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QUALITY ENGINEERING
LABORATORY BÖBLINGEN

Title: BURSTING STRENGTH

1.0 INTRODUCTION

1.1 SCOPE

1.1.1 This document establishes the method for determining Bursting Strength of card stock and paper.

1.2 REFERENCES

1.2.1 Standards

TAPPI T402-OS-49 Conditioning Paper and Paperboard
for Testing

TAPPI T403 Bursting Strength of Paper

1.3 AUTHORIZATION

1.3.1 This document is authorized by the Manager of Quality Assurance Consumables.

1.4 TEST EQUIPMENT/MATERIAL

1.4.1 Mullen Tester, Model "C", manufactured by B. F. Perkins and Sons, Inc., Holyoke, Massachusetts. (Figure 1)

1.5 CALIBRATION

1.5.1 Reference the manufacturer's procedure for calibration instructions.

2.0 PROCEDURE

2.1 SAMPLE PREPARATION

2.1.1 The test sample shall consist of a minimum of five (5) standard DP cards, or five sheets of paper containing at least 100 square inches.

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- 2.1.2 Environment for conditioning and testing specimen(s) shall be in accordance with TAPPI T402-OS-49.

3.0 TEST INSTRUCTIONS

NOTE: Refer to applicable specification for limits or range requirements.

- 3.1 Clamp the specimen securely into position.
- 3.2 Zero the pressure gauge dial indicator.
- 3.3 Apply hydrostatic pressure by means of the operating lever until the specimen ruptures.
- 3.4 As soon as the specimen ruptures, release the hydrostatic pressure by means of the pressure release lever.
- 3.5 Record the pressure reading in pounds per square inch registered on the dial indicator.
- 3.6 Return the dial indicator to zero.
- 3.7 Perform at least ten tests. Preferably no more than two POPS per specimen.
- 3.8 Apply an equal number of tests to the felt and wire sides of a card.
- 3.9 To insure equal distribution of tests, the specimen should be tested first with wire side up and a second pop should then be made with the specimen wire side down.
- 3.10 During test, observe for movement of the unclamped portion of the specimen. If slippage is indicated by such movement, discard the test and increase the clamp pressure by means of the clamp spring adjusting screw.
- 3.11 No tests shall be made on areas containing creases, imperfections, or any visible damage.

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4.0 REPORTING

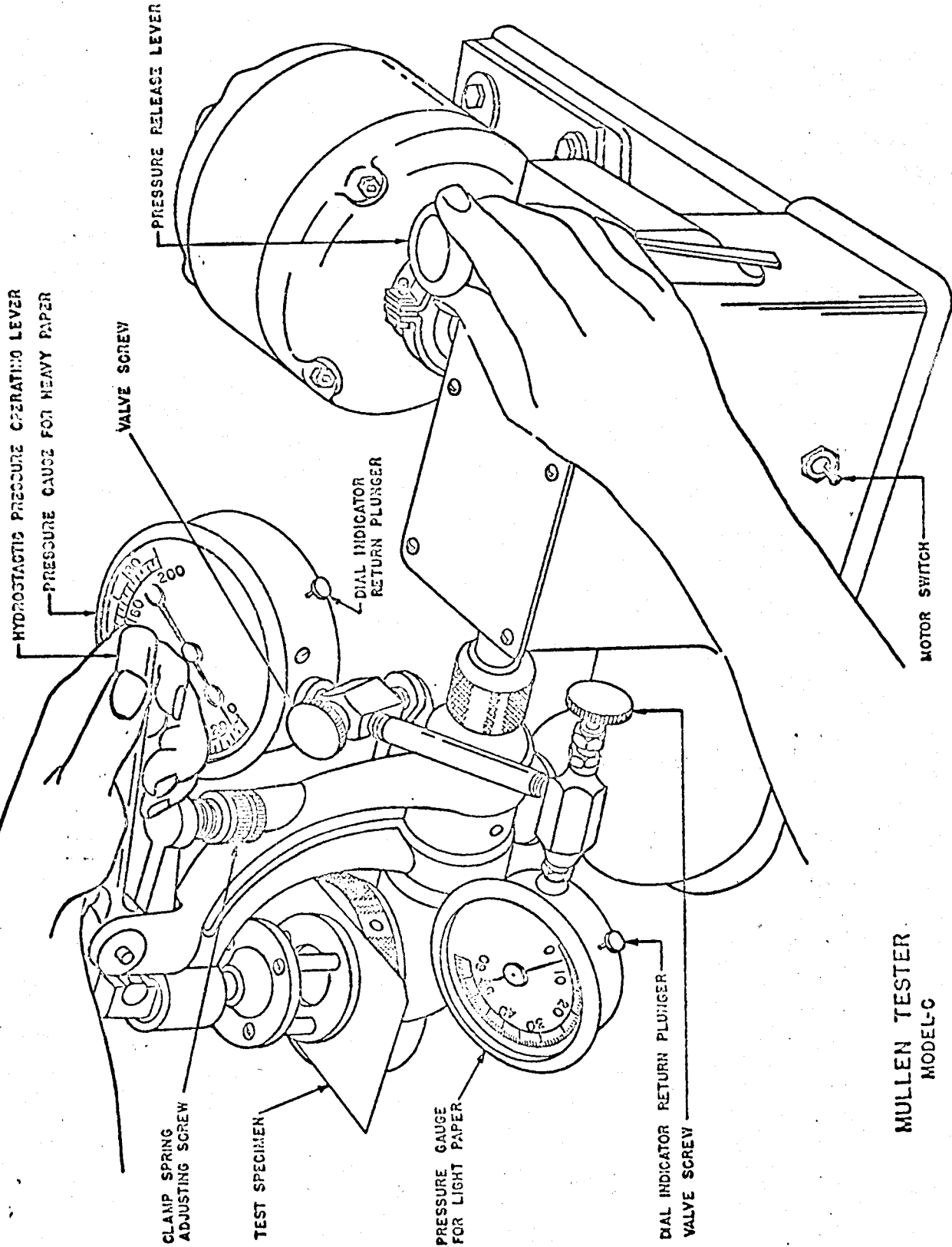
- 4.1 The bursting strength of a sample is the average of at least ten individual tests or pops. Bursting strength shall be reported in points (approximate pounds per square inch hydrostatic pressure) to the nearest point.



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MULLEN TESTER
MODEL-C

FIGURE 1