Elcometer 195

Säberg Drill

Operating Instructions

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Thank you for your purchase of this Elcometer 195 Säberg Drill. Welcome to Elcometer.

Elcometer are world leaders in the design, manufacture and supply of inspection equipment for coatings and concrete. Our products cover all aspects of coating inspection, from development through application to post application inspection.

The Elcometer 195 Säberg Drill is a world beating product. With the purchase of this product you now have access to the worldwide service and support network of Elcometer. For more information visit our website at www.elcometer.com

1 ABOUT YOUR DRILL

The Elcometer 195 Säberg Drill provides a method of assessing coating thickness layers especially on hard or brittle coatings.

For some coating/substrate combinations it is necessary to use a destructive method. Whereas a Paint Inspection Gauge (P.I.G.) makes a linear cut along the coating, the Elcometer 195 Säberg Drill makes a small hole in order to measure the coating thickness layer thus much less damage is done.

- Ideal for hard or brittle coatings
- Measures coatings up to 1500μm (60mils)
- Used in conjunction with a graticule scale microscope (included)

1.1 WHAT THE BOX CONTAINS

- Heavy handwheel
- Light handwheel
- Cutter
- Hexagonal wrench
- Drill body
- Microscope
- · Carrying Case
- Operating Instructions

The instrument is packed in a cardboard and foam package. Please ensure that this packaging is disposed of in an environmentally sensitive manner. Consult your local Environmental Authority for further guidance.

To maximise the benefits of your new instrument please take some time to read these Operating Instructions. Do not hesitate to contact Elcometer or your Elcometer supplier if you have any questions.



2 USING YOUR DRILL

- 1. Select appropriate handwheel:
 - heavy for use on hard or thick coatings ie. above 250 microns, or
 - light for soft or thin coatings ie. below 250 microns.
- 2. Fix the cutter on the handwheel selected. Tighten the recess socket-head screw.
- Place the drill body on the surface to be measured with the hole directly above the test area. Fit the cutter into the drill hole.
- 4. Rotate the handwheel in a clockwise direction, using pressure as necessary (for soft coatings rotate finger in recess) until the cutter has penetrated the coating and marked the substrate.
- Remove cutter assembly and the drill body. View the hole with the microscope, focusing on the side of the hole.
- Note the number of graticule divisions between the coating surface and the colour change between the coating and substrate, or next paint surface.
- 7. To calculate the coating thickness:
 - multiply the number of graticule divisions by 20 to give the coating thickness in microns, or
 - multiply the number of graticule divisions by 0.79 to give the coating thickness in mils.

(These instructions are valid for a 20 $\mu\text{m/division}$ microscope).

3 MAINTENANCE

The Elcometer 195 Säberg Drill is designed to give many years service under normal operating and storage conditions.

The instrument does not contain any user-serviceable components. In the unlikely event of a fault, the instrument should be returned to your local Elcometer supplier or directly to Elcometer. Contact details can be found on the outside cover of these instructions, or on the Elcometer website, www.elcometer.com

4 SPARE PARTS

The following spare part is available from Elcometer, or your local supplier.

Spare 90º drill

T1955188-

5 RELATED EQUIPMENT

Elcometer produces a wide range of adhesion gauges and associated inspection equipment. Elcometer 195 users may also benefit from the following Elcometer products:

- Elcometer 141 Paint Inspection Gauge
- Elcometer 406 Mini Glossmeter
- Elcometer 107 Cross Hatch Cutter

For further information contact Elcometer, your local supplier, or visit www.elcometer.com