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Calibration Specification for Bursting Strength Testers for Paper(Board)

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(English Translation)

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Appendix C. Evaluation Examples of Measurement Uncertainty of Pressure Indication Error

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of Paper (Board) Burst Tester (7)

Appendix D Example of Uncertainty Evaluation of the Error in the Value of the Clamping Pressure Indicator (10)

Introduction

This specification is based on JJF 1001-2011 "General Measurement Terms and Definitions", JJF 1059.1-2012 "Measurement Basic Evaluation Regulations and Evaluation" and JJF 1071-2010 "Rules for Compiling National Measurement and Calibration Specifications" Fan to develop.

This specification mainly refers to GB/T 454-2002 "Determination of paper bursting strength", GB/T 1539-2007 "Cardboard "Determination of bursting strength" and QB/T 1057-2004 "Paper and cardboard bursting strength tester" compiled.

This specification is the first release.

Calibration Specification for Paper (Board) Burst Tester

1 Scope

This specification is applicable to the calibration of paper burst tester, cardboard burst tester (hereinafter referred to as burst tester), other low strength the calibration of the burst tester for sheet materials can be performed by reference.

2 Reference documents this specification refers to the following documents.

JJG52-2013 elastic element type general pressure gauge, pressure vacuum gauge and vacuum gauge JJG875 digital pressure gauge GB/T 454-2002 Determination of bursting strength of paper GB/T 1539-2007 Determination of bursting strength of cardboard GB/T 4687-2007 paper, cardboard, pulp and related terms QB/T 1057-2004 Paper and Cardboard Bursting Tester for dated reference documents, only the dated version applies to this specification; for those without date references the latest version (including all amendments) is applicable to this specification.

3 Terms and units of measurement

3.1 Terminology

3.1.1 bursting strength Under the pressure of the hydraulic system, the maximum pressure when the elastic film pushes against the circular area of the paper or cardboard sample.

[GB/T 4687-2007,4.24]

3.1.2 Bursting strength tester Instrument for measuring bursting strength of paper, cardboard and other low-strength sheet materials.

3.1.3 clamping system clamping system the clamping system of the rupture tester is

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composed of a clamping pressure indicator, an upper chuck, a lower chuck, and a pneumatic circuit.

Hold the sample evenly.

3.2 Unit of measurement the legal unit of measurement used by the burst tester is Pa (Pascal), or its decimal multiple unit. kPa, MPa, etc.

unit of measurement.

4 Overview

The burst resistance instrument is composed of a pressure measurement system, a clamping system, a hydraulic system, etc., which is tested for the burst resistance of paper and cardboard Special measuring instruments.

According to Pascal's law, the instrument is filled with silicone oil (or its (Other media) as the medium for pressure transmission, when the hydraulic system is pressurized, the adhesive film is raised by the pressure of silicone oil, which is raised and clamped.

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