

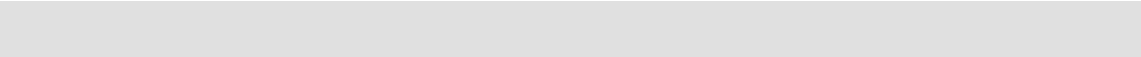


## **Specific Accreditation Criteria**

### **Manufactured Goods ISO/IEC 17025 Annex**

#### **Testing of paper and related products**

**January 2018**



**© Copyright National Association of Testing Authorities, Australia 2013**

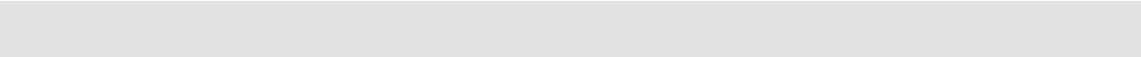
This publication is protected by copyright under the Commonwealth of Australia Copyright Act 1968.

NATA's accredited facilities or facilities seeking accreditation may use or copy this publication or print or email this publication internally for accreditation purposes.

Individuals may store a copy of this publication for private non-commercial use or copy a reasonable portion of this publication in accordance with the fair dealing provisions in Part III Division 3 of the Copyright Act 1968.

You must include this copyright notice in its complete form if you make a copy of this publication.

Apart from these permitted uses, you must not modify, copy, reproduce, republish, frame, upload to a third party, store in a retrieval system, post, transmit or distribute this content in any way or any form or by any means without express written authority from NATA.



## Testing of paper and related products

This document provides interpretative criteria and recommendations for the application of ISO/IEC 17025 for both applicant and accredited facilities conducting testing of paper and related products.

Applicant and accredited facilities must also comply with ISO/IEC 17025 and the NATA ISO/IEC 17025 Standard Application Document (SAD).

The clause numbers in this document follow those of ISO/IEC 17025 but since not all clauses require interpretation the numbering may not be consecutive.

### 5.5.2 Common equipment performance checks

Facilities are responsible for establishing their own equipment assurance program. This is to ensure that all equipment used satisfies the need to produce consistent and reliable and where appropriate traceable results. In doing so facilities must ensure that where methods writing bodies have included equipment calibration and checking intervals in standard methods that these intervals must be followed if the methods are covered by the accreditation. Facilities should refer to the guidance documents available for equipment (NATA's *General Equipment Table*) for further information on calibrations and checks on equipment.

The following supplementary information pertains to equipment items having specific application to pulp and paper testing and may not be directly described within NATA's *General Equipment Table*.

Item of equipment	Calibration interval (years)	Checking interval (months)	Procedures and references
<b>Autotitrator</b>		12	Volume delivered.
<b>Bending resistance</b>	2		Load cell calibration.
	2		Check value.
	2		Bending angle.
	2		Bending speed.
	2		Bending length. AS/NZS 1301.453
<b>Bendtsen porosity roughness tester</b>	5,000 to 10,000 tests		Roughness head. Manostat weights. Roughness jig. AS/NZS 1301.439 and 440
<b>Burst tester</b>	1		Pressure transducer calibration.
	2		Pumping rate.
		3	Diaphragm height test AS/NZS 1301.403

Item of equipment	Calibration interval (years)	Checking interval (months)	Procedures and references
		6	Check at zero and one point against a gauge block or length bar and record results. Inspect anvils. If the gauge block or length bar is not externally calibrated check it immediately after callipers are calibrated and use for the six-monthly check.
<b>Centrifuge</b>	2		Rotational frequency.
<b>Die cutter</b>	2		Paper dimension checks.
		6	Visual check for wear
<b>Freeness tester</b>	2		Bottom orifice flow rate. Screen plate calibration. AS/NZS 1301.206
<b>Guillotine</b>		12	Tensile paper width
		12	Tear paper dimensions. AS/NZS 1301.448 and AS/NZS 1301.400
<b>Hand sheet press</b>			
	2		Pressure gauge. AS/NZS 1301.214
		12	1st press time to pressure.
		12	1st press time at pressure.
		12	2nd press time to pressure.
		12	2nd press time at pressure. AS/NZS 1301.203
<b>Hot plate</b>		5 years	Surface temperature.
<b>Kajaani fibre analyser</b>		3	Rayon check.
<b>Laboratory blotter</b>		Each batch	Klemm absorbency. Water uptake. Grammage. Thickness. Dimensional stability. AS/NZS 1301.214
<b>PFI mill</b>	2		Rotational frequency.
			Peripheral speed. AS/NZS 1301.209
<b>Porosimeter</b>	2		
		Each use	Check value. AS/NZS 1301.447
<b>Pulp disintegrator</b>			
		12	Rotational frequency – against counter.
		24	Rotational frequency – against tachometer.
		12	Blade pitch. AS/NZS 1301.214
<b>Pulping digester</b>		1	Temperature probe check.
		6	Temperature calibration.

Item of equipment	Calibration interval (years)	Checking interval (months)	Procedures and references
<b>Purified water system</b>		1	Conductivity.
<b>Roughness tester</b>			
	2		Primary (air flow) calibration.
		Each use	Check value. AS 1301.441.
<b>Sheet machines</b>			
		12	Drainage time.
		12	Agitation time.
		12	Dwell time.
		12	Air couching time.
		12	Air couching pressure.
		24	AS 1301.203
<b>Spectrophotometer</b>			
		3	Paper tabs.
		Each use	Black cup.
<b>Stock divider</b>			
		24	Volume check.
		24	Grammage check.
<b>Tear tester</b>			
	2		Load cell calibration.
	2		Pendulum friction.
		12	Length of tear. AS/NZS 1301.400
<b>Wood chip screens</b>		12	Timer check, Vibration angle (where applicable), Screen aperture sizes.

### 5.10.1 Reporting the results

#### Packaging items

Where wet or saturated items have been received for testing the facility shall pre-condition by drying to stable mass before conditioning as per the standard. The condition in which the items were received shall be reported.

Where replacement fill materials are used these shall be reported in full – dimensions, density, etc. Reports must also identify the printing upon fibreboard materials under test.

## 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/NZS 1301.203s *Methods of test for pulp and paper - Forming handsheets for physical testing of pulp*
- AS/NZS 1301.206s *Methods of test for pulp and paper - Freeness of pulp*
- AS/NZS 1301.209s *Methods of test for pulp and paper (metric units) - Laboratory processing of pulp - PFI mill method*
- AS/NZS 1301.214s *Methods of test for pulp and paper - Equipment for preparation of handsheets*
- AS/NZS 1301.400s *Methods of test for pulp and paper - Tearing resistance of paper*
- AS/NZS 1301.403s *Methods of test for pulp and paper - Bursting strength of paper*
- AS/NZS 1301.426s *Methods of test for pulp and paper - Determination of thickness and apparent bulk density or apparent sheet density*
- AS 1301.439s *Methods of test for pulp and paper - Bendtsen roughness of paper and paperboard*
- AS 1301.440s *Methods of test for pulp and paper - Bendtsen air permeance of paper and board*
- AS/NZS 1301.441s *Methods of test for pulp and paper - Sheffield roughness of paper and board*
- AS/NZS 1301.447s *Methods of test for pulp and paper - Sheffield air permeance of paper and board*
- AS 1301.448s *Methods of test for pulp and paper - Tensile strength of paper and paperboard (Constant rate of elongation method)*
- AS/NZS 1301.453s *Methods of test for pulp and paper - Bending resistance of paper and board - Constant rate of deflection*

## **Amendment Table**

The table below provides a summary of changes made to the document with this issue.

<b>Section or Clause</b>	<b>Amendment</b>
New Document	This document represents a direct adoption of the former Mechanical Testing Annex D – Pulp/paper testing and related packaging products. The technical content is unchanged. The document has been reviewed and updated to reflect the new accreditation criteria documentation structure.