

CROSS CUT ADHESION TEST CC1000

VF1839, VF1840, VF1842, VF1844, VF1846, VF1847

DATASHEET

PRODUCT DESCRIPTION

The TQC Cross Cut Adhesion Test KIT (CC1000) 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.



BUSINESS

Protective Coatings, Corrosion Control, Coating Laboratories, Paint Production

STANDARDS

EN-ISO 2409, ASTM D3359

FEATURES

- Self-adjusting knife-holder ensures equal pressure on the cutting knife
- Round cutting knife with eight cutting edges for longer lifetime
- Ergonomically shaped handle
- Easy to change round cutting knife
- Wide range of knife sizes available for different coating thicknesses and substrates and according to different standards

SCOPE OF SUPPLY

- Soft grip handle incl. CC1000 holder
- Hardened steel cutter (type may vary, see below)
- Nylon brush
- Illuminated magnifier
- Adhesive tape (adhesion to steel 4.3N/cm)
- 4 mm Allen key
- Sturdy case

ORDERING INFORMATION







Art-Nr.	VF1839	VF1842	VF1844	VF1846	VF1847		
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	ASTM D3359		
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	-	-	-	-
Spare knives	VF2355	VF2357	VF2358	VF2359	VF1861		

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
VF2355	Teeth distance 1 mm, acc. to ISO & ASTM
VF2357	Teeth distance 2 mm, acc. to ISO & ASTM
VF2358	Teeth distance 3 mm, acc. to ISO
VF2359	Teeth distance: 1 mm, acc. to ASTM D3359<2009
VF1861	Teeth distance: 1,5 mm, acc. to ASTM D3359<2009

USE

- 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.
- Brush the pattern lightly with the supplied brush several times back and forth along each of the diagonal lines of the lattice pattern.
- 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.
- Carefully examine the cut area, if required using the magnifier and classify the test

Classification		Description	Appearance of surface of cross-cut area from which flaking has occurred (example for 6 parallel cuts)
ISO	ASTM		
0	5B	The edges of the cross-cut 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

- Clean with a soft and dry cloth. Do not use water or solvents.
- Avoid mechanical shocks or contact with sharp objects
- Always use high quality alkaline batteries. (Illuminated magnifier)

SAFETY PRECAUTIONS

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

DISCLAIMER

The right of technical modifications is reserved.

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