

No. 2348

Heat seal tester

Heat seal tests on plastic films and laminated materials determine the strength and other characteristics of a specimen's heat-sealed section. For that purpose, heat-sealed specimens must be fabricated first. This tester provides flexible setting of the heat seal conditions, including the heating bar temperature, pressure and pressurizing time, helping fabricate specimens easily in a laboratory.

- Heat plate size:** 15 mm wide, 200 mm long
- Temperature:** max. 200 °C
- Compression pressure:** 0.5 MPa
- Compression:** pneumatic
- Compression time:** 0.2 sec. to 10 min., selectable
- Upper heating bar:** heater 300 W, temperature sensor inserted
- Lower heating bar:** with built-in impulse heater
- Power source:** 100/110 VAC 50/60 Hz 7 A
- Air source:** 0.5 MPa
- Outer dimensions:** 850×500×500 mm
- Instrument weight:** 90 kg



No. 2348

No. 2375

Seal press tester

When evaluating workability, including embossing fitness, of paper for crepe paper, towel paper, etc., conventional press-based equipment has drawbacks in that pressure or temperature cannot be set meticulously. With this tester, embossing fitness of specimens can be evaluated against the seal strength needed for paper towel's wrap-around seal section, for example, or for coffee filter's sealed section on the edges. Also, this tester enables to identify the required strength by applying different pressure, temperature and humidity settings and checking the behavior of the sealed sections. To serve the above purpose, the tester incorporates a pressurizing bar with a set of concave and convex-shaped teeth members and a large-sized air cylinder to press the bar down on the specimen. It can operate with a pressure up to 6300 kg and a heating temperature up to 150 °C. In addition, a safety mechanism is employed to allow pressurizing operation to take place only when the operator uses both hands to press the start switch.

- Specimen:** standard crepe paper 55 to 65 g/m²
- Clamping area:** 5 mm wide, 25 mm long
- Total clamping pressure:** 6300 kgf, pneumatic, steplessly variable
- Service air pressure:** 0.8 to 0.9 MPa in maximum pressurization
- Tooth geometry:** pitch 1.85 mm, inclination 10°, tooth geometry for non-standard specimens will be determined on the basis of experiments
- Interval between upper and lower teeth:** max. 5 mm
- Clamping time:** set by timer 0.5 to 100 h (selectable as desired)
- Heating:** cartridge heater with tooth plate inserted, upper and lower heater 250 W each
- Temperature:** max. 150 °C
- Temperature control:** PID and manual regulator
- Power source:** 100/110 VAC 50/60 Hz 7 A
- Air source:** 0.7 MPa
- Outer dimensions:** 810×565×840 mm
- Instrument weight:** 205 kg



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