

CROSS CUT ADHESION TEST KIT CC2000

DATASHEET

PRODUCT DESCRIPTION

The TQC CC2000 Cross Cut Adhesion Test KIT is used to test the adhesion of dry coats of paint on their substrate by means of a series of cuts through the coating. Two series of parallel cuts cross angled to each other to obtain a pattern of 25 or 100 similar squares. The ruled area is evaluated by using a table chart after a short treatment with a stiff brush, or adhesive tape for hard substrates.

The cutting knife of the TQC Cross Cut Adhesion Test CC2000 is easy to exchange without the use of extra tools. The self positioning knife bracket of the TQC Cross Cut Adhesion Test CC2000 ensures equal pressure on the cutting knife.



BUSINESS

Coating/Paint Industry, Galvanise, Automotive, Laboratory, Painters, Shipping Industry, Steel Protection, Wood

STANDARDS

EN-ISO 2409, ASTM D3359

FEATURES

- Self-adjusting knife-holder ensures equal pressure on the cutting knife
- Ergonomically shaped handle
- Easy to change cutting knife, no extra key needed
- Wide range of knife sizes available for different coating thicknesses and substrates and according to different standards.

SCOPE OF SUPPLY KIT SP1666

- CC2000 grip (Excl. knife, this need to be ordered separately)
- Brush
- Illuminated loupe
- Roll of adhesive tape acc. EN-ISO 2409

SCOPE OF SUPPLY BASIC SP1665

- CC2000 grip (Excl. knife, this need to be ordered separately)

ORDERING INFORMATION

SP1666 - TQC Cross cut tester CC2000 Kit (excl. knife)
 SP1665 - TQC Cross cut tester CC2000 Basic (Holder excl. acc.)

SP1702 - Spare knife Teeth distance 1 mm acc. to ISO & ASTM
 SP1703 - Spare knife Teeth distance 2 mm acc. to ISO & ASTM
 SP1704 - Spare knife Teeth distance 3 mm acc. to ISO
 SP1705 - Spare knife Teeth distance: 1 mm acc. to ASTM
 SP1706 - Spare knife Teeth distance: 1,5 mm acc. to ASTM

Art-Nr.	SP1702		SP1703		SP1704	SP1705	SP1706	
Blades	6		6		6	11	11	
Teeth distance	1mm / 0,039 inch		2mm / 0,079 inch		3mm / 0,12 inch	1mm / 0,039 inch	1,5mm / 0,059 inch	
Acc. To	ISO 2409	ASTM D3359	ISO 2409	ASTM D3359	ISO2409	ASTM D3359 <2009	ASTM D3359 <2009	
Coating thickness on hard substrates	0-60µm / 0-2,4 mils	0-50µm / 0-2 mils	61-120µm / 2,4-4,8 mils	50-125µm / 2-4,9 mils	121-250µm / 4,8-9,8 mils	0-50µm / 0-2 mils	50-125µm / 2-4,9 mils	
Coating thickness on soft substrates	-		0-60µm / 0-2,4 mils					

ACCESSORIES

SP3007 - Adhesion tape, single roll, adhesion to steel 4.3 N/cm
 SP3010 - Adhesion tape, set of 3 rolls, adhesion to steel 4.3 N/cm
 SP3020 - Adhesion tape, single roll, adhesion to steel 7.6 N/cm
 SP1710 - Nylon Brush for Cross Cut Adhesion Test
 SP9700 - Lighted Magnifier 2.5x

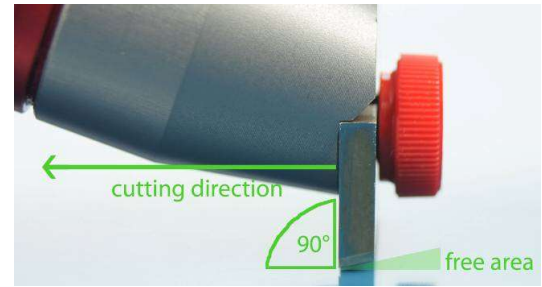
USE

Measuring method

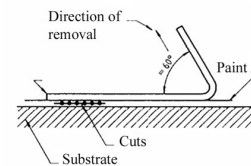
A right-angle lattice pattern is cut into the coating penetrating through to the substrate. The resistance of the coating to separation of the substrate is classified using the table.

Working method

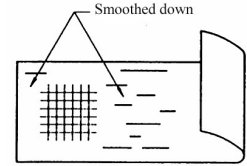
1. Make two cuts/scratch, perpendicular to each other, drawing the handle with the appropriate cutter (depending on coating thickness and substrate) through the coating into the substrate thus making the lattice pattern. The picture indicates the correct position of the cutter and cutting direction.
2. Brush the pattern lightly with the supplied brush several times back and forth along each of the diagonal lines of the lattice pattern.
3. For hard substrates only the test can be extended by applying the adhesive tape parallel to one set of cuts over the lattice pattern and pull it off steadily in 0.5 to 1 sec. at a 60° angle within 5 minutes after applying acc. to ISO. Acc. to ASTM within 90s ±30s at a 180° angle.
4. Carefully examine the cut area, if required using the magnifier and classify the test area according to the table

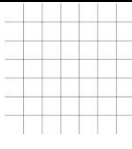
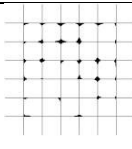
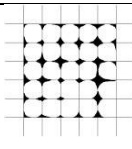
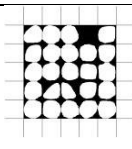


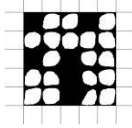
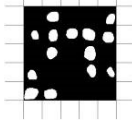
b) Position of tape immediately prior to removal from grid



a) Position of tape with respect to grid



Classification		Description	Appearance of surface of cross-cut area from which flaking has occurred (Example for six parallel cuts)
ISO	ASTM		
0	5B	The edges of the cuts are completely smooth; none of the squares of the lattice is detached.	
1	4B	Detachment of small flakes of the coating at the intersections of the cuts. A cross-cut area not significantly greater than 5% is affected.	
2	3B	The coating has flaked along the edges and/or at the intersections of the cuts. A cross-cut area significantly greater than 5%, but not significantly greater than 15%, is affected.	
3	2B	The coating has flaked along the edges of the cuts partly or wholly in large ribbons, and/or it has flaked partly or wholly on different parts of the squares. A cross-cut area significantly greater than	

		15%, but not significantly greater than 35%, is affected.	
4	1B	The coating has flaked along the edges of the cuts in large ribbons and/or some squares have detached partly or wholly. A cross-cut area significantly greater than 35%, but not significantly greater than 65%, is affected.	
5	0B	Any degree of flaking that cannot even be classified by classification 4.	

SPECIAL CARE

- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Do not use compressed air to clean the instrument.
- Always keep the parts in the case when not in use.

SAFETY PRECAUTIONS

- Avoid humidity
- A knife is a sharp object. Be careful when using it.

DISCLAIMER

The right of technical modifications is reserved.

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