

# **Tensile**

## **Aim of the Program**

This proficiency testing program aims to assess laboratories' ability to competently determine tensile properties of a metal sample; and to provide participants with external quality assurance to enhance accuracy and reliability.

## **Application of the Program to Accreditation**

Participation in this proficiency testing program satisfies the requirements of ISO/IEC 17025:2017 – *General Requirements for the Competence of Testing and Calibration Laboratories* for monitoring performance by comparing results with other laboratories.

## **Program Details**

The Tensile program is an annual program comprising of one round per year.

Sample – Two metal samples.

Tests – 0.2% Proof Stress (non-proportional elongation) (Rp0.2), Upper Yield (ReH), Lower Yield (ReL), Tensile Strength (Rm), Percentage Elongation after Fracture (A%) and Percentage Reduction in Area after Fracture (Z%).

## **Statistical Analysis:**

A robust z-score technique is used to assess performance.

## **Reporting:**

At the conclusion of each round, each participant receives a confidential individual summary sheet, detailing its performance in the program, and a final program report summarising all participant data.

## **Confidentiality**

Each participant is assigned a unique code number, keeping all results anonymous in all PTA reports and publications.

## **Fees and Further Information**

For information on program fees or other enquiries, please contact PTA directly:

Email: [ptaenquiry@pta.asn.au](mailto:ptaenquiry@pta.asn.au)