



DISK PEEL TESTER

Disk Peel Tester - ToronDPT™ 100

Ink Adhesion and Peel Strength Tester for Printed Films

The ToronDPT™ 100 is an ink adhesion tester that measures the ink binding fastness of printed, laminated, and coated films by the disk peel method. A disk presses a strip of adhesive tape onto the printed surface at a set load, and the tape is then peeled away, so the amount of ink that transfers shows how well the ink is bonded. It suits gravure-printed and composite print structures.

The ToronDPT™ 100 applies the tape at a 100 N load and peels it at 0.8 m/s, so the application pressure and peel speed stay consistent between tests. The controlled conditions make results comparable across prints and batches. The compact benchtop unit runs on a standard single-phase supply.

Beyond printed inks, the ToronDPT™ 100 checks the adhesion of surface layers from vacuum coating, surface coating, and lamination. The ToronDPT™ 100 (Ink Adhesion and Peel Strength Tester for Printed Films) suits printing, packaging, and converting labs that verify ink and coating adhesion before a run ships.

APPLICATIONS

Disk Peel Tester - ToronDPT™ 100 Applications

The ToronDPT™ 100 measures how well printed inks and coatings stay bonded across print and packaging production.

- **Gravure-Printed Films:** tests the ink binding fastness of intaglio (gravure) printed plastic films.
- **Composite and Laminated Prints:** checks ink adhesion on composite and laminated printed structures.
- **Cellophane and Specialty Prints:** measures ink adhesion on cellophane and specialty printed materials.

- **Vacuum-Coated Surfaces:** tests the adhesion of vacuum-coated and metallized surface layers.
- **Surface Coatings and Varnishes:** checks the adhesion of surface coatings and overprint varnishes.
- **Lidding and Flexible Packaging Films:** verifies ink and coating adhesion on packaging films.
- **Print Adhesion QC:** confirms that printed inks stay bonded through handling and use.
- **Incoming and In-Process QC:** verifies ink and coating adhesion against specification.



Standards

The ToronDPT™ 100 is designed to align with internationally recognized standards for pressure-sensitive tape adhesion testing.

- JIS Z0237 - Testing Methods of Pressure-Sensitive Adhesive Tapes and Sheets
- JIS C2107 - Testing Methods of Pressure-Sensitive Adhesive Tapes and Sheets for Electrical Purposes

FEATURES

Disk Peel Tester - ToronDPT™ 100 Key Features

The ToronDPT™ 100 uses a controlled-load disk and set peel speed for repeatable ink adhesion testing.

- **Disk Peel Method:** presses tape onto the print with a disk, then peels it to reveal ink transfer.
- **Ink Binding Fastness:** measures how well printed inks stay bonded to the film.
- **Controlled Application Load:** a 100 N load presses the tape onto the print for firm, repeatable contact.
- **Set Peel Speed:** a 0.8 m/s peel speed keeps the test consistent between runs.
- **Printed and Coated Films:** tests gravure prints, composite and laminated prints, and coated surfaces.
- **Vacuum and Surface Coatings:** checks the adhesion of vacuum-coated and surface-coated layers.
- **Comparable Results:** controlled load and speed make results comparable across prints and batches.
- **Compact Benchtop Design:** a light, compact frame runs on a standard single-phase supply.

THEORY & METHOD

Theory and Method

Printed inks and coatings have to stay bonded to the film they sit on. When the ink is poorly anchored, it lifts, flakes, or transfers, and the print fails. The disk peel method checks this bond by pressing a strip of adhesive tape onto the printed surface, then peeling it away and seeing how much ink comes off with it.

A disk presses the tape onto the print at a fixed load, so the tape makes firm, repeatable contact with the ink. The tape is then peeled back at a set speed. A well-bonded ink stays on the film and leaves the tape clean, while a poorly bonded ink lifts off and transfers to the tape.

The controlled application load and peel speed keep the test consistent, so results can be compared across prints and batches. The method suits gravure-printed films, laminated and composite print structures, and vacuum-coated or surface-coated layers. It gives a quick, practical check of ink binding fastness before printed film goes into production.

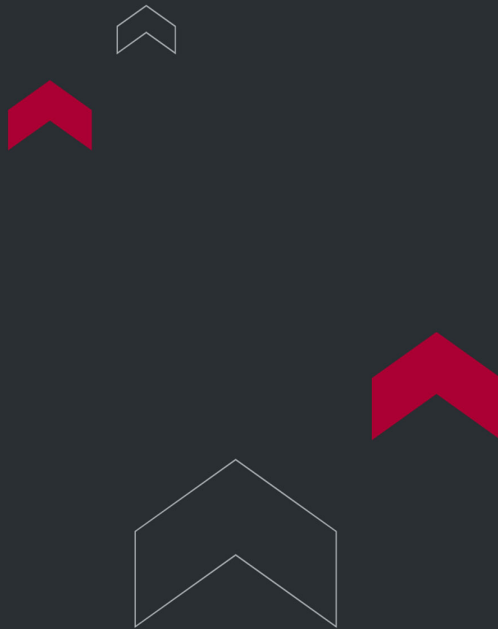
TECHNICAL SPECIFICATIONS

Disk Peel Tester - ToronDPT™ 100 Technical Specifications

Parameter	Specification
Application Load	100 N
Peeling Speed	0.8 m/s
Dimensions	345 mm (L) × 188 mm (W) × 235 mm (H)
Voltage	AC 220 V, 50 Hz (110V is also available)
Net Weight	23 kg

Standard Delivery

Item	Description
Main Unit	Disk peel ink-adhesion test instrument
Application Disk	Disk that presses the tape onto the printed surface



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