



**PHARMA DEVILS**  
QUALITY CONTROL DEPARTMENT

**USER REQUIREMENT SPECIFICATION**

**Name of Item:** Bursting Strength Tester

**Protocol No.:**.....

**Functional Area:** Quality Control

**Page No.:** 1 of 7

**Name of Equipment:** Bursting Strength Tester

**Document Reference Number:** .....

**Effective Date:** .....



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**1.0 Approval:**

Signing of this approval page of URS indicates agreement in this document. Should Modifications to the user Requirements Specification approach become necessary, an addendum will be prepared and approved.

<b>Prepared by</b>	<b>Signature</b>	<b>Date</b>
<b>Checked By</b>	<b>Signature</b>	<b>Date</b>
<b>Reviewed By</b>	<b>Signature</b>	<b>Date</b>
<b>Approved By</b>	<b>Signature</b>	<b>Date</b>



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**2.0 Table of Contents:**

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**3.0 INTRODUCTION:**

This document is generated for the purpose of specifying the user requirements for a bursting strength tester.

The URS shall be recognized as the integral part of the procurement agreement with the selected equipment vendor. The equipment supplier or vendor shall abide by the information and condition set forth by this document as well as purchasing and delivery terms and conditions of Client.

The Bursting Strength tester is used to check the strength and performance of materials like paper, paperboards, corrugated boards and boxes, solid fiberboards, filter cloth.

**4.0 OVERVIEW DEFINITION:**

**4.1 The Bursting strength tester shall have the following features:**

- 4.1.1. The bursting strength tester shall be auto testing type interfaced with sensors which stop the machine after bursting.
- 4.1.2. Instrument shall have updated operating knob for operation
- 4.1.3. The bursting strength shall be designed for auto stop after each bursting.
- 4.1.4. The bursting strength tester shall be interfaced with two Pressure gauges of 0-7 & 0-35 hgs/cm<sup>2</sup>.
- 4.1.5. The bursting strength tester shall be provided with the light indicator.
- 4.1.6. The bursting strength tester shall be fitted on moulded rubber diaphragm having dual pressure gauge. Individual valve is provided for each pressure gauge.
- 4.1.7. Pressure gauge should be panel mounted and fully protected.
- 4.1.8. The bursting strength tester shall be provided with reading display screen to facilitate easier.
- 4.1.9. Bursting strength tester is capable of testing low burst value materials like paper as well as higher burst values material like Paperboard, Corrugated Board Fabric Cloth. (Range: 0 to 7/10 & 35 /70 Kg/cm<sup>2</sup> )
- 4.1.10. Bursting Strength tester should compile the standards mentioned in IS, FCBM, ASTM, FEFCO, TAPPI Standards.

**4.2 The bursting strength shall be used primarily for:**

Testing of bursting strength of the different packaging material



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**4.3 Technical Specifications:**

**4.3.1 Capacity** : 0 – 35 kg/cm<sup>2</sup>

**4.3.1 Least count** : Capacity Least count  
0 – 7 kg/cm<sup>2</sup> 0.1 kg/cm<sup>2</sup>  
0 – 35 kg/cm<sup>2</sup> 0.5 kg/cm<sup>2</sup>

**4.4 The machine is to be used at the following environmental conditions:**

**4.4.1 Room Temperature** : 24± 2 °C

**4.4.2 Relative Humidity** : NMT 55 %

**4.5 Base Utilities Available:**

**Electrical** : **Single Phase, 230V ±10 % 50 HZ**

**5.0 OPERATIONAL REQUIREMENTS**

**5.1 OPERATION:**

The Bursting Strength tester shall operate with a minimum of operator involvement. Operation shall be safe both from an operator and environmental standpoint.

**5.2 POWER FAILURE/RECOVERY:**

In the event of a power failure, the system will stop automatically and will require operator intervention to re-start.

**5.3 SAFETY FEATURE:**

The system shall be stop safely in emergency.

**5.4 ALARMS AND WARNINGS:**

The busting strength tester should have alarm if any parameter goes up and down from the capacity of the instruments.



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**6.0 SALIENT FEATURES:**

**6.1 COMPATIBILITY AND SUPPORT:**

**ELECTRIC CONTROL:**

Bursting strength tester should consist of electrical on / off switch for operation.

**UTILITIES:**

The Supplier shall specify utility requirement. The User shall ensure that the utilities are available.

**6.2 MATERIAL OF CONSTRUCTION:**

**Base frame:** SS 304

**7.0 MAINTENANCE**

Do's and Don'ts to be provided

- 7.1 Preventive maintenance system and checks to be provided (Maintenance and operation manuals of vendor equipment)
- 7.2 A comprehensive lubrication list and recommended lubrication schedule
- 7.3 A comprehensive recommended maintenance (regular recommended inspection intervals, wear points, recommended spare parts list)
- 7.4 Supplier shall supply 2 Copies of Operation, Installation, and Maintenance manuals., DQ, Electrical drawing

**8.0 DELIVERY**

The Karl Fischer apparatus with all options, equipment, and the documentation listed below, shall be delivered to the Client Site.

Delivered should be confirmation of the purchase order

**9.0 DOCUMENTATION**

- 9.1 The Supplier shall provide the documentation for preliminary review. The Supplier shall provide documentation reflecting "as-built" condition with final delivery.
- 9.2 All final documents shall be shipped with transmittals that identify them as contractually required documents. All final documents and drawings shall reflect "As-Built" condition.



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9.3 All documents shall be in English language and supplied with hard copies and supplied in the format identified for each document:

9.4 Design qualification

9.5 Installation Qualification

9.6 Operational Qualification

9.7 Maintenance and service manuals

9.8 Instrument listing

9.9 Material of construction