

WELDING

MAKING GREEN WORK.



Bio-Circle Surface Technology GmbH Schweißen – EN - AL01/ 2024



VISION

WE FOR YOU



Bio-Circle Online Shop 24/7:
Order around the clock



More info in our shop!



STRAIGHT AHEAD WITH SUSTAINABILITY

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 almost 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 2023**.

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 – this vision has shaped the company's thoughts and actions for almost 40 years. Especially nowadays there is a lot of talk about sustainability. But the only thing that counts is to act sustainably.



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.



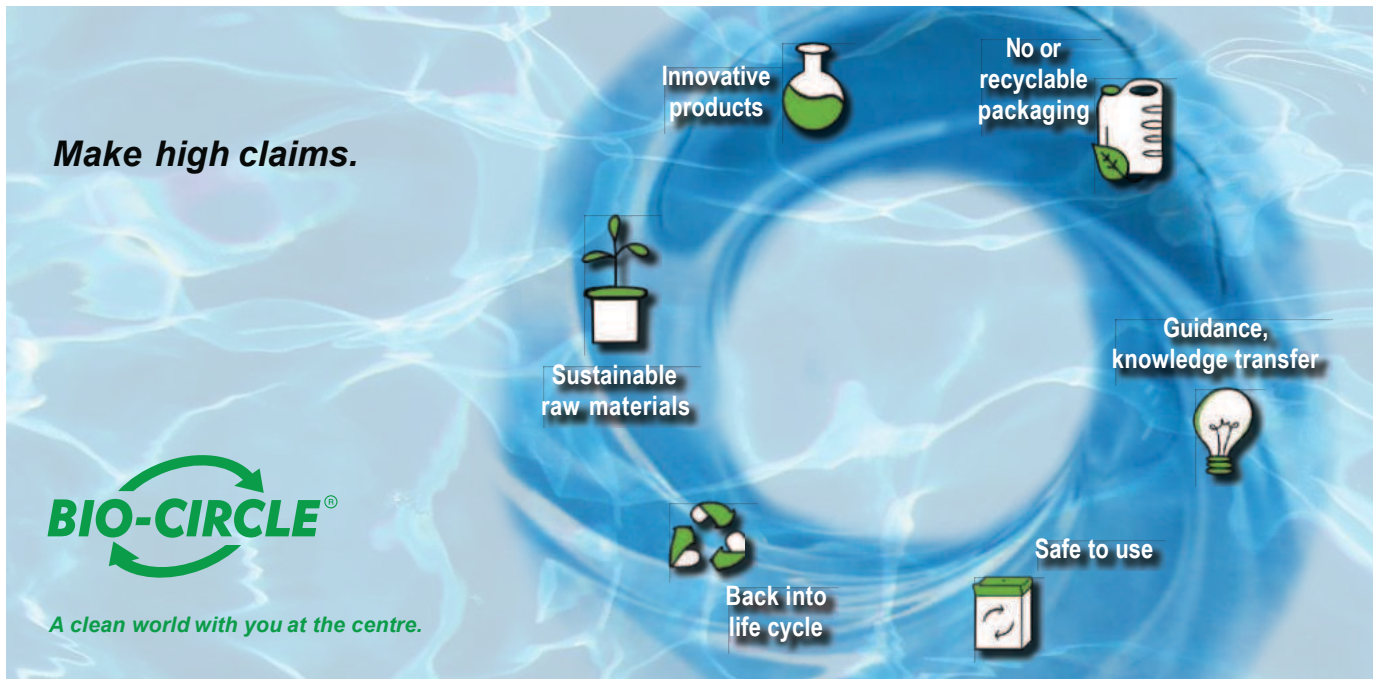
No or recyclable packaging

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.



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**.

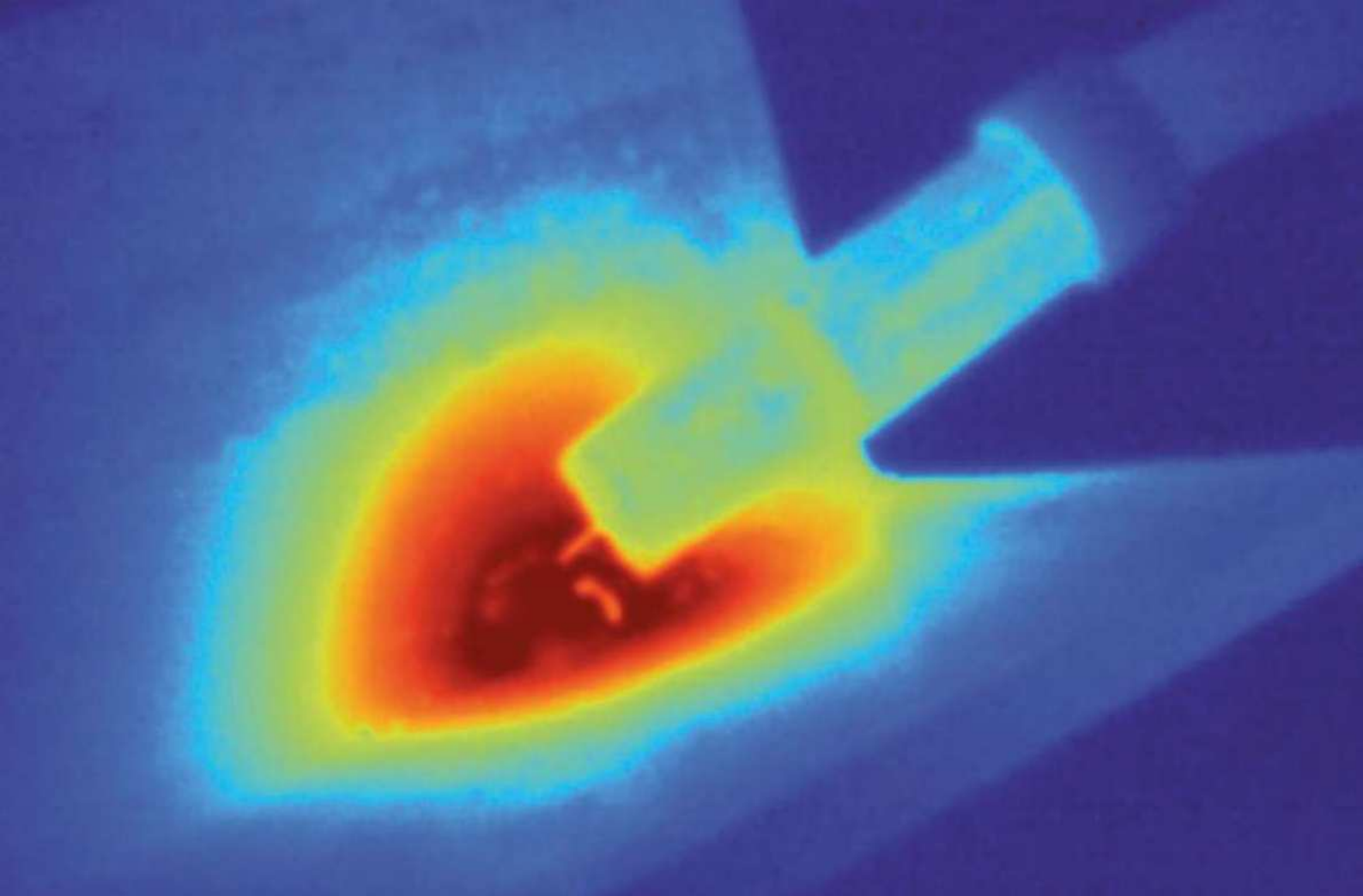
The user, who has **more fun and motivation at work**, feels fitter because they are exposed to far fewer pollutants and toxic fumes, and they are happy about a better quality of life. For both sides, there is also the **time saving**. Not only thanks to the effectively cleaning industrial cleaners,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

MAKING GREEN WORK.



WELDING

„After using our silicone- and oil-free release agents, subsequent processes such as varnishing can run without any problems in 98 % of all cases.”

(Bio-Circle Surface Technology GmbH member of staff)

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E-WELD PREMIUM PRODUCTS

#cohesion

The excellent wetting properties, **the fabulous separating effect**, the low consumption, and the stable consistency of the emulsions make the E-WELD products a must-have in welding applications.

In addition, most of them are solvent-free and non-labelled, which increases occupational health and safety and reduces operating costs. Great benefits for the user and the entrepreneur.

RELEASE AGENTS FOR WELDING

Optimal separating effect on weld spatter

Spray it on. Weld. Wipe it off. Finished.

The anti-spatter sprays prevent weld spatter from burning in during MIG/MAG welding and laser- and plasma cutting. **Trouble-free zinc coating, powder coating and varnishing after welding can be done anywhere and anytime, because the nature-identical ingredients are silicone- and oil-free!** In this context, we have been granted approvals issued by Herring Zinc Coating, Volkswagen AG, SLT Laser Technology et al.

E-WELD 2

- Release agent especially suited for multilayer welding
- Ideal for welding thin metal sheets



D50002 500mL bottle with trigger

PU: 20 x 500 mL (1 box)

D02002 20L jerrycan

D20002 200L plastic drum

D10002 1000 L IBC

E-WELD 3

- Release agent for welding
- Prevents the build-up of slag in plasma- and laser-cutting
- Perfectly suited for robotic welding



D50008 500mL PET bottle with trigger

PU: 20 x 500 mL (1 box)

D02008 20L jerrycan

D20008 200L plastic drum

D10008 1000 L IBC

E-WELD 4

- Release agent for welding
- Ideal for difficult, fine weld seams: thanks to the Moses effect, the separating lotion will part in the presence of heat, which guarantees accurate work



D50012 500mL PET bottle with trigger

PU: 20 x 500 mL (1 box)

D02012 20L jerrycan

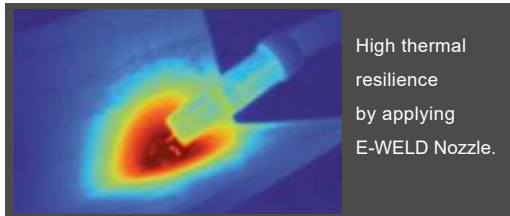
D20012 200L plastic drum

D10012 1000 L IBC

NOZZLE PROTECTION

Full power

In welding, a clean nozzle is half the battle.



E-WELD Gel

- ▶ Nozzle lube, made of highly pure, light-coloured fats
- ▶ Protects the nozzle, the welding apron, gloves and work boots from weld spatter
- ▶ Extends the service life of the welding nozzles



VOC free!

D20106 200 g tin

with magnet

PU: 12 x 200 g (1 box)

D01006 10 L pail

E-WELD Nozzle

- ▶ High-performance nozzle protection in an aerosol can
- ▶ Ceramic protection that lasts up to 8 hours
- ▶ Dries within seconds
- ▶ Thermally stable up to 1000 °C/1832 °F
- ▶ Also ideal for current contact tubes, clamping devices, and laser- and plasma cutting machines

D40017 400 mL aerosol can

PU: 6 x 400 mL (1 box)

Hazard warnings: Eye Irrit. 2, Aerosol 1,

Aerosol 1, STOT SE3





E-WELD SHIELD

Innovative surface protection

The water-based compound with ceramic protection prevents major build-ups of slag on the bars during plasma- and laser-cutting. This increases the service life of the systems and reduces set-up times, which in turn increases productivity and reduces operating costs. Moreover, the work pieces to be cut rest flat on the bars, which increases the quality of the cutting results.



E-WELD Shield 10 kg jerrycan
Order no. D01116

E-WELD Shield

- ▶ Water-based compound with ceramic protection
- ▶ Surface protection for the bars of plasma- and laser-cutting machines
- ▶ Prevents major build-ups of slag
- ▶ Makes slag is easy to remove

FIELD OF USE: metal processing/CNC, maintenance of plasma- and laser-cutting machines. Apply a well-covering layer of E-WELD Shield to the new or cleaned bars using the E-WELD Shield Spray Gun, a lamb's wool roller, or AUTRASYS(cf. p. 120). Allow to dry for approx. 1 hour. Very economical (1 kg is usually sufficient for approx. 20 square metres).

E-WELD Shield Spray Gun
Order no. HW0180



Pressure controller
for E-WELD Shield Spray Gun
Order no. HW0180-01



D01116 10kg jerrycan

Hazard warnings: Aquatic Chronic 3

E-WELD Shield Spray Gun

The E-WELD Shield Spray Gun is an application system for E-WELD Shield surface protection, which leaves a ceramic protective layer on the bars of plasma- and laser-cutting benches in order to prevent major build-ups of slag.

- ▶ Easy handling
- ▶ Individual adjustment options for spray- and airflow rate
= optimal exploitation of the release agent
- ▶ Environmentally compatible: compressed air as a propellant



SURFOX – THE ALTERNATIVE TO PICKLING PASTES!

Electro-chemical weld seam cleaning for stainless steel and co.

SURFOX 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 and aluminium. 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 from aluminium welds.

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

SURFOX 305

- Powerful weld seam cleaner for the cleaning and polishing of MIG-, TIG-, and spot welds on stainless steel
- The integrated tank with pump ensures permanent automatic electrolyte supply.
- Swift and safe work without interruptions
- Special marking kits for stainless-steel-, aluminium-, and titanium surfaces are available separately



SURFOX Mini

- Cleans and polishes TIG- and spot welds on stainless steel
- Ideal for repairing components that are difficult to reach and in narrow spaces
- The electrolyte comes in handy tubes and is fastened directly on the wand
- Special marking kits for stainless-steel-, aluminium-, and titanium surfaces are available separately



For further information please go to <https://www.bio-circle.com/surfox-the-weld-seam-cleaner>

	SURFOX305	SURFOX205	SURFOXMini
Power supply	230 Volt, 50/60 Hz	230 Volt, 50/60 Hz	230 Volt, 50/60 Hz
Power consumption	900 W	450 W	450 W
Secondary voltage	10-30 VAC/DC	10-30 VAC/DC	10-30 VAC/DC
Adjustment range	6–30 A	6–15 A	6–15 A
Tank capacity	1,9 L	1,9 L	–
Hose package length	4 m	4 m	2 m
Ground cable length	3 m	3 m	2 m
Weight	18,6 kg	18,6 kg	3,8 kg
Dimensions L x W x H	470 x 260 x 380 mm	470 x 260 x 380 mm	320 x 130 x 240 mm
IP protection class	IP 21	IP 21	IP 23
Funktionen	Cleaning, electro-polishing, marking (optional extra)	Cleaning, electro-polishing, marking (optional extra)	Cleaning, electro-polishing, marking (optional extra)
Vapour elimination	Compressed-air connection	Compressed-air connection	–
Scope of delivery	1 standard insert 90°, 1 brush kit B60, 3 standard pads, 1 clamp ring, 1 transport case	1 standard insert 90°, 1 brush kit B30, 3 standard pads, 1 clamp ring, 1 transport case	1 slim insert 90°, 1 carbon-fibre brush, 1 pad, 1 clamp ring, 1 transport case
Order no.	54D338	54D238	54D086

SURFOX LIQUID

Electrolytes for cleaning, polishing and neutralizing

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



SURFOX-H

Standard formula

- ▶ 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



G10092 100mL tube, PU:6 x 100 mL
G00592 5L jerrycan

SURFOX-T

High-performance formula

- ▶ 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 100mL tube, PU:6 x 100 mL
G00191 1L bottle, PU:12 x 1 L
G00591 5L jerrycan
G02091 20L jerrycan
G20091 200L plastic drum
Hazard warnings: Skin Corr. 1B, Met. Corr. 1

SURFOX-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 1L bottle, PU:10 x 1 L
A00557-25 5L jerrycan
A02057-25 20L jerrycan

THE E-NOX RANGE

Stainless steel cleaner

These cleaners are ready for use and ideal for smooth stainless-steel surfaces. They are for manual applications and solvent-free or VOC-reduced.

Occupational health and safety and the environment are of primary importance for these cleaners; they are **free from hydrofluoric and nitric acid**.



E-NOX Care

- Maintenance oil and long-term protection for stainless steel (indoors and outdoors)



B50019 500ml bottle with trigger

PU: 20 x 500 ml (1 box)

B00519 5L jerrycan

B02019 20L jerrycan

Hazard warnings: Asp. Tox. 1, Eye Irrit. 2

E-NOX Shine

- Water-based and alkaline
- Fast-drying
- Silicone-free
- Suitable for the food industry



A50170 500ml PET bottle with trigger

PU: 20 x 500 ml (1 box)

A01070 10L jerrycan

A02070 20L jerrycan

A20070 200L plastic drum

E-NOX Clean

- Water-based, acidic
- Viscous, with long-lasting foam



A00141 1000ml plastic bottle

PU: 12 x 1000 ml (1 box)

A01041 10L jerrycan

A02041 20L jerrycan

A20041 200L plastic drum

Hazard warnings: Eye Dam. 1,

Skin Irrit. 2, Met. Corr. 1

E-NOX-I

- Water-based, acidic
- Ultra-fine abrasive materials guarantee excellent cleaning



A00192 1kg plastic bottle

PU: 12 x 1 kg (1 box)

A00592 5kg jerrycan

A02092 20kg jerrycan

Hazard warnings: Eye Irrit. 2,

Skin Irrit. 2, Met. Corr. 1

The E-NOX cleaners for stainless steel surfaces **remove** mineral deposits, rust, oxidation, and heat tinting, in certain cases also fingerprints and limescale.

From: stainless steel, steel, tiles, aluminium, and plastics; in certain cases, also from zinc-coated surfaces and non-ferrous metals.

FIELD OF USE: food industry, metal processing/CNC, automotive, machine maintenance, etc.

AUTRASYS

Application system

The efficient, fast and safe way of applying cleaners and release agents for welding.

The Bio-Circle application system makes the cleaning of medium-sized and large surfaces easier. Wherever the quantity from a spray bottle won't suffice, and wherever operators need to be particularly protected from fatigue, that's where the application system proves its strengths. It is connected directly to either the jerrycan or the drum. With the aid of the AODD pump, the fluid is pumped from the tank and can then be applied efficiently to the surface.

Ideally suited for the Bio-Circle cleaners and release agents for welding.

- ▶ Time-saving because of large-area application
- ▶ Comfortable working, also overhead
- ▶ Eco-friendly – conventional compressed air as a propellant
- ▶ High efficiency thanks to micro-fine spray mist – 3.7 m² per minute
- ▶ Low-maintenance operation thanks to AODD pump
- ▶ Adjustable output



Please note:
Observe occupational
limit values!

	AUTRASYS
Input pressure max.	6 bar
Hose length	5 m
Pump output max.	8 L/min
Spray gun nozzle size	1.5 mm
Order no.	G80001

Drum holder for AUTRASYS	
Order no.	G80001-01



STAINLESS-STEEL FOAM SPRAYERS

To cleanliness with stable foam

Air-powered foam sprayer with 3 m of pneumatic hose. Easy handling and safe working due to stainless-steel housing, safety valve and air pressure control.

For the application of water-based, foaming cleaners, pH 2 – 12, such as FOR CLEAN V, CB 100.



- ▶ Air pressure: 8 bar max.
- ▶ Adjustable compressed air flow
- ▶ With handle and castors
- ▶ Efficiency: 7.3 m² per minute

G84001 Stainless-Steel Foam Sprayer 24 L

Applying cleaner with compressed-air foam lance



AIR FORCE

Rethink for a change!

Sustainability with the refillable spray bottle

Air Force is a refillable aluminium spray bottle – the best friend of any foamless cleaner!

'From jerrycan to bottle' is the new thinking in manual surface cleaning



Spray over a large area – flood with pinpoint accuracy

RECOMMENDED PRODUCTS, foamless and non-labelled: AF Clean, E-Weld 2, FT 100, GS 200, et al.



With compressed air + cleaner you dispense with flammable propellants!

- ▶ Unscrew bottle – fill in cleaner – screw down – top up with compressed air
- ▶ Nebulize or flush at the touch of a button: fine spray mist for large areas
- ▶ Precise, reliable, overhead: flushing and rinsing with a precision capillary tube
- ▶ Sustainable: refillable, suitable for many applications
- ▶ Effective ß 650 ml capacity

Refill – sustainably good!

FIELD OF USE: automotive, metal/CNC, everywhere in maintenance; pre-treatment and final cleaning, cleaning of large surfaces, components such as engine blocks with narrow gaps, overhead work and much more.

APPLICATION: To top up with compressed air, a tyre inflator with adapter (for passenger cars) is necessary. Recommended pressure: up to 6.3 bar

H65000 Aluminium spray bottle

H65010 Bottleneck incl. Valve and suction tube

H65050 StarterKit consisting of:

Aluminium spray bottle, tyre inflator,

3 L jerrycan of AF Clean, drain tap for 3 L

H65060 Tyre inflator

Unscrew bottle – fill in cleaner – screw down – top up with compressed air



ACCESSORIES:



Tap

H00003 for 5 L and 10 L jerrycans

H00004 for 20 L and 30 L jerrycans

H00015 for 200 L plastic drum, ¾" incl. adapter



Stainless steel hand-operated pump

H00006 for 200 L plastic drum

(discharge 0.6 L hoist)

2" standard drum thread



Plastic hand-operated pump

H00007 for 200 L plastic drum

(discharge 0.3 L hoist)

2" standard drum thread

incl. thread adapter

and 1 m hose



HDPE bottle with trigger

H00001 500 ml, spray nozzle green/white

H00101 1000 ml, spray nozzle green/white



rPET bottle with trigger

H00033 500 ml, spray nozzle green/white



Spray nozzle

H50012 with plastic nozzle green/white

for 500 mL HDPE/PET bottle

H00112 with plastic nozzle green/white

for 1000 mL plastic bottle



Pressure pump-action spray bottle

H10001 1.5 l



Jerrican cap spanner/bung wrench

H00016 Jerrican cap spanner

for both DIN 51 and DIN 61,

plastic, colour: green

H00030 Bungwrench, metal,

for 200 L drums



Dosing pump and wall bracket

H00011 Dosing pump incl. wall bracket

for 3 L bottle Hand Cleaning Cream

H00012 Dosing pump

for 3 L bottle Hand Cleaning Cream



Foam sprayer

H10003 1.5 l



Nature Boost –

optimal performance, employee protection and reduction of environmental impacts. Successful cleaning in the industry with the power of Nature. Nature Boost cleaners are based on renewable raw materials. They stand out for their excellent dissolving powers, especially with strong greases, oils, adhesives as well as paint and inks. What makes Nature Boost even more impressive is that it stands for non-combustible, VOC-free, and non-labelled products.



VOC-free, VOC-reduced

The European VOC Solvents Directive (1999/13/EC) aims to considerably reduce the use of solvents and VOC emissions into the environment, thus protecting human health. In the development and manufacturing of our products we pay close attention to developing and manufacturing VOC-free or VOC-reduced products. In plenty of applications, the water-based Bio-Circle products can replace solvents completely.



Non-labelled

With the aid of efficient systems and non-labelled products we succeed in optimizing the processes at our customers'. The cleaning quality is maintained although the cleaning is done without labelled products. The laborious handling of hazardous substances is obsolete. HAZMAT storages, HAZMAT trainings, and the preparation of operating instructions are a thing of the past. The employees' health and the environment are protected. Even trainees and apprentices are allowed to handle the products.



NSF – Cleaning in the foodstuffs industry

The NSF-certified water-based Bio-Circle cleaners are completely miscible with water, and because of their residue-free rinsability they are suitable for applications in the foodstuffs industry according to sec. 31 LFGB (German Food, Consumer Goods and Feed Code).



Water-miscible

Many of our cleaners are concentrates. They are easy to mix with water and hence very economical. Please make sure the mixing ratio corresponds to the application and the contamination.



Clean Blue – for low-temperature cleaning only

The Bio-Circle low-temperature cleaners – Clean Blue – have been developed for mechanical and manual use. They save energy and efficiently remove strong contaminations already at ambient temperature.



Ready to use

These cleaners are applied ready for use. Depending on the cleaner, their application is manual or mechanical. The user is relieved of one work step, as calculating the mixing ratio is no longer necessary.

Our delivery service (Germany)

Delivery time: approx. 2–3 days.

Delivery:

Free domicile incl. packaging for order values of € 600.00 or higher.

For order values (OV) under € 600.00, we invoice the following service charges (SC):

Service charge: OV up to € 100.00	SC of € 16.50
OV up to € 200.00	SC of € 19.50
OV up to € 600.00	SC of € 22.50

Collection by the customer:

You are welcome to pick up your products Monday thru Thursday between **8:00 a.m. and 4:30 p.m.** and Friday between **8:00 a.m. and 3:00 p.m.** directly from our production facilities in Gütersloh. Please call ahead on **+49 (0) 5241 9443 0**, so that we can prepare your order for pick-up.

Payment terms:

Our invoices are payable within 8 days with a 2 % discount, or within 30 days net without deduction. Upon request, we will debit the invoice amount from your account within 8 days. In that case you will receive a 3 % discount. For this, we require a direct debit authorization from you.

Reservation of title:

All items delivered by us shall remain our property until all present and future claims arising from the business relationship with the customer have been settled in full.

All prices are subject to VAT at the applicable rate.

A STRONG GLOBAL PARTNER:



- ▶ CLEANING
- ▶ PROTECTING
- ▶ LUBRICATING
- ▶ WELDING



VERSPANINGSTECHNIEK



REINIGINGSTECHNIEK



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