



PROFICIENCY TESTING PROGRAM

TENSILE TESTING OF METALS

Company Background

Proficiency Testing Australia (PTA) is one of Australia's largest and most experienced proficiency testing providers. We have a reputation for providing friendly, customer-focussed service using qualified, experienced staff and specialists.

Proficiency Testing Australia is able to service a very broad range of industries, and many of our clients come to use our services based on the recommendation of colleagues. Proficiency Testing Australia has offices in Sydney and Brisbane, so our services and support are readily accessible.

Proficiency Testing Australia is accredited as a Proficiency Testing Provider by The American Association for Laboratory Accreditation. The accreditation covers the specific proficiency testing sample/artefact types listed on the agreed scope of accreditation. The accreditation meets the requirements of ILAC Guide 13:2007 *Guidelines for the Requirements for the Competence of Providers of Proficiency Testing* (comprising ISO/IEC Guide 43-1:1997, as well as relevant elements of ISO/IEC 17025:2005 applicable to characterisation, homogeneity and stability testing of proficiency testing materials) and management system requirements of ISO/IEC 17025:2005 as well as other relevant ISO 9000:2005 requirements.

Aim of the Program

The aim of the Tensile Testing of Metals program is to test each participant's ability to competently perform mechanical testing of metal samples.

Application of program to accreditation

Participation in proficiency testing programs would satisfy requirements of ISO/IEC 17025: 2005 *General requirements for competence of testing and calibration laboratories*.

Program Details

The Tensile Testing of Metals program is conducted once a year. The size and shape of the metal sample may vary from round to round.

Participants receive up to four test items for each round. The tests for each round include a range mechanical analysis:

- Thickness;
- 0.2% proof stress (non-proportional elongation) ($R_{p0.2}$);
- Upper yield (R_{eH});
- Lower yield (R_{eL});
- Tensile strength (R_m); and
- Percentage elongation after fracture (A%).

A final report, summarising the information submitted by all of the participants can be viewed on the PTA website at the conclusion of each round of the program. A summary sheet is also sent to each individual participant at the conclusion of the program. This summary sheet details the performance of that laboratory in the program.

Confidentiality

Each participating laboratory is assigned a code number to allow for confidential treatment of results in all reports and publications produced by PTA. Please refer to the PTA website (http://www.pta.asn.au/pta_Confidentiality) for more information.

Fees

Refer to the current PTA fee schedule available on the PTA website (www.pta.asn.au/pta_Schedules)

Further Information

For further information on the Food Program contact ptaenquiry@pta.asn.au