



GREENOX

Weld seam cleaning system

MAKING GREEN WORK.

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 14001 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 2024**.

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 **CO₂-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

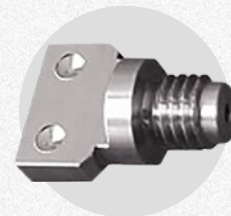
-  The power regulator enables a perfect finish, even on delicate surfaces.
-  The integrated tank and pump ensure a continuous and automatic supply of electrolyte.
-  Fast and safe working without interruptions.
-  Special Marking Kits for stainless-steel surfaces are available separately.

Included accessories

GREENOX MACRO



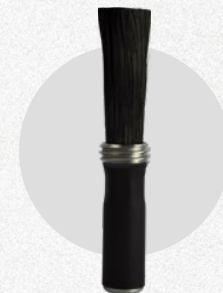
G00114
Earth cable | red, 3 m



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

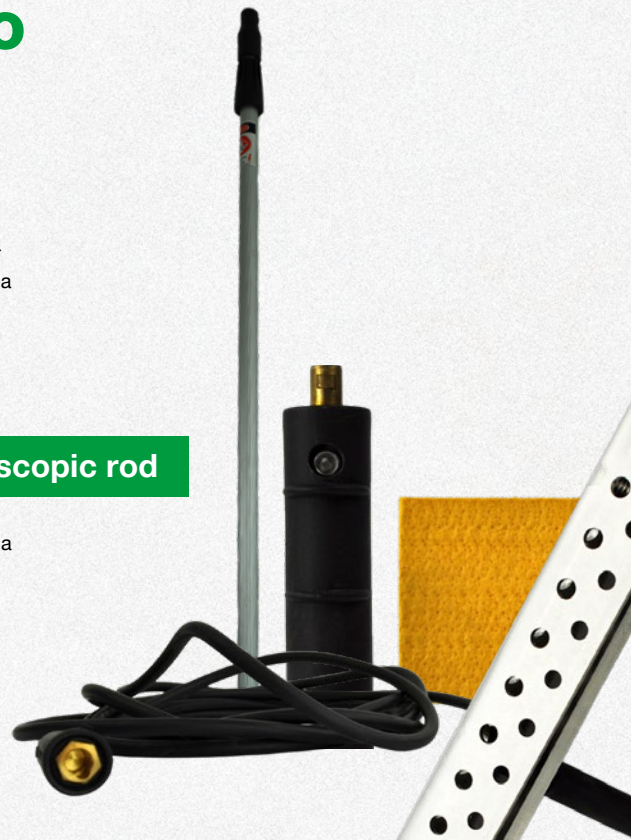
GREENOX MACRO

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**

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

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

*optional

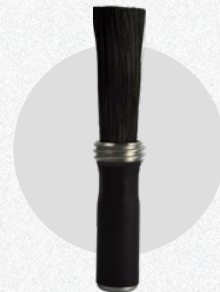
Included accessories

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 × 30 × 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°
 - 2× Standard-Pads
 - Clamping ring
- G00300** Brush Kit B30
- G00600** Brush Kit B60



Accessories / carbon fibre brush kits / individual parts

- 48R113** O-Ring | 3 × 1 mm
- 54B063** Cable for mini wand | 2 m
- G00105** Adapter for brushes B30 / B60
- G00110** MICRO wand
- G00111** MICRO carbon fibre brush
- G00113** Cable for manual wand | 4 m
MICRO / MACRO / Surface area

- G00114** Earth cable | red, 3 m
- G00115** MICRO transport box | 40 × 30 × 32 cm
- G00118** Holder for MICRO wand with drip tray
- G00119** Jar with a screw lid | 500 ml
- G00201** MACRO transport box | 140 l
80 × 60 × 60 cm

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

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



Pads / inserts

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

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



Cleaning sleeves

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

54B007	Slim cleaning sleeve 90° for insert 54B017, PU: pcs
54B008	Slim cleaning sleeve 60° for insert 54B018, PU: 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



A00157-25

1000 ml plastic bottle,
PU: 10 × 1000 ml

A00557-25

5 l jerrycan

A02057-25

20 l jerrycan





 [biocircle_de](https://www.instagram.com/biocircle_de)



GREENOX

CLEANS EASILY AND SAFELY!

Bio-Circle Surface Technology GmbH
Berensweg 200 | D-33334 Gütersloh

Phone no.: +49 (0)5241 9443-0

Email: service@bio-circle.de