# Surface cleaning & more »without grinding marks«

When the weld seam appearance is also important



## Where conventional, abrasive grinding techniques or conventional pickling techniques very quickly reach their limits, the ABICLEANER is the gentle and fast solution.

In contrast to classic cleaning products such as pickling pastes, abrasives, brushes, fleece or emery, electrochemical surface cleaning with the ABICLEANER does not leave any unsightly grinding or pickling marks on the workpiece.

In addition, with the help of the millions of filaments of the carbon fibre brush, hard-to-reach places such as the inner seams of railings can be reached effortlessly and thus cleaned after welding without leaving any residues – and all this with 80 amps at 100% duty cycle.





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## When appearance is also important

In many industrial production processes, tarnish is undesirable because the appearance matters – this is where the ABICLEANER can prove its skills. Especially when welding stainless steel, so-called tarnish colours are produced, which do not look very nice on railings, facades, switch cabinets etc. and ideally have to be removed again gently. The use of pickling pastes or other abrasives and grinding tools is highly toxic on the one hand and leaves unsightly marks on the sensitive stainless steel surface on the other. Anyone who has ever tried to clean an extractor hood in the kitchen, for example, with a felt sponge and scouring agent, will be familiar with these unsightly scratch marks on the surface.

With the ABICLEANER, even delicate surface structures such as waffle patterns are not changed and retain their original appearance.

In addition to the gentle cleaning of the surface, which is conducted with a hydrofluoric acid-free solution, the ABICLEANER also has the property of restoring corrosion resistance after mechanical, chemical and thermal treatments. Stainless steel forms a layer of chromium oxide for protection, as the chromium in the stainless steel combines with oxygen and hydrogen from the environment, making the metal resistant to corrosion. After cleaning the weld seam surface with the ABICLEANER, the precious metal is also directly protected against corrosion again; this is also referred to as having been »passivated«.



#### The benefits at a glance

- Gentle on the surface facilitated by the carbon fibre brush made of over 1.5 million filaments
- **Fast & effective** due to the electrochemical effect
- **Safe** free of hydrofluoric acid
- Simple only one fluid for cleaning and polishing (polishing possible with the ABICLEANER 1000 AC/DC)
- **Powerful** professional units with 100% duty cycle at full power rating





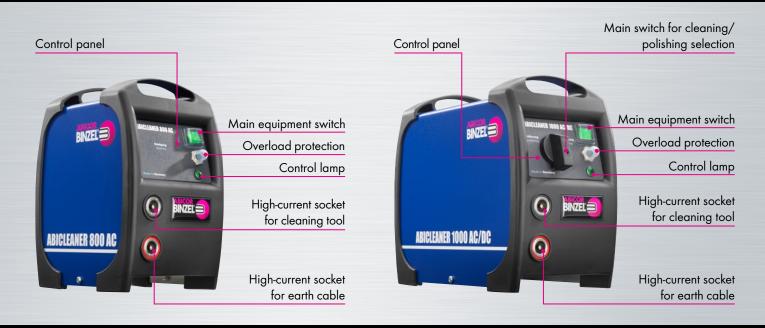


## The process: Electrochemical cleaning

Electrochemical cleaning uses micro-arcs to remove welding residues from metal surfaces after welding and »passivate« them at the same time. For this purpose, a carbon fibre brush wetted with electrolyte, at the ends of which more than one million small arcs are generated, is moved over the workpiece surface.

The carbon fibre principle in combination with the powerful equipment technology in the ABICLEANER is a reliable electrochemical cleaning process for all industrial applications or welding seams.

## The equipment: Get the best out of every weld seam



### ABICLEANER 800 (AC)

#### To ensure that tarnish does not stand a chance

This light and compact unit operates with alternating current and is used where tarnish does not belong. The ABICLEANER 800 is ideally suited for cleaning and passivating stainless steel surfaces after welding, such as stair railings, balcony railings or stainless steel facades, as well as for pipeline construction and chemical and plant engineering.

### ABICLEANER 1000 (AC/DC)

#### Where the look simply inspires

The ABICLEANER 1000 can readily be described as a multi-talent not only for cleaning welded surfaces, but also for special applications such as polishing, levelling or brightening surfaces. Removing tarnish and restoring the corrosion layer is completed with this device by the fact that it also creates a visually very appealing surface. Its range of application extends from locksmiths building a shapely railing, for example, to the medical sector, where surfaces need to be polished.

## The accessories: 100% accessibility and gentle cleaning

#### **ABIBRUSH carbon fibre brush**

The carbon fibre brush, with its more than 1.5 million and only 7  $\mu$ m finest filaments, gets into even the narrowest and most inaccessible crevices, and into even the most awkwardly accessible corners. Due to their nature, the brush bristles follow every contour of the workpiece.

The threaded part on the handle and the brush adapter are made of high-quality stainless steel (1.4571) and are corrosion-resistant.

The ergonomic handle also shows that this is a device for continuous use because this does not tire the user's hand, making joint pain a thing of the past.

#### ABICLEAN all-in-one cleaning electrolyte

The guarantee for safe cleaning, passivation and shining metal surfaces, because the all-in-one cleaning electrolyte ABICLEAN is the ideal solution for the cleaning process – and that is not all: When ABICLEANER has a DC function, this electrolyte

can additionally be used for polishing surfaces. Transport, storage and application are easy in handling and processing, as compared to conventional pickling agents, no hydrofluoric acid is contained.

Unbeatable in a team with the ABICLEANER devices from ABICOR BINZEL. **ELEA** 

ABICLEAN