

Measurement Uncertainty

Global Proficiency offers a range of specialist services to assist with interpretation of test data and related information, including: Single-point Measurement Audits, customised ring trials, assessment of bias and accuracy, repeatability and reproducibility, measurement uncertainty, method validation, and design of sampling plans.



DATACHEK OBJECTIVE

To assist and support our customers by implementing processes that validate, optimise, and verify that procedures, routines and methods used within an organisation are performing to expectations and specifications. From sampling, production, methodology, precision, and accuracy to the interpretation of the data gathered from these processes, we have the experience and expertise to help.

DATACHEK – ASSESSING MEASUREMENT UNCERTAINTY

Laboratory Quality Control comprises many different important aspects and facets, and one facet of growing importance is uncertainty of measurement (UoM). Customers want assurance that the result provided is within a reasonable expected range of UoM, and accreditation bodies are putting greater emphasis on laboratories being able to provide UoM for the tests and methods they perform.

For laboratories that have participated in Global Proficiency's Proficiency Testing Schemes, data provided over time can be used for helping laboratories estimate their UoM for specific tests and methods.

WHY GLOBAL PROFICIENCY?

Global Proficiency operates in accordance with international best practice. We are:

- Accredited to ISO/IEC 17043 Conformity Assessment -General Requirements for Proficiency Testing.
- Accredited to ISO 17034: General requirements for the competence of Reference Material Producers.
- Used by New Zealand MPI (Ministry for Primary of Inter-Laboratory Industries), as the provider Comparison Programmes for the meat and food testing industries.

Our Existing customers choose our services because:

- The ease of ordering and delivery of products at a reasonable price.
- Our excellent communication and understanding of laboratories needs, combined with fast delivery of reports and round summary information.
- Reports are easy to read and provide all the information laboratories need.
- They assist in demonstrating the validity of results, for example, during method development.

MEASUREMENT UNCERTAINTY ASSESSMENT OPTIONS

Using the data provided in past proficiency testing rounds, Global Proficiency can provide a raw data output of all provided results, the variability from the consensus value, a report covering all specified tests broken down into methods, and the resulting uncertainty of measurement based on averaged performance. A bias is provided along with the Total Analytical Error (chemistry tests only*). A Westgard Chart can also be produced to allow laboratories to apply the Westgard Rules to assess acceptable vs out of control measurements.

*Bias and therefore Total Analytical Error are not provided for quantitative microbiological tests due to microbiological methods being empirical, however the UoM report, data output and Westgard charts provide valuable information to assist in the estimation of your laboratory's UoM for these tests.

CONTACT US TO DISCUSS YOUR REQUIREMENTS

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PLEASE VISIT OUR WEBSITE www.global-proficiency.com

