AIR PERMEABILITY/POROSITY TESTER “Gurley” (4110+4320)

For determination of the air permeance of Paper and Board according to Gurley Method

   NF Q 03-078 - SCAN P-19 - SCAN P-53

- Original Gurley instrument
- Porosity Tester with electronic timer module
- Easy to use
- Instrument of high accuracy
- Includes a 20 oz. cylinder and 1.0 square inch orifice lower clamp plate and upper adapter.
- Compatible with the Integral Tests Management System LYNX (versions Plus or Pro)

OPTIONAL: Software LYNX

Through PC and LYNX Software + Testing Module the test results directly and without human errors are captured, then you can make statistical calculations ...
INTRODUCTION

Densometers are the accepted standard for measuring the porosity, air-permeability or air-resistance of sheet-like materials such as papers, wovens, plastics and membranes. All Densometers measure the time required for a given volume of air (25cc to 400cc) to flow through a standard area of material being tested under light uniform pressure. Certain models such as the S-P-S Tester are also used to measure surface smoothness and material softness. Manual and automatic units available. Conform to TAPPI T-460, ASTM D-726-58 & D-202-77, APPITA/AS 1301-420, BS 5926, CPPA D-14, ISO 5636/5, SCAN P-19 & P-53.

SPECIFICATION

The Densometer test measures the time required for a given volume of air (25cc to 300cc) to flow through a standard area of material tested, under light uniform pressure. The air pressure is supplied by an inner cylinder of specific diameter and standardized weight, floating freely within an outer cylinder partly filled with oil to act as an air-seal. The sample material is held between clamping plates having a circular orifice area of 1.0 (standard), 0.25 or 0.1 square inch (optional).

Densometer readings may be evaluated on both a direct or indirect basis dependent upon the material and test purpose. They are a direct test of materials which are intended to either resist or permit the passage of air. Indirectly, they are used to measure other physical properties which affect the flow of air through a porous sheet.

APPLICATIONS INCLUDE:

- In manufacturing and printing, to control the selection of materials affording the appropriate degree of liquid (ink, varnish, sizing) absorption.
- To test filters, porous bags & materials where controlled porosity is essential.
- To test insulating materials for air resistance.
- To supplement other physical tests enabling regulation or strength of manufacturing process to give the desired formation, appearance or strength since there is a close correlation in a given material between air permeability and these other properties.

The Digital timer Model 4320 not only increases the accuracy and productivity of these instruments, but provides recording and computing capabilities that will absolutely minimize the possibility of operator error. Both RS-232 and Centronics output to a variety of devices, including most printers and PC’s.

NOTE: Equipped with Digital Module 4320 to control with great accuracy the time in seconds the passage of air through the sample and also able to connect this Instrument to LYNX System (Integrated Management of Laboratory Computerized).

* The Software LYNX is a development of TECHLAB SYSTEMS S.L.

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**CONNECTIONS:**

- **Electrical:** 110V/60Hz or 230V/50Hz Single-phase

**DIMENSIONS AND WEIGHT:**

- **Dimensions:** 400 x 250 x 430 mm (M x D x H)
- **Box for transport:** 620 x 410 x 710 mm (M x D x H)
- **Weight Net/Gross:** 10 Kg / 13 Kg

**DELIVERY CONTENT:**

- Air Permeability Tester 4110+4320 Model
- Digital timer Module 4320 Model
- Cylinder of 20 oz.