



**BIO-CIRCLE®**



**GREENOX**

Weld seam cleaning system

**MAKING GREEN WORK.**

[bio-circle.com](http://bio-circle.com)

## THINK HOLISTICALLY. ACT SUSTAINABLY.

Bio-Circle Surface Technology GmbH – your reliable partner for industrial products for cleaning, welding, protecting, and lubricating.

Environmentally friendly and user-friendly. For manual and automatic parts cleaning. With 40 years of know-how and experience in research, product development, process optimization, sales, and service. With a global network and with production sites and partners. With around 190 employees, the Gütersloh site is the Bio-Circle headquarters. All products are developed and manufactured here for Germany, Europe and beyond. Made in Germany.

## SUSTAINABILITY AND QUALITY

Aware of our responsibility for the environment, we introduced an environmental management system **as early as 1996**, which has been **continuously certified by LRQA** in accordance with the requirements of the **globally valid DIN ISO 14.001 standard**. **Since 2020**, we have also participated in ecovadis – the independent sustainability ranking for companies – and have had ourselves evaluated.

With our activities in the field of sustainability, labour and human rights, ethics, and sustainable procurement, we were **once again** able to achieve the **ecovadis Bronze Ranking in 2025**.

**As a sustainably-minded company, we not only attach great importance to the best product performance, but also to the best environmental compatibility.**



## SET HIGH STANDARDS!

The way the company works is reflected in the six building blocks of the circle. They are constantly reviewed and optimized. Transparency and sustainability are the basis of all these building blocks that interlock like cogwheels. Bio-Circle products cannot save the world, but they can contribute to the conscious treatment of the environment and our fellow human beings.



# A CLEAN WORLD WITH YOU AT THE CENTRE



## Sustainable raw materials

As a manufacturer of industrial cleaners and cleaning systems, Bio-Circle has a great responsibility. After all, these products have a high value in the maintenance of machines, plants, and components. They are an important part of the production chain in every industry. We take a close look and use sustainable raw materials to produce **environmentally friendly and user-friendly industrial cleaners**.



## Innovative products

Bio-Circle has always been committed to sustainability in an industry where the harmful effects of solvents on the environment, humans and animals are still being glossed over. Our innovative products for the cleaning sector stand for **safe application** in manual and automatic parts cleaning.

We are pioneers, we do things differently and we walk a straight path. We formulate and produce industrial cleaners that are non-labelled and low-labelled. In our own laboratory and in our own production facilities.



## No or recyclable packaging

The piles of rubbish are getting higher and higher, the plastic vortexes in the oceans are getting bigger and bigger. These are just two problems – we all know that. When it comes to packaging, Bio-Circle is constantly moving forward and developing.

The best bottle is no bottle, because refillable application systems are the solution – they make bottles dispensable! And if there's no other way, we have recyclable 500 ml PET bottles made from **100% recycled material**.

To make your work easier, cleaners in IBCs and 200-litre drums can be transferred into 20-litre jerrycans with hand pumps. Of course, the IBCs, drums and jerrycans are made of the **easily recyclable** plastic HDPE.

In **shipping**, only **recycled and recyclable paper** that has been awarded the **'Blue Angel'** eco-label is used as filling material. In addition, we ship **CO<sub>2</sub>-neutral** through our parcel service provider and our freight forwarder.

# MAKING GREEN WORK.



## Sound advice and knowledge transfer

We share our experience and know-how with you so that you can clean easily, quickly, safely, cost-efficiently and in an environmentally friendly way.

**You have questions, we provide answers.** If you are satisfied with the cleaning performance and with your work, if we have been able to optimise your work processes – then we are satisfied too.



## Safe to use

Working with non-labelled and low-labelled industrial cleaners and recirculating cleaning equipment can trigger a domino effect:

For the company, the longer service lives, the reduced health and safety measures and the increased productivity are just a few reasons to be happy about savings because **costs are reduced.**

The user, who has **more fun and motivation at work**, feels fitter because they are exposed to far fewer pollutants and toxic fumes, and they are happy about a better quality of life. For both sides, there is also the **time saving.** Not only thanks to the effectively cleaning industrial cleaners, but also because of the energysaving, recirculating parts washers.



## Back into the life cycle

At Bio-Circle, we live and breathe life cycle thinking. **We place great emphasis on sustainability in production and application.** Longer service lives and VOC-free or VOC-reduced cleaners reduce your disposal effort and make it safer.



# GREENOX

## Electro-chemical weld seam cleaning for stainless steel

**GREENOX** is the alternative to pickling pastes. The patented weld seam cleaning device is an effective method of removing heat tinting after welding from TIG-, MIG-, and spot welds on stainless steel. It promotes the formation of a uniform and durable passive chromium oxide layer which protects the stainless steel from further corrosion. An output regulator facilitates a perfect finish even on sensitive surfaces. Oxide and smoke residues are effectively removed.

**GREENOX** is available in two different versions. All are a safe, fast, and economical alternatives to toxic pickles for the passivation of stainless steel.

## Perfect weld seams with effortless handling

### THE BENEFITS



#### Safe

**GREENOX** cleaning electrolytes are NSF-certified and suitable for use in the food industry. They pose no health risk to the user.



#### Fast

A TIG weld is cleaned and passivated at a speed of one to two metres per minute.



#### Easy to use

The **GREENOX MACRO** weld seam cleaning device has an integrated tank with a pump that ensures a continuous and automatic supply of electrolyte. This enables quick and safe working without interruptions.



# GREENOX MACRO

**CLEANING, PASSIVATING, POLISHING  
- ALL WITH JUST ONE DEVICE.**



## Weld seam and surface cleaning device

The **GREENOX MACRO** enables the cleaning and polishing of stainless-steel weld seams and the cleaning and passivation of stainless-steel surfaces. The automatic power control ensures that weld seams and surfaces are cleaned quickly and economically. The integrated touch panel makes it easy to set the various functions:

### Cleaning and polishing TIG/MIG weld seams with a carbon fibre brush

This method is flexible and quick to use, especially in nooks and crannies.

### Cleaning and polishing TIG/MIG weld seams with an insert and felt

Ideal for cleaning fillet welds, straight surfaces and external corners. The additional connection for surface cleaning makes it possible to clean and passivate large areas of stainless steel, e.g. containers, tanks, railings and facade sections.

An optional Marking Kit is available for marking and black-etching stainless-steel parts.



## THE BENEFITS

-  The power regulator enables a perfect finish, even on delicate surfaces.
-  The integrated tank and pump ensure a continuous and automatic supply of electrolyte.
-  Fast and safe working without interruptions.
-  Special Marking Kits for stainless-steel surfaces are available separately.

# Included accessories

## GREENOX MACRO



**G00114**  
Earth cable | red, 3 m



**G00105**  
Adapter  
for brushes B30 / B60



**G00205**  
PTFE insulator



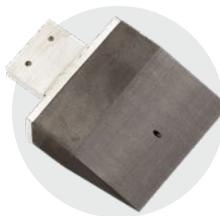
**G00405**  
Brush B60



**G00505**  
Screw sleeve  
for brush B60



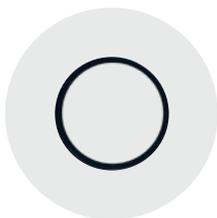
**48R113**  
O-Ring | 3 x 1 mm



**54B009**  
Wide insert | 45 mm



**G00117**  
Pad | 90 x 46 x 3,5 mm  
for wide insert 45 mm



**54B042**  
O-Ring | 30 x 3,5 mm  
for wide insert 45 mm



**48R476**  
Drip tray



**G00202**  
Wand holder



**G00201**  
MACRO transport box  
140 I | 80 x 60 x 60 cm



# Optional accessories

## GREENOX MACRO

### 200 mm surface area

- G00113** | Cable for manual wand | 4 m  
MICRO / MACRO / Surface area
- G00220** | Wand for 200 / 300 mm surface area
- G00221** | Pad for 200 mm surface area
- G00222** | Insert for 200 mm surface area

### 300 mm surface area with telescopic rod

- G00220** | Wand for 200 / 300 mm surface area
- G00231** | Pad for 300 mm surface area
- G00232** | Insert for 300 mm surface area
- G00233** | Telescopic rod with cable | 8 m  
for 200 / 300 mm surface area



# Technical specifications **GREENOX MACRO**

<b>Input voltage</b>	230 V – 50/60 Hz	<b>Protection class</b>	IP20
<b>Output voltage</b>	3-30 V	<b>Noise level</b>	<70 dB (A)
<b>Output current</b>	0-100 A	<b>Weight (empty)</b>	23 kg
<b>Output power</b>	2400 W	<b>Dimensions</b>	450 × 215 × 485 mm
<b>Output voltage setting</b>	1 V	<b>Wands</b>	Wand with compressed air system   6 m MICRO wand* Marking wand* Surface area wand*
<b>Output current setting</b>	LOW, MEDIUM, HIGH	<b>Functions</b>	Cleaning Polishing Marking
<b>Tank capacity</b>	1,8 l		
<b>Pump output</b>	1 - 3,6 l/h		
<b>Pump settings</b>	Dynamic Manual Auto (8 levels)		

\*optional

# GREENOX MICRO

**WHERE PRECISION MEETS PERFORMANCE  
– FOR BRILLIANT RESULTS.**



## THE BENEFITS

- ✓ The power regulator enables a perfect finish, even on delicate surfaces.
- ✓ Special Marking Kits for stainless-steel surfaces are available separately.



## Weld seam cleaning device

**GREENOX MICRO** has been specially developed for cleaning and passivating stainless steel weld seams. Thanks to automatic power control by inverter, the device ensures fast and economical weld seam cleaning.

Cleaning is done with the Micro carbon fibre brush, which is particularly flexible and ideal for narrow components, railings and inner corners. It offers better handling on vertical weld seams and enables effective cleaning overhead, for example when building railings.

For fillet welds, straight surfaces and external corners, inserts and pads are used to ensure a thorough cleaning. We recommend cleaning with **GREENOX T** for the best results. **GREENOX N** should then be used as a neutraliser to completely remove any residue and to passivate the stainless-steel surfaces.

A Marking Kit is available as an option, which can be used to mark and black-etch stainless-steel parts.

## Technical specifications **GREENOX MICRO**

<b>Input voltage</b>	230 V – 50/60 Hz	<b>Noise level</b>	<10 dB (A)
<b>Output voltage</b>	12 V AC	<b>Weight (empty)</b>	4,6 kg
<b>Output current</b>	0-30 A	<b>Dimensions</b>	140 × 290 × 350 mm
<b>Output power</b>	360 W	<b>Wands</b>	MICRO wand Marking wand*
<b>Protection class</b>	IP20	<b>Functions</b>	Cleaning Marking*

\*optional

# Included accessories

## GREENOX MICRO

G00100



**G00105**  
Adapter  
for brushes B30 / B60



**G00111**  
MICRO carbon  
fibre brush



**G00110**  
MICRO wand



**G00118**  
Holder for MICRO wand  
with drip tray



**G00112**  
MICRO  
screw sleeve



**G00113**  
Cable for manual wand | 4 m  
MICRO / MACRO / Surface area



**G00114**  
Earth cable | red, 3 m



**G00205**  
PTFE insulator



**G00119**  
Jar with a screw lid  
500 ml



**G00115**  
MICRO transport box  
40 x 30 x 32 cm



# Other accessories

## Brush kit

- G00120** Carbon fibre brush kit in a case
- Mini wand
  - Cable for mini wand | 2 m
  - Holder for mini wand
  - Mini carbon fibre brush
  - Insert 90°
  - 2x Standard-Pads
  - Clamping ring
- G00300** Brush Kit B30
- G00600** Brush Kit B60



## Accessories / carbon fibre brush kits / individual parts

- |               |   |               |  |
|---------------|---|---------------|--|
| <b>48R113</b> | O-Ring   3 × 1 mm   | <b>G00114</b> | Earth cable   red, 3 m                         |
| <b>54B063</b> | Cable for mini wand   2 m                                   | <b>G00115</b> | MICRO transport box   40 × 30 × 32 cm          |
| <b>G00105</b> | Adapter for brushes B30 / B60                               | <b>G00118</b> | Holder for MICRO wand with drip tray           |
| <b>G00110</b> | MICRO wand  | <b>G00119</b> | Jar with a screw lid   500 ml                  |
| <b>G00111</b> | MICRO carbon fibre brush                                    | <b>G00201</b> | MACRO transport box   140 l<br>80 × 60 × 60 cm |
| <b>G00113</b> | Cable for manual wand   4 m<br>MICRO / MACRO / Surface area |               |  |

<b>G00205</b>	PTFE insulator
<b>G00305</b>	Brush B30 + sleeve
<b>G00405</b>	Brush B60
<b>G00505</b>	Screw sleeve for brush B60
<b>G00404</b>	Connection cable for mini wand and BM   4 m

<b>54B029</b>	Carbon fibre brush for mini wand, <b>PU:</b> 5 pcs
<b>54B036</b>	Insert 90° for mini wand
<b>54B038</b>	Slim insert 90° for mini wand
<b>54B048</b>	Wide graphite insert for mini wand
<b>54B051</b>	Pads for wide graphite insert, <b>PU:</b> 10 pcs + O-Ring



## Pads / inserts

<b>54B143</b>	Standard insert 90°
<b>54B017</b>	Slim insert 90°
<b>54B018</b>	Slim insert 60°
<b>54B002</b>	Clamping rings for insert 54B143, <b>PU:</b> 10 pcs
<b>54B026</b>	Poli-Pad S   46 × 24 × 4 mm, <b>PU:</b> 10 pcs + clamping ring

<b>54B027</b>	Poli-Pad TL   60 × 38 × 2 mm, <b>PU:</b> 10 pcs + clamping ring
<b>54B028</b>	Poli-Pad TS   46 × 24 × 2 mm, <b>PU:</b> 10 pcs + clamping ring
<b>54B040</b>	Standard cleaning pad   46 × 24 × 4 mm for insert 90°, <b>PU:</b> 10 pcs + clamping ring



## Cleaning sleeves

<b>54B005</b>	Cleaning sleeve for internal angle 90° for insert 54B143, <b>PU:</b> 5 pcs
<b>54B006</b>	Cleaning sleeve for internal angle 60° for insert 54B016, <b>PU:</b> 5 pcs

<b>54B007</b>	Slim cleaning sleeve 90° for insert 54B017, <b>PU:</b> pcs
<b>54B008</b>	Slim cleaning sleeve 60° for insert 54B018, <b>PU:</b> 5 pcs



# MARKING

## Black etching

Permanent marking of appliances by black etching with the marking kits and the **GREENOX M** contained in them, an electrolyte solution specially developed for black etching stainless steel. This oxidation process leaves a permanent black mark on the stainless-steel surface, resistant to mechanical and chemical attack.



## Marking / labeling

54B080

### Marking Kit

- Marking wand with cable
- Marking pads and O-rings
- **GREENOX M** electrolyte solution for marking / black etching

54B081

### Marking Kit Pro

- Marking wand with cable
- Marking pads and O-rings
- **GREENOX M** electrolyte solution for marking / black etching
- Stencil printer with 20 metres of stencil paper



- 54B083** | Marking Pad | 60 × 40 × 2 mm,  
PU: 20 pcs
- 54B086** | Stencil paper | 100 mm × 20 m

- 54B087** | Stencil paper | 100 mm × 50 m
- 54B088** | Graphite insert | 35 × 10 mm  
for marking wand

## GREENOX M Marking fluid

- Electrolyte solution for the permanent black etching of stainless steel



- H04891** | 250 ml plastic bottle
- 54A036** | 5 l jerrycan

# Permanent stencils

Customised stencils are available in sizes up to 300 x 500 mm. Permanent stencils are ideal for black etching your company logo and address or other recurring information.

## Stencils / Reproduction from template

- H02791** | On request, depending on size
- H06991** | Film creation based on camera-ready artwork



# GREENOX Liquid

## Cleaning, polishing and neutralizing

**GREENOX Liquids** are a safe, clean and efficient method for cleaning stainless-steel welds. The surface finish is not affected.

### GREENOX H Electrolyte

- Developed for TIG- and point welding of stainless steel
- No transport of HAZMATs, no storage of HAZMATs
- Fewer vapours
- Safe alternative to pickling pastes and aggressive acids
- No labelling required under the CLP Regulation

 **G00592** | 5 l jerrycan



### GREENOX T Electrolyte

- Developed for highly demanding TIG-, point- and MIG welds
- Safe alternative to pickling pastes and aggressive acids
- No hydrofluoric acid, no nitric acid
- Removes light scaling

 **G10091** | 100 ml tube, **PU:** 6 × 100 ml  
**G00191** | 1000 ml plastic bottle, **PU:** 12 × 1000 ml  
**G00591** | 5 l jerrycan  
**G02091** | 20 l jerrycan  
**G20091** | 200 l plastic drum



**Hazard warnings:** Skin Corr. 1B, Met. Corr. 1

## GREENOX S Surface cleaner

- Developed for cleaning and passivating stainless-steel surfaces with **GREENOX MACRO**
- Faster cleaning and safe passivation of stainless steel through electrolytic cleaning
- Slightly viscous and foaming – good adhesion to vertical surfaces



**G00193**

1000 ml plastic bottle,  
**PU:** 12 × 1000 ml

**G02093**

20 l jerrycan

**Hazard warnings:** Eye Irrit. 2, Skin Corr. 1B, Met. Corr. 1



## GREENOX N Neutralizer

- Developed for neutralizing the surface after electro-chemical and electro-polishing processes
- Ready for use, non-flammable, non-toxic, non-corrosive
- Leaves no residues



**A00157-25**

1000 ml plastic bottle,  
**PU:** 10 × 1000 ml

**A00557-25**

5 l jerrycan

**A02057-25**

20 l jerrycan





**GREENOX**

**CLEANS EASILY AND SAFELY!**

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