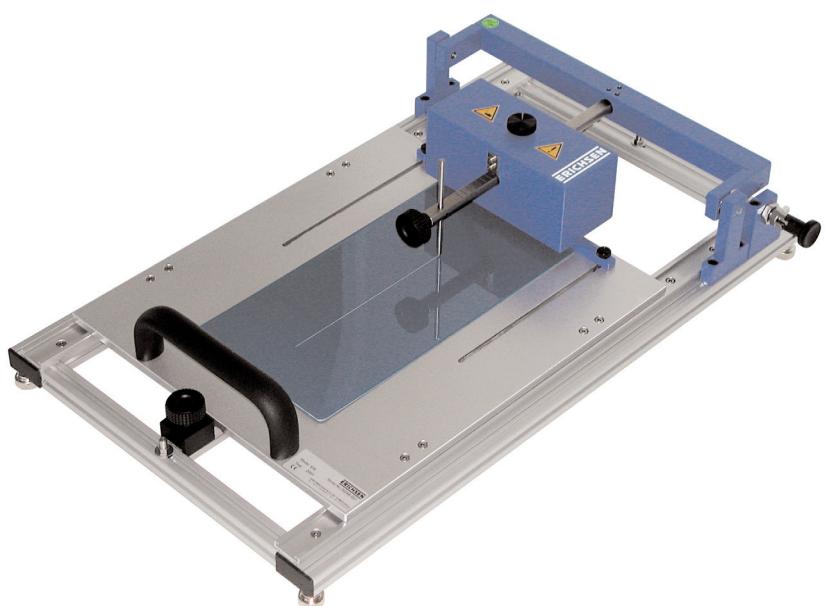


**Test Panel Scratcher
CORROCUTTER 639**



testing equipment for quality management

ERICHSEN

**van Laar
Clemen
Sikkens**

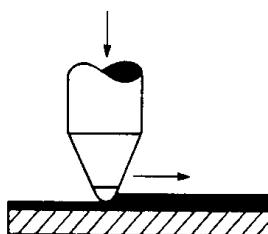
Purpose and application

The Test Panel Scratcher **CORROCUTTER 639** is designed for the application of defined and reproducible scratches through coatings on test panels intended for subsequent corrosion tests. For this purpose the frequently used scratching tools in accordance with van Laar, with Clemen as well as with Sikkens are available.

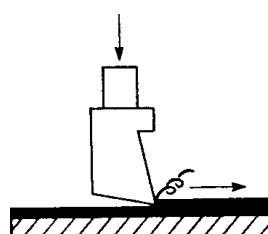
The **CORROCUTTER 639** prevents from the strain put to fingers and wrists of users when scratching by hand large series of test panels using a scratching stylus.

Scratching Tools

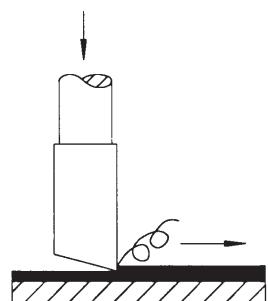
- a) Test tip acc. to van Laar with a tungsten carbide ball tip 0.5 mm dia. depth of scratch up to 250 µm).



- b) Test tip acc. to Clemen, tungsten carbide tip, spherical chisel shaped in an angle of 2°.



- c) Scratch tool in accordance with Sikkens, rectangular cutting edges, tungsten carbide tip 0.5 or 1 mm wide.



- d) Further tools, e. g. tungsten carbide ball tip 0.75 or 1 mm dia. as well as cross cutting tip upon request.

Procedure

Before starting the test the **CORROCUTTER 639** should be positioned on a solid, flat base and levelled with the help of the supplied spirit level and the adjustable feet.

The test panel is placed onto the movable slide, with the coated side facing upwards, in that way that it sits close to the adjustable ledger underneath the rider weight which is located in position 0 (i. e. without exerting any pressure onto the scratching tool support) on the work arm.

The required test tool is then inserted into the scratching tool support at the end of the work arm and slightly fixed with the knurled screw.

To level the work arm the spirit level is placed onto the ball-bearing crosshead of the work arm while the scratching tool should touch the test panel. After levelling the scratching tool is tightened with the help of the supplied Allen key.

To place, position and remove the test panel in an easy and secure manner the work arm is lifted and arrested in the upheld position at the crosshead using the laterally located stop bolt. By sliding and fixing the rider weight on the work arm the required scratching force is adjusted (one division mark on the work arm = approx. 2 N). The force range comprises approx. 2 to 40 N. The adjustable ledger and the movable slide stop under the handle can be fixed by a knurled screw and serves as scratching length limiter.

While the left hand is holding the work arm with the scratching force adjusted, the right hand releases the stop bolt so that the scratch tip can be placed in a controlled manner onto the test panel to be scratched. The scratching procedure is executed by steadily drawing up the slide using the handle.

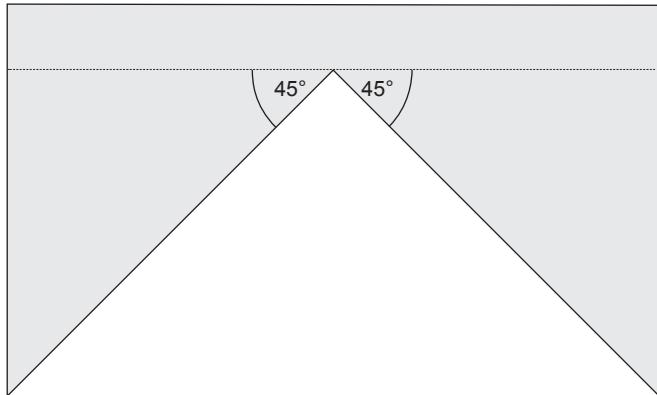
When moving the test panel laterally, it is possible to apply several parallel scratches exerting different scratching forces, so that the necessary setting for scratching through the coating can be determined.

When using the cross scratch template it is possible to apply also scratches in the shape of a diagonal, rectangular cross with variable scratch lengths. For this purpose the cross scratch template is positioned against the adjustable ledger of the **CORROCUTTER 639**. The test panel to be scratched is placed into the jog of the cross scratch template and scratched by executing the usual procedure.

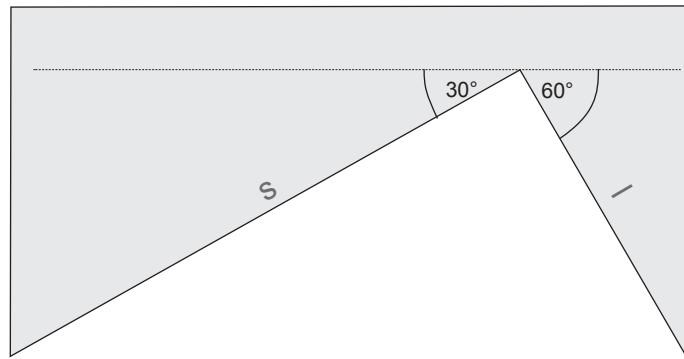
Then the scratching procedure is repeated on the test panel having been rotated through 90° and thus the required cross scratch is completed. The maximum dimensions of the test panel are 270 x 270 mm.

The St. Andrews's cross template enables the application of scratches producing a St. Andrew's cross either in a horizontal or in a vertical position. For this purpose the template has to be turned round (upside down) after the first scratch. Then the test panel has to be positioned after having been rotated through 90° and the second scratch is carried out.

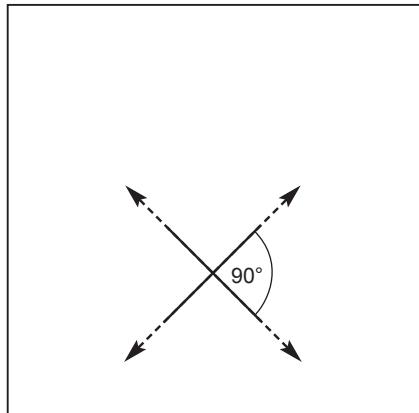
Decisive for the vertical or horizontal position of the St. Andrew's cross that will be produced, is the marked edge of the ledger of the template jog against which the lower edge of the test panel is positioned for the first scratch. The two edges of the ledger are marked - one by "s" for upright position and the other by "l" for horizontal position. The maximum dimensions of the test panel are 210 x 297 mm.



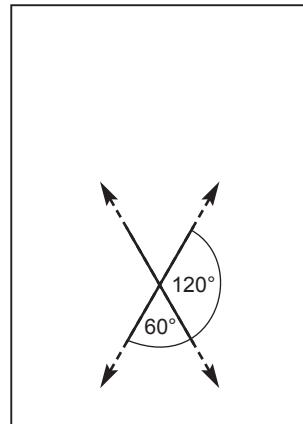
Template for cross scratch (diagonal, rectangular)



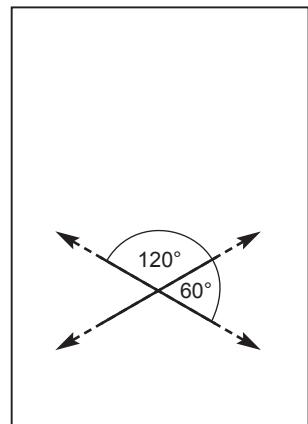
Template for the St. Andrew's cross (vertical or horizontal, 60°/120°)



Test panel (max. dimensions 270 x 270 mm)
with applied cross scratch



Test panel (max. dimensions
210 x 297 mm) with applied St.
Andrew's cross (vertical)



Test panel (max. dimensions
210 x 297 mm) with applied St.
Andrew's cross (horizontal)

Design

The **CORROCUTTER 639** is a desk-top unit. The slide is equipped with a linear guide (sliding bearing) and is moved by hand.

Technical Data

Dimensions (L x W x H): 600 x 400 x 160 mm
Weight: approx. 15 kg
Scratching force: approx. 2-40 N
Maximum scratch length: approx. 220 mm

Max. dimensions of the test panels:
Length 300 mm
Width 200 mm
Thickness 20 mm

Max. dimensions of the test panels
when using a cross scratch template:
Length 270 mm
Width 270 mm
Thickness 20 mm

Max. dimensions of the test panels
when using a template for the St. Andrew's cross:
Length 297 mm
Width 210 mm
Thickness 20 mm

Order Information	
Order No.	Product Name
0245.01.31	Test Panel Scratcher CORROCUTTER 639 including test tip in accord. with van Laar, spirit level and Allen key

Accessories	
Order No.	Product Name
91 5030241	Test tip acc. to Clemen
0693.01.32	Test tip acc. to van Laar
0740.01.32	Scratch tool acc. to Sikkens 1 mm
0741.01.32	Scratch tool acc. to Sikkens 0.5 mm
0742.01.32	Cross scratch template 90°
0743.01.32	St. Andrew's cross template 60°/120°

Subject to technical modifications.
Group 21 - TBE + BAE 639 - X/2005