

Item
2519

1. Product Description:

Tenazit Electro Clean
Electrochemical Cleaning and Marking Machine

Dimensions:	31.5 x 20 x 26.5 cm
Weight:	20 kg
Specification:	TENAZIT ELECTRO CLEAN



2. Contents

- 1: Tenazit Electrochemical Cleaning Machine (700 VA, 115/240V, 50-60Hz, 6A)
- 1: Carbon Fiber Brush (Item 2520)
- 1: Cleaning Brush Cable
- 1: Ground Clamp with Cable
- 1: 500 ml Bottle of Electrolyte Solution (Item 2522)
- 1: 500 ml Bottle of Electrolyte Solution (Item 2523)
- 1: Empty 500 ml Spray Bottle
- 1: Wide-Mouth Container
- 1: Power Cord



1. Application

- Electrochemical cleaning system designed to clean and create a protective layer on metal surfaces in a single step through the generation of electrolytic arcs.
- Carbon fibers are excellent electrical conductors. Electrical arcs are generated at the fiber tips, effectively removing stains, discoloration, oxide layers, and even light scale.
- The electrolyte solution increases the electrical conductivity of the carbon fibers while also providing a cooling effect. As it evaporates, it creates a protective atmosphere that helps prevent micro-oxidation of the treated area and promotes the formation of chromium oxide, helping restore the protective passive layer of stainless steel. The electrolyte contains E338, a non-hazardous additive commonly used in the food industry.
- Can also be used for electrochemical marking of metal products.
- A durable, permanent mark can be produced in only 3–4 seconds, without causing corrosion, acid etching, or significant alteration of the workpiece.

2. Operating Instructions

- For manual operation.
- Connect the ground cable to the machine and securely attach the ground clamp to the workpiece.
- Connect the carbon fiber brush to the M10 connector on the Teflon handle. Adjust the Teflon sleeve as the carbon fibers wear, ensuring that the fibers protrude no more than 10 mm for optimum cleaning performance. Tighten securely to prevent burn marks on the workpiece.
- Set the rotary switch to position I or II, depending on the operation:
 - POSITION I: Brush cleaning or dark marking using an anode and felt pad.
 - POSITION II: Brush polishing or light marking using an anode and felt pad.



- Dip the carbon fiber brush into the electrolyte in the wide-mouth container and allow excess electrolyte to drain off.
- Position the brush as close as possible to a 90° angle to the surface and move it across the area to be treated. The electrochemical process removes surface contamination from the workpiece.

3. Safety information

- Do not modify the machine.
- Always wear appropriate personal protective equipment (PPE), including gloves, respiratory protection, and safety glasses.
- Improper use may result in injury.

4. Handling

- Initial inspection should be performed while the product is in its original packaging. If there is visible evidence of damage, the product should not be accepted.
- Handle the machine carefully to prevent impacts and/or drops that could damage the equipment or reduce its service life.

5. Storage

- Store the machine preferably in its original individual packaging, on a flat surface at least 10 cm (4 in) above floor level, away from damp, cold, or hot surfaces and from any type of fluid. Ideal storage conditions are 40–50% relative humidity and a temperature between 15 and 29 °C (59–84 °F).

6. Packaging units

- 1 unit (see contents).

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7. Parts Diagram

Description

- 1 High current socket red
- 2 High current socket black
- 3 LED green
- 4 Thermal fuse (Circuit breaker 80 Ampere)
- 5 Power switch (main switch orange 230V)
- 6 Power switch cap (main switch cover transparent)
- 7 Main Plug
- 8 Fan
- 9 Tap changer 8 connections
- 10 Rectifier
- 11 Capacitor
- 12 PCB
- 13 Plug 6 pins for PCB
- 14 Plug 4 pins for PCB
- 15 Transformer
- 16 Voltage selector 115/230 V
- 17 Teflon handle with high flex-cable, 4m, 10mm²
- 18 Ground clip, 200 A made of cast brass, 4m, 10mm²
- 19 Montage pins for brush
- 20 Carbon electrode 90° M10x1.5 thread

