

## *Automated Burst*

*The Technidyne PROFILE/Plus Burst automatically measures top or bottom side Burst.*

- + Bolt on diaphragm mounting
- + Silicon oil
- + Adjusted Burst
- + Continuous Monitoring Technique
- + Paper version has an improved diaphragm design
- + Selectable clamping pressure
- + PROFILE/Plus Automated Testing System Ready



## Features

### **Bolt on Diaphragm Mounting**

The Bolt-on Diaphragm Mounting technique of the PROFILE/Plus Burst eliminates the diaphragm from twisting during installation. Once the diaphragm is in place, the upper plate is secured to the lower device. This secure lock-down eliminates the potential of the diaphragm loosening during use, which can occur with screw-on type mounting brackets.

### **Silicon Oil**

The silicon oil utilized in the PROFILE/Plus Burst has a longer lifespan than other hydraulic fluids and does not break down and leave deposits or gumming in the instrument. In addition, the silicon oil's viscosity is such that air bubbles that get into the fluid quickly rise to the surface, where they can be removed.

### **Adjusted Burst**

Each diaphragm has its own unique expansion characteristic that changes with the age and usage of the diaphragm. To eliminate this variable from the bursting strength measurement, the PROFILE/Plus Burst offers the Adjusted Burst capability. The expansion characteristics of the diaphragm can account for a large portion of the bursting strength in low bursting strength samples. Taking this in to account can provide a more accurate burst assessment.

### **Continuous Monitoring Technique**

Accurately capturing the point of rupture requires continuous monitoring of the measurement cycle. To accomplish this, the PROFILE/Plus Burst incorporates innovative technology that provides maximum instrument resolution. As fibers begin to break in the sample, a premature point of rupture can occur. The PROFILE/Plus Burst is able to move beyond this first point and determine the true point of rupture, by using this continuous monitoring technique.

### **Improved Diaphragm Design**

The diaphragms used in the paper version of the PROFILE/Plus Burst instrument are made with a transparent polymer. This allows for easy determination of any entrapped air, as the diaphragm is located at the zenith of the diaphragm mechanism. Any entrapped air will rise to the highest point and will be easily seen and then eliminated from the hydraulic chamber.

### **Selectable Clamping Pressure**

If the sample to be tested is not properly clamped there is a high potential of introducing inaccuracies into the data. To ensure proper clamping of the sample the PROFILE/Plus Burst provides the capability of adjusting the sample clamping pressure. Establishing proper clamping pressures for grade differences is important for achieving maximum repeatability and reproducibility in your quality program.

## Economic Benefits – Lowering Costs and Saving Money

**Bolt on diaphragm mounting** ensures the proper installation of this critical element, thereby keeping service costs low.

**Silicon oil** prevents measurement system gumming, providing greater instrument uptime and reduced service costs.

**Adjusted Burst** helps to ensure that data will always be reliable, thereby avoiding costly retests and improving lab efficiency.

**Continuous Monitoring Technique** provides the most reliable method for accurate and repeatable burst measurements, resulting in the establishment of tighter control limits.

**Improved diaphragm design** simplifies routine maintenance and to avoid costly retests and helps to optimize test efficiency

**Selectable clamping pressure** ensures stable testing conditions, thereby reducing variability and increasing testing efficiency.

## PROFILE/Plus Automated Test System

PROFILE/Plus is a unique building block approach to automated testing. Each PROFILE/Plus instrument is a standalone instrument that can be easily placed in line with other PROFILE/Plus instruments to operate as an automated test system. This one of



a kind versatility allows you the flexibility to build an automated test system that can be established over time or all at once. In addition as your testing needs change, the versatility of the PROFILE/Plus provides the flexibility to modify the testing sequence or move other test in to or out of the system. PROFILE/Plus puts you in charge of your automated testing program. In today's ever changing markets, having a testing program that can adapt, is key to long term viability.

## Specifications and Technical Data

- + CD or MD profile strips
- + Single sheet samples (automatically)
  - o A3, A4, and 8½" x 11"
- + Handsheets
- + Thickness Range – 25 to 1000 µm
- + Grammage Range - 15 to 600 g/m<sup>2</sup>
- + Paper Version
  - o 3.6 - 290 psi (25 - 2000 kPa)
- + Board Version
  - o 20 - 798 psi (50 - 5500 kPa)
- + Weight –
  - o 98 lb
  - o 45 kg
- + Dimensions –
  - o Height = 26" (66 cm)
  - o Depth = 18" (46 cm)
  - o Width = 10 ½" (26.7cm)
- + Voltage/Frequency -
  - o 100-130 VAC/49-61 Hz
  - o 210-250 VAC/49-61 Hz
- + Air -
  - o 30 - 40 psi
  - o 205 - 275 Kpa

The Technidyne *PROFILE/Plus Burst* measures the burst for either paper (TAPPI T403, ISO 2758, PAPTAC D.8) or board (TAPPI T807, ISO 2759, PAPTAC D.19).



### Results:

**Measurement completed in seconds!**

**Bursting Strength**

**Burst Index**

**Adjusted Burst**

**Adjusted Burst Index**

**User Burst**

**User Burst Index**

**Multiple measurement, averaging, statistics and trending capabilities**

**Average, Maximum Test Value, Minimum Test Value and Standard Deviation**

**Tabular and Graphical display of results**