

Gelbo Flex Tester model GFT392

Flex durability tester for Flexible Barrier Materials
Complies with ASTM test method F392



Introduction:

This instrument has been designed to determine the flex resistance of the flexible barrier materials by applying repetitive strain. Pinholes formations are the criteria for measuring failure and are determined by use of colored turpentine and allowing it to stain through the pinholes onto a white backing.

Specimens of flexible materials are flexed at standard atmospheric condition (23°C / 73°F and 50% relative humidity). The flexing action consists of a twisting motion combined with a horizontal motion, thus, repeatedly twisting and crushing the film. The frequency is at a rate of 45 cycles per minute.

There are 5 test conditions to choose from. One may choose a test cycle that simulates real conditions from partial flex and 20 cycles to full flex for 2700 cycles.

Condition A - Full flex for 1 hour (2,700 cycles)

Condition B - Full flex for 20 minutes (900 cycles)

Condition C - Full flex for 6 minutes (270 cycles)

Condition D - Full flex for 20 cycles

Condition E - Partial flex only for 20 cycles

An additional **operator defined cycle** has been added – maximum number of cycles is 10,000.

Specifications: CE

- Shows a visual result of pin holing and delamination
- Maxim stroke (distance traveled by moveable mandrel): 6" (155 mm)
- Twist: 440° on long stroke (6" or 155 mm) and 400° on short stroke (3.25" or 80 mm)
- Totalizing counter for cycles
- Frequency rate: 45 cycles per minute
- Stainless steel and anodized aluminum construction

- Stainless steel cutting template 8"x11"(280 x 200 mm)
- High level of safety – safety interlock, safety guard, emergency stop
- User selectable test condition switch
- Dimensions: 40"Lx12"Wx12"H (1015x305x305 mm)
- Instrument weight: 100 pounds (46 kg)
- Required utilities 220 VAC @ 50Hz

Applications:

- Flexible plastic films
- Coextruded structures
- Coated films and paper