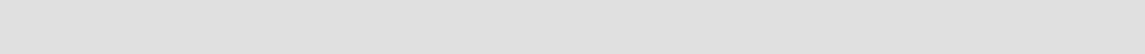




Mechanical Testing ISO/IEC 17025 Application Document

Annex A: Classification of testing machines

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Mechanical Testing Annex A: Classification of testing machines

This document provides interpretative criteria and recommendations for the application of ISO/IEC 17025 for both applicant and accredited facilities conducting classification of testing machines under the field of Mechanical Testing.

Applicant and accredited facilities must also comply with the ISO/IEC 17025 standard and Mechanical Testing field application document and any field annexes, policies and/or technical circulars (refer to *NATA Procedures for Accreditation*).

Published standards for calibration of force-measuring systems of testing machines classify testing machines into various levels. This classification is based on the readability, accuracy and repeatability of the testing machine.

TEST ON	CLASS OF MACHINE REQUIRED
Metals; metal powders and products; breaking tests upon lifting gear, welded chain, wire rope and fittings; springs; threaded fasteners; timber; fibre building boards; plywood; seat belts (assembly tests).	A 1.0% Repeatability, $\pm 1.0\%$ Accuracy
Fibre ropes and cordage; gypsum and gypsum products; glass; textiles; paper and paperboard; rubber; plastics; leather; gaskets; seals and packing; adhesives and sealers; adhesive tapes, moisture barrier materials; proof tests on welded chain; cargo (webbing load) restraint systems (AS 4380).	B 2.0% Repeatability, $\pm 2.0\%$ Accuracy
Proof tests upon lifting gear, wire rope and fittings.	C 5.0% Repeatability, $\pm 5.0\%$ Accuracy

ASTM standards require calibration of force measuring systems to ASTM E4. This standard differs slightly from AS 2193. Other standards may also vary from these classifications.

References

This section lists publications referenced in this document. The year of publication is not included as it is expected that only current versions of the references shall be used.

Standards

AS 2193	<i>Calibration and classification of force-measuring systems</i>
AS/NZS 4380	<i>Motor vehicles – Cargo restraint systems – Transport webbing and components</i>
ASTM E4	<i>Standard practices for force verification of testing machines</i>