The TQC Cross Cut Adhesion Test (Basic Cutter) 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 lines are cut at right angles to obtain a pattern of 25 / 100 squares. The ruled area is evaluated (by using a table chart) after a short treatment with a stiff brush, or adhesive tape (hard substrates).

Standards
ISO/DIN 2409, ASTM D3359

Application area's
Coating/Paint Industry, Galvanise, Automotive, Laboratory, Painters, Shipping Industry, Steel Protection, Wood

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.

Standard delivery
Cross Cut Adhesion Tester acc. to DIN-ISO, 6 teeth
SP1660 TQC Cross-cut adhesion test, Basic Cutter 1 mm
SP1661 TQC Cross-cut adhesion test, Basic Cutter 2 mm
SP1662 TQC Cross-cut adhesion test, Basic Cutter 3 mm.

Cross cut Adhesion Tester acc. to ASTM, 11 teeth
SP1663 TQC Cross-cut adhesion test, Basic Cutter 1 mm.
SP1664 TQC Cross-cut adhesion test, Basic Cutter 1,5 mm.

Optional items
Spare TQC knife acc. to DIN-ISO
SP1702 Teeth distance 1 mm
SP1703 Teeth distance 2 mm
SP1704 Teeth distance 3 mm

Spare TQC knife acc. to ASTM
SP1705 Teeth distance: 1 mm
SP1706 Teeth distance: 1,5 mm
### Optional items (2)

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP3007</td>
<td>Adhesion tape, single roll, adhesion to steel 4.3 N/cm</td>
</tr>
<tr>
<td>SP3010</td>
<td>Adhesion tape, set of 3 rolls, adhesion to steel 4.3 N/cm</td>
</tr>
<tr>
<td>SP3020</td>
<td>Adhesion tape, single roll, adhesion to steel 7.6 N/cm</td>
</tr>
<tr>
<td>SP1710</td>
<td>Nylon Brush for Cross Cut Adhesion Test</td>
</tr>
<tr>
<td>SP9700</td>
<td>Lighted Magnifier 2.5x</td>
</tr>
</tbody>
</table>

### Additional information

#### Comparison Chart

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
<th>Appearance of surface of cross-cut area from which flaking has occurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>The edges of the cuts are completely smooth; none of the squares of the lattice is detached.</td>
<td>(Example for six parallel cuts)</td>
</tr>
<tr>
<td>1</td>
<td>Detachment of small flakes of the coating at the intersections of the cuts. A cross-cut area not significantly greater than 5% is affected.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The coating has flaked along the edges of the cuts in large ribbons and/or same squares have detached partly or wholly. A cross-cut area significantly greater than 35%, but not significantly greater than 65%, is affected.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Any degree of flaking that cannot even be classified by classification 4.</td>
<td></td>
</tr>
</tbody>
</table>
Use

ISO 2409:
1 mm. spacing for coatings up to 60 µm on hard substrates
2 mm. spacing for coatings up to 60 µm on soft substrates
3 mm. spacing for coatings from 61 to 120 µm on both hard and soft substrates
3 mm. spacing for coatings from 121 µm to 250 µm on both hard / soft substrates

ASTM D3359:
1 mm. spacing for coatings up to 50 µm
1,5 mm. spacing for coatings from 50 to 125 µm

Safety Precautions

- A knife is a sharp object. Be careful when using it.
- Always use the cassette to store the knife

Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.