of Conformity" Simple acceptance rule where the acceptance limit equals the tolerance limit provided that the tolerance to uncertainty ratio (TUR) $\geq 1:1$. Where a measured result's TUR is not $\geq 1:1$ the measured result is endorsed thus # because conformance cannot be determined. The risk that accepted items are outside the tolerance limit is up to 50%. The risk of false reject is up to 50% for measured results outside the tolerance.

Full details of our measurement of uncertainty are available on our UKAS Schedule of Accreditation

Please contact us if your requirements are not covered by the rules listed above.

Please also see Dimensional Decision Rule Policy document

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Dimensional Laboratory Decision Rule Policy

We have chosen to apply the "Binary Statement for Simple Acceptance Rule" from ILAC G8: 09/2019 to all UKAS dimensional calibration certificates to meet the statement of conformity requirement from Clause 7.8.6 of ISO/IEC 17025:2017. This clause states that for calibrations performed to a specification and including a statement of conformity, a decision rule must be implemented. The decision rule must be agreed with the customer and reported with the results on the calibration certificate.

Conformity statements are in accordance with the "Binary Statement for Simple Acceptance Rule" from ILAC G8: 09/2019 where the acceptance limit equals the tolerance limit provided that the laboratories tolerance to uncertainty ratio (TUR) is equal to or greater than 1:1. Where a measured result's TUR is not equal to or greater than 1:1 the measured result will be endorsed with a #. The risk that accepted items are outside the tolerance limit is up to 50%. The risk of false reject is up to 50% for measured results outside the tolerance.

This rule is applied unless instructed by the customer at the contract review stage.

To conform to the requirements of the "Binary Statement for Simple Acceptance Rule" the uncertainty budgets have been expanded to show individual features and will feature on each calibration certificate and replaces our previous method before the implementation of ISO/IEC 17025:2017.

The level of risk includes the uncertainty of measurement and is defined as providing a 95% level of confidence in the uncertainty of measurement and has been carried out in accordance with UKAS requirements.

If you have any questions regarding the implementation of these rules then feel free to contact us.

Please see also Decision Rules and Statement of Conformity document

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