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PRETREATMENT TEST KIT
SP7315

MANUAL

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BRESLE TEST KIT
SP7310

MANUAL

PRODUCT DESCRIPTION

The TQC Bresle Kit complies with the ISO 8502-6 and ISO 8502-9 standards that describe the Bresle Method to assess the level of soluble salts using a Bresle patch or Bresle sampler, distilled water and a conductivity gauge. The conductivity is mainly directly proportional to the concentration of dissolved chloride ions in the solution. The kit includes all the necessary equipment to execute a bresle test that will indicate the contamination of soluble salts on blast-cleaned surfaces prior to coating. Inside the TQC Bresle Kit is a conductivity gauge used for the assessment of soluble salt ions as chlorides, sulphates and nitrates.

Details
Conductivity meter HI0070:

Battery compartment
Selected measurement method (Cond-TQS-Salt)
Indication of unit (µS/cm of mS/m)
Battery indicator
Measured value
Temperature
On button
Calibration button (in menu mode 'Exit' button)
Enter button (in menu mode 'Accept' button)
Menu button (in menu mode 'Scroll' button)
Temperature electrode
EC/Conductivity button
Synthetic protective cover

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STANDARDS

ISO8502-6, ISO8502-9

SCOPE OF SUPPLY

The Bresle kit is complete with

- Case
- Digital Conductivity meter
- Bresle patches, 25 pieces
- Distilled water,
- Calibration Solution
- Cleansing Solution
- Cups
- Syringes
- Pictorial manual
- Magnet

PREPARATIONS

- Remove the plastic cap from the measuring cell
- Press the on button
- Check whether 'COND' is shown at the top left. If so, perform the measurement. If not, go through the following steps:
  - click on menu button,
  - scroll with the 'menu / scroll' button until 'measure' is selected
  - confirm with the 'enter / accept' button
  - scroll with the 'menu / scroll' button until 'COND' is selected
  - confirm with the 'enter / accept' button
  - press 'calibration / return' button to return to the measurement screen
  - COND is shown at the top left
- Calibration prior to each use is desirable for a reliable measurement:
  - Place the gauge flat on a flat surface
  - Poor the supplied calibration solution in the measuring cell
  - Push the CAL button
  - Wait until the measurement is stabilized
  - The display shows CAL ✓, calibrations was successful
  - Push the enter button to return to the normal display

Measuring Cell

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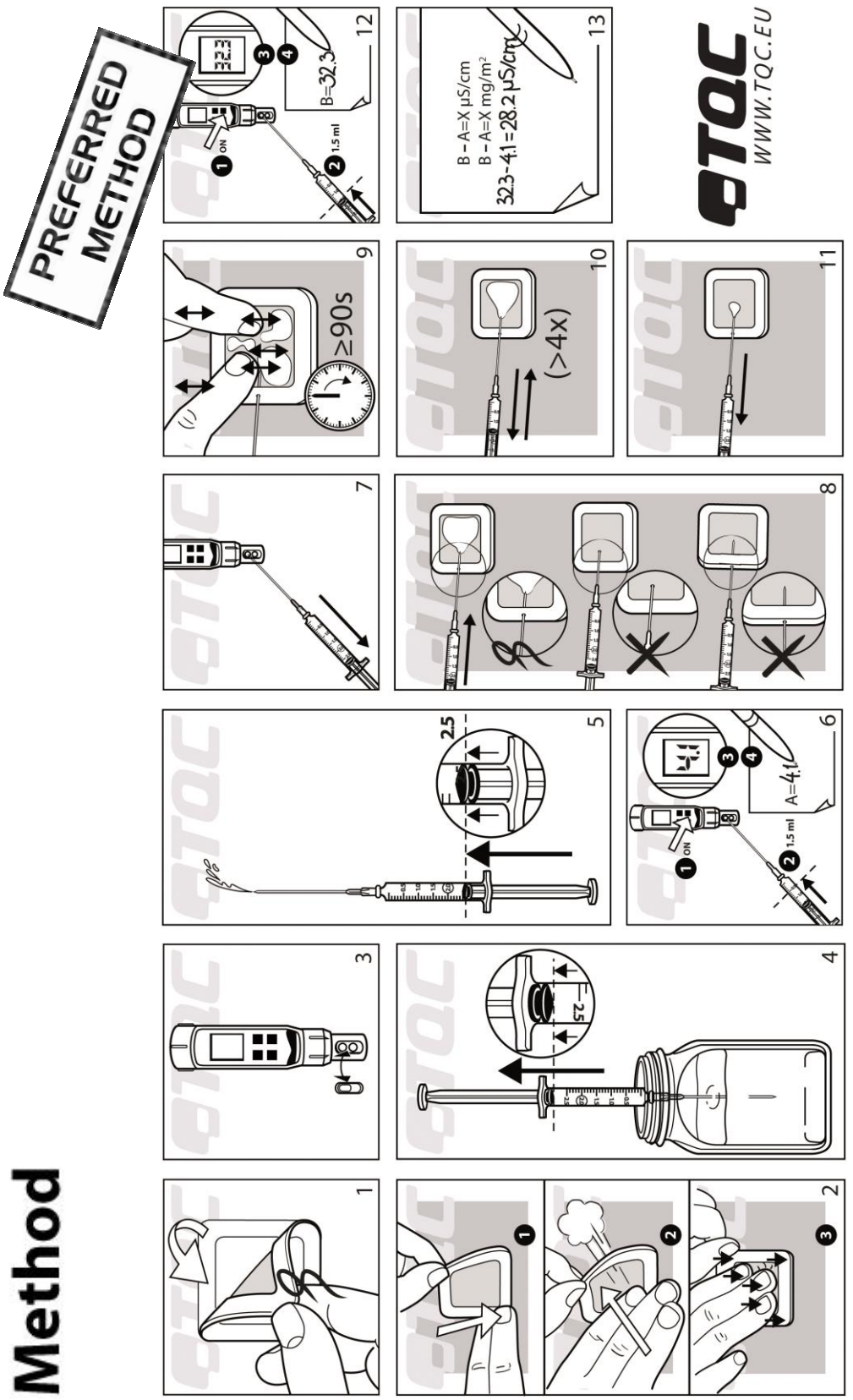
DETERMINATION OF SOLUBLE CONTAMINANTS ON SURFACES; DIRECT SAMPLE PROCEDURE



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A. Select the section on the steel surface to be used as the test area for assessment of the total surface density of salts. It should preferably be dry and with no loosely adherent rust, dirt or moisture (dampness), so that the patch frame can properly adhere to the surface. The Bresle patch can be placed in almost every position, vertical, horizontal, slanting or on surfaces that are not completely flat.

It is recommended to test more than one spot to catch the variations of the contamination level!

B. Remove the square protective backing of the Bresle patch with its inner protective paper and dispose. Place the Bresle patch with the adhesive side to the test surface and press firmly in order to create a tight seal. When placing the patch take care to trap as less air as possible in the patch.

C. Use the syringe to draw 2,5 ml out of the large deionised water bottle. Take care that there are no air bubbles in the syringe.

D. Inject 1,5 ml of the deionised water in the measuring cell and note the blank value.
(Write the value down as blank value)

E. Draw the 1,5ml from the measuring cell back into the syringe to have again 2,5ml of water in the syringe.

F. Insert the 2,5 ml of deionised water into the Bresle patch by injecting it through the latex membrane and the foam at an angle of 30° from the surface.
(Inserting through the transparent part of the Patch or from the bottom side could cause leakage!)

G. Dissolve the salts by tapping the latex membrane for several minutes. In-between suck water from the patch and reinject into the patch several times. This operation should go on for about 3 to 5 minutes with 2-4 pumping strokes per minute.

H. When finished, suck up the entire volume of water into the syringe, remove the syringe from the TQC Bresle Patch. Inject 1,5ml of this water into the measuring cell of the conductivity gauge.

I. Measure the conductivity of the solution in the measuring cell and note down the value. This is the "**Measured Value**".

J. Calculate the difference between the measured value (measured at "I") and the blank value which has been determined earlier
(µS **Measured Value** - µS **blank value**).

The total surface density of soluble salts/contaminants (S) in mg/m^2 soluble salts measured as Sodium Chloride is

S mg/m^2 soluble salts measured as Sodium Chloride = 1 x (Measured Value – blank value)

(all salts are considered as NaCl or Sodium Chloride)
"Sample Value" and "**Zero Reference**" are in microSiemens (µS) per centimeter.

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IF AN INTERPRETATION OF JUST THE CHLORIDES OR CL- IS REQUIRED THE MULTIPLIER WILL BE 0.6 INSTEAD OF 1 !

K. Dispose all the contaminated water in the supplied bottle and clean all critical parts by rinsing with clean distilled water.

CLEAN COMPONENTS ARE OF MOST IMPORTANCE FOR A RELIABLE TEST RESULT!

L. Make sure the Bresle Patch is removed from the surface after the test has been performed.

DETERMINATION OF THE WATER SOLUBLE SALTS IN MINERAL ABRASIVES, CONFORM ISO 11127-6

- Collect a number of samples , minimum 5, of the abrasive at random at different places.
- Mix them well and take 100 g from this mix into the 100 ml. beaker.
- Pour 100 ml. distilled water into the large 250 ml. beaker which has been cleaned before with distilled water.
- Take a reading of this water with the conductivity gauge and note the value. This is the "Zero Reference"
- Add the 50 g of abrasives to the 100 ml distilled water in the large beaker.
- Shake the mixture well for about 5 minutes and leave it for one hour.
- Shake again for 5 minutes.
- Decant some of the water into a clean beaker and measure the conductivity.

Contact the paint-manufacturer, abrasive supplier or project-manager for the maximum acceptable conductivity level

MAINTENANCE

- Maintenance of the conductivity meter is minimal, because it's quite easy to perform a measurement. Nevertheless the technology inside the instrument is very advanced.
- Depending on the frequency of use, a thin film may occur on the probe. Use a damp cloth to remove this.
- After each use the instrument should be rinsed with tap water and demineralized liquid. Make sure the probe stays clean.
- A blinking battery indicator indicates the batteries need to be replaced. Open the battery compartment cover. Note polarity facing up and remove the old batteries. Replace with fresh ones with the same polarity. facing up as the old ones.

WHEN SOMETHING GOES WRONG

When the instruments doesn't perform the way you expected, usually you can solve it yourself easily. Therefore read this part thoroughly before claiming warranty.

Problem	Possible cause	Solution
The value measured is unstable	Pollution?	Clean the measuring cell with a damp soft cloth and rinse the measuring cell thoroughly with demiwater afterwards.
Display fails	Insufficient battery power	Replace batteries
Calibration fails	Dirty measuring cell or old / polluted calibration standard.	Always use a 'fresh ' calibration standard. Once opened the calibration standard will not keep.

DISCLAIMER

The right of technical modifications is reserved.

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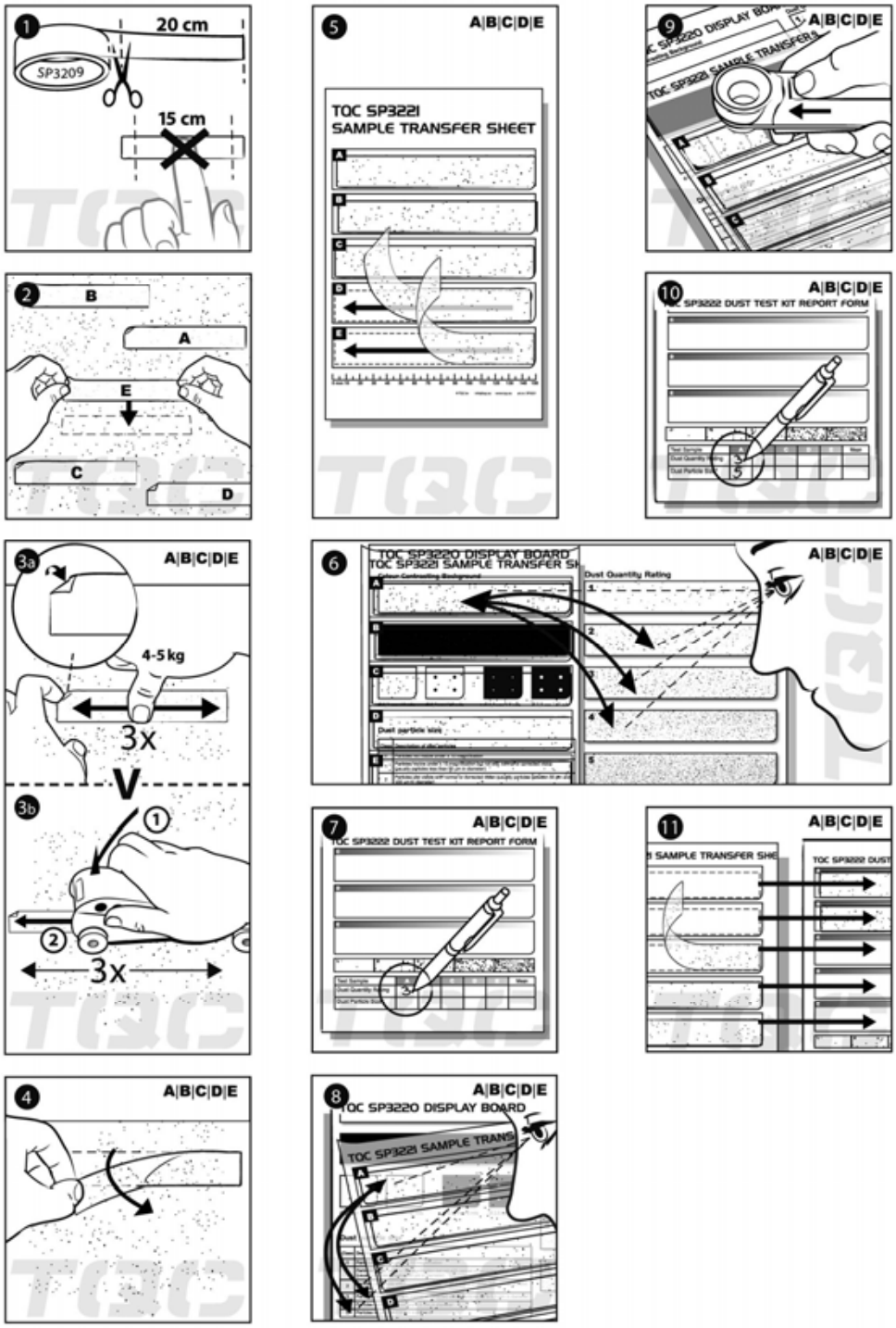
DUST TEST KIT
SP3200

MANUAL

DUST TEST PROCEDURE



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