TLS

SMOOTHNESS AND POROSITY TESTER (GURLEY method) 4340 model

To quickly and accurately determine the Smoothness and Porosity of the air in paper and cardboard using the GURLEY method

TECHLABSYSTEMS

SMOOTHNESS AND POROSITY TESTER 4340 model

APPLICABLE STANDARDS

ISO 5636/5 - TAPPI T-460 - TAPPI T536 - ASTM D-726 - ASTM D-202 - APPITA/AS 1301-420 - BS 5926 - CPPA D-14 - SCAN P-19 - SCAN P-53.

GENERAL INFORMATION

This unit measures the air permeability and smoothness by the Gurley method of all types of laminated materials, mainly paper and cardboard.

The Model 4340 differs from the traditional manual densometers in several ways.

1/ The Model 4340 utilizes the latest mass flow and servo-regulator technology to provide a quick, accurate test that is oil-free.

2/ Second, pneumatic cylinders insure both a consistent clamping pressure as well as an automatic test feature; which allows the user to test a sample several times without constantly opening and closing the test area by hand.

3/ With the addition of an auto-drive mechanism, the user can program the number tests as well as the span they are tested over. Therefore, a sheet or strip of paper can be analyzed automatically, with output in either **Gurley** seconds, **Sheffield**, **Bendsten** or **Bekk** equivalent seconds.

By utilizing several state-of-the-art mass flowmeters, in addition to a servo-regulator, the Model 4340 can accurately test both low and high flow materials that have traditionally tested between 0 and 50.000 'Gurley Seconds'.

A typical test involves the Model 4340 automatically choosing the optimum test pressure (called 'AUTOSELECT') based on the amount of flow recorded on the corresponding flowmeter and then displaying the test time. At the end of each manual test, the user can toggle between either **Gurley** units, **Bendsten, Sheffield** or **Bekk** calculated equivalent units.

If an automatic test was chosen, the user can toggle between alternate equivalent units, after the mean and standard deviation has been calculated and displayed. If desired, the user can predetermine the units they want displayed (called 'USER-DEFINED').

- **Air permeability and smoothness tests in a single instrument**
- **Automatic and manual tests possible**
- **Reading in seconds**
- **RS-232 interface and printer connection**
- **Statistical analysis of results**

- **Automatic and Manual test modes**
- **Output units by calculation: BEKK, BENDTSEN, GURLEY and SHEFIELD**
- **Choice of various air volumes**
- **Programmable self-control mechanism**
- **Interchangeable orifices (1.0 in² standard, 0.25 & 0.1 in² optional)**
- **Ease of reading, self-control display**
- **Calculations of means and standard deviations automatically**
- **Standard built-in outputs: RS-232 and Centronics**
- **Does not require Oil**
- **Consistent pneumatic sample holder closure**
- **Compatible with LYNX Software**

OPTIONS

- **Air Compressor** with Filter / Pressure Regulator / Combo Dryer
- Alphanumeric roll **printer**
- Interchangeable air passage **holes** (1.0, 0.25 & 0.1 in²)

POWER SUPPLY: 110V/60 Hz or 220/50 Hz single-phase
REQUIRED AIR SUPPLY: Al menos 4.5 bar (40 PSI)
TESTER DIMENSIONS: 240 x 400 x 320 mm (W x D X H)
NET WEIGHT: 14 Kg
TRANSPORT PACKAGING DIMENSIONS: 680 x 720 x 550 mm (An. x Fondo x Al.)
GROSS WEIGHT APPROX.: 25 Kg

CONTENT OF THE STANDARD SUPPLY:

* Gurley Air Porosity and Smoothness Meter model 4340 (with 1 in² orifice)