

MPK 740 Multi-Blade Cross-Cut Adhesion Tester Kit

The Multi-Blade Cross-Cut Adhesion Tester by **MapakPlus** is used to assess the adhesion of paint and other organic coatings using the cross-cut method. It creates a uniform grid pattern on the coated surface, which is then evaluated to determine coating adhesion.

The tester is suitable for laboratory, production, and on-site inspection. Interchangeable cutters with 1 mm, 2 mm, and 3 mm spacing allow testing under different conditions.

Multi-Blade Cross-Cut Adhesion Tester Kit



Testing Procedure

- Select the cutter spacing according to the coating thickness and substrate.
- Hold the handle perpendicular to the specimen and make a series of parallel cuts through the coating.
- Make a second series of cuts at right angles to form a grid.
- Apply tape and assess the coating's adhesion using the applicable test standard.

Note: The cuts should pass through the coating but should not penetrate too deeply into the substrate. If the coating cannot be cut properly, record this in the test report

Applications

- Adhesion testing of paint and organic coatings
- Evaluation of powder coatings and varnish films
- Inspection of coated components during production
- Quality control in paint and surface-treatment industries
- Laboratory and on-site coating evaluation



Kit Includes

- Cross-cut cutter with 1 mm, 2 mm, and 3 mm blades
- Brush
- Magnifier
- Tape roll
- Hexagonal screwdriver



Standards: ISO 2409:1992 · GB/T 9286-98 · BS 3900 E6 · ASTM D3359

Specifications

Parameter	Specification
Test Method	Manual cross-cut adhesion testing
Cutter spacing	1 mm, 2 mm, and 3 mm
Blade configuration	1 mm: 11 blades; 2 mm: 11 blades; 3 mm: 6 blades
Operation	Manual
Test result	Coating adhesion is assessed by examining the cross-cut grid
Suitable use	Laboratory, production, and on-site testing

Features and Functions

- Interchangeable cutters support different coating and substrate conditions.
- A replaceable blade is fitted by loosening the screw.
- The handle is designed for one-handed operation.
- The cross-cut grid provides a visual basis for assessing coating adhesion.
- The kit includes a cutter, brush, magnifier, tape roll, and hexagonal screwdriver.

Cross-Cut Rating Guide

ISO Class	ASTM Class	Result described in the supplied material
0	5B	Cut edges are smooth; no lattice peeling
1	4B	Minor peeling at cut intersections; up to 5%
2	3B	Peeling of approximately 5–15%
3	2B	Peeling of approximately 15–35%
4	1B	Peeling of approximately 35–65%
5	0B	Peeling exceeds the previous level