

# MagicCleaner 150/300



# Cleaning of Stainless CrNi-Steel

Different processes and the advantages of Magic Cleaning.

## Cleaning processes

- Pickling
- Sand-blasting
- Grinding
- **Electrochemical cleaning**

## Advantages of Magic Cleaning

- Economical cleaning of stainless steel surfaces
- Dosed electrolyte consumption
- Cleaning and passivating in one
- No subsequent passivation needed

**MAGIC**  
**CLEANER**

# Applications of Electrochemical Cleaning

- Apparatus and plant construction  
(Institutional kitchen, food industry and swimming pools)
- Portal construction  
(Stair railings and Design elements)
- Maintenance and repair



# Why Cleaning & Passivating is Important



## Characteristics of stainless CrNi-steel

### Why is it corrosion resistant?

#### Passivity of the metal surface

Chromium content above 12,5%  
Carbon content below 1,2%

Formation of a thin,  
corrosion-resistant layer



## Stainless CrNi-steel & heat impact during welding

### What happens during welding?

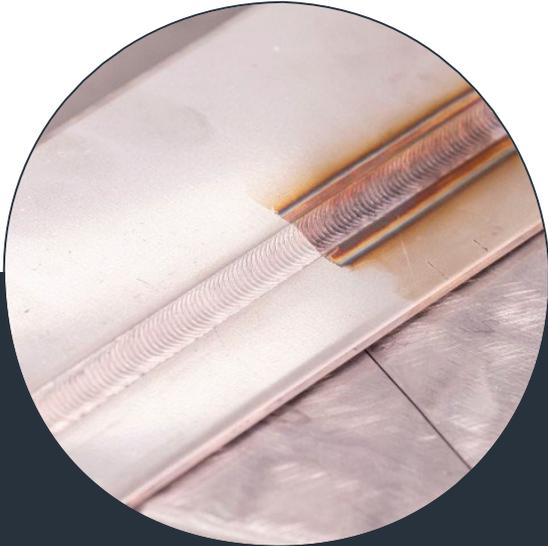
#### Passive layer will be destroyed

Tarnishing color prevents the  
oxygen to reach the surface

Reduction of the corrosion  
resistance of the material



# 3 Different Processes



## Cleaning (AC-Current)

The electrochemical **cleaning** process uses AC-current and electrolyte liquid to remove tarnish after welding.



## Polishing (DC-Current)

Electrochemical **polishing** is a process that removes part of the base material from the workpiece and brightens the weld seam.



## Printing

For **marking** stainless steel permanently you need in addition:

- Printing foil
- Special electrolyte liquid

# MagicCleaner 150

## Highlights

- Light weight 4,5kg
- Ready to use in 2 steps

## Existing certifications

CE, UKCA, UL/CSA, CCC, EAC, AUS/NZ

## Small cleaning torch

- Manual electrolyte dosing
- Mountable 0,1 liter tube

## Easy to use

- Select the right process
- Power adjustment

## Housing

- Proven housing
- IP23-Protection

## Torch holder

For easy pad mounting



# MagicCleaner 300

## Highlights

- Ready to use in 3 steps
- Integrated tank (1,8 liter)
- Torch with compressed air blowing system

## Powerful cleaning torch

Integrated compressed air blowing system  
(Patent)

## Easy to use

- Select the right process
- Power adjustment
- Integrated tank (1,8 liter)
- Liquid pump (manual/automatic)

## Existing certifications

CE, UKCA, UL/CSA, CCC, EAC, AUS/NZ



## Inverter technology inside

- Weight reduction
- Energy saving

## Housing

- Proven housing
- IP23-Protection

 MagicCleaning

 MagicPolishing

 MagicPrinting

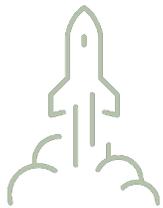
# Product Benefits



Ready to use in max. 3 steps



3 processes are available



Inverter based cleaning technology



# Technical Data

	Magic Cleaner 150	Magic Cleaner 300
Mains voltage -15 / +10%	230V / 50/60 Hz or 100 - 110V / 50-60 Hz	230V / 50/60 Hz or 100 - 110V / 50-60 Hz
Mains fuse	6,3 A	10 A
Maximum primary power	500 VA	1000 VA
Output current	0 - 15 A	0 - 30 A
Output voltage	0 - 30 V	0 - 30 V
Output power	450 W	900 W
Open circuit voltage	30 V	30 V
Liquid dosing rate	Manual	1 - 3,6 l/h
Liquid tank	100ml Tube	1,8 l
Protection class	IP 23	IP 23
Dimensions l x w x h	365 / 130 / 285 mm	558 / 210 / 369 mm
Weight	4,5 kg	14 kg

# Main Differences

	NEW		OLD
	MagicCleaner 150	MagicCleaner 300	MagicCleaner standalone
Cleaning AC	x	x	x
Polishing DC	x	x	x
Printing (AC & DC)	x	x	x
Integrated pump		x	x
Output current	15A	30A	20A
Cleaning torch MC150	x	x	
Cleaning torch MC300		x	
Cleaning liquid (capacity)	100ml tube	1,8l	1,5l
ToolCase 60	x		
ToolCase 120		x	
Trolley available		x	

# Variants in Detail



## MagicCleaner 150

Mains plug EF	4,075,253
Mains plug CN	4,075,253,005
np - without mains plug	4,075,253,008

## MagicCleaner 150 MultiVoltage

Mains plug B	4,075,253,631
np - without mains plug	4,075,253,638



## MagicCleaner 300

Mains plug EF	4,075,254
Mains plug CN	4,075,254,005
np - without mains plug	4,075,254,008

## MagicCleaner 300 MultiVoltage

Mains plug B	4,075,254,631
np - without mains plug	4,075,254,638

# Overview Package MC 150



Torch holder MC150  
42,0510,0601



Adapter for brush 35x63mm  
42,0510,0603



Ground cable 10mm<sup>2</sup> 3m  
42,0510,0599



Current cable 2m  
42,0510,0602



Cleaning torch MC150  
42,0510,0600



Graphit-electrode 22mm  
42,0510,0500



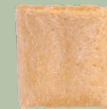
Graphit-electrode 10mm  
42,0510,0506



Hex-wrench 2,5mm  
42,0510,0376



Cleaning-/Polishing felt 22mm  
42,0510,0501



Cleaning-/Polishing felt 10mm  
42,0510,0507



Carbon brush MC150  
42,0510,0510



Connection part MC150  
42,0510,0511

# Overview Package MC 300



Torch holder  
MC150  
42,0510,0601



Adapter for  
brush 35x63mm  
42,0510,0603



Carbon brush  
MC150  
42,0510,0510



Connection  
part MC150  
42,0510,0511



Ground cable  
10mm<sup>2</sup> 3m  
42,0510,0599



Torch holder  
MC300  
42,0510,0651



Hex-wrench  
2,5mm  
42,0510,0376



Carbon brush  
small MC 300  
42,0510,0529



Connection  
part MC 300  
42,0510,0531



Graphit-electrode  
22mm  
42,0510,0500



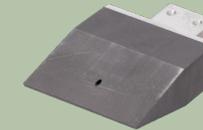
Graphit-electrode  
10mm  
42,0510,0506



Cleaning torch  
MC150  
42,0510,0600



Tungsten-electrode  
22mm  
42,0510,0520



Graphit-electrode  
45mm  
42,0510,0524



Mounting ring  
19x23x10  
42,0510,0514



Sealing ring  
3x1mm  
42,0510,0722



Cleaning-/Polishing  
felt 22mm  
42,0510,0501



Cleaning-/Polishing  
felt 10mm  
42,0510,0507



Current  
cable 2m  
42,0510,0602



Fast Bond  
Felt 22mm  
42,0510,0521



Big bond felt  
93x46  
42,0510,0525



Mounting ring  
36,81x3,53  
42,0510,0532

# Torch Attachments



## Graphite electrode

Using for linear movement:

- Linear welds
- Corner joints
- T-joints
- Butt welds



## Tungsten electrode

Using for linear movement:

- Linear welds
- Corner joints
- T-joints
- Butt welds



## Carbon fiber brush

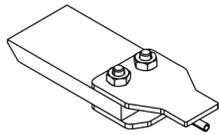
Typical applications:

- Welded pipes,
- Undercuts,
- Very sharp corners
- Complex shapes

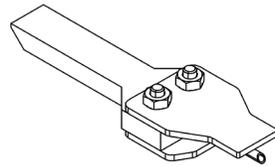
# Cleaning Torch MC 150

 MagicCleaning

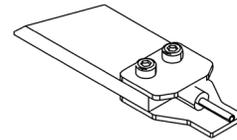
 MagicPolishing



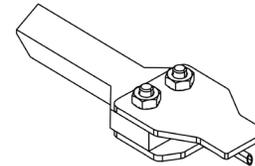
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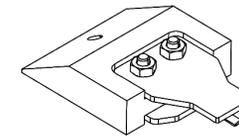
42,0510,0506



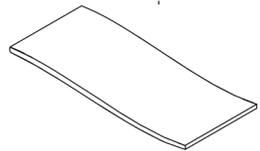
42,0510,0502



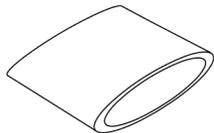
42,0510,0508



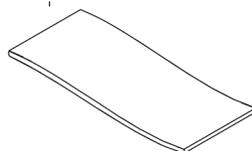
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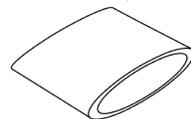
42,0510,0521



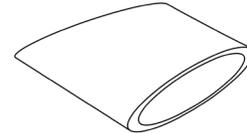
42,0510,0501



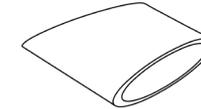
42,0510,0535



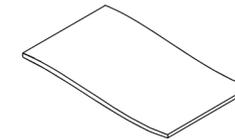
42,0510,0507



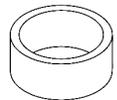
42,0510,0503



42,0510,0509



42,0510,0505



42,0510,0514  
**PTFE Ring**



42,0510,0513  
**PTFE Ring**

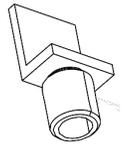


42,0510,0512

Accessories used to clean/polish small workpieces

Accessories used to clean/polish large workpieces

 MagicCleaning



42,0510,0511



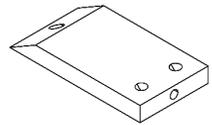
42,0510,0510

**Carbon brush** is used to clean **corners** or areas **difficult to reach** (tubes).

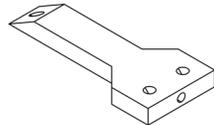
# Cleaning Torch MC 300

 MagicCleaning

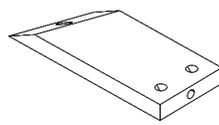
 MagicPolishing



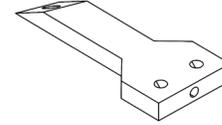
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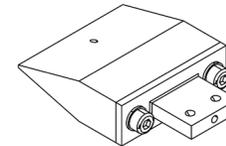
42,0510,0526



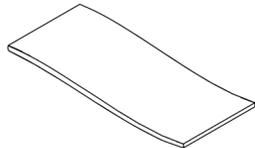
42,0510,0522



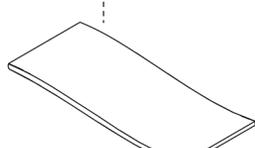
42,0510,0528



42,0510,0524



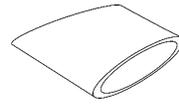
42,0510,0521



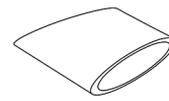
42,0510,0535



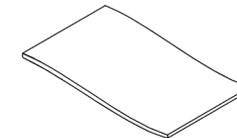
42,0510,0507



42,0510,0503



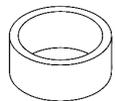
42,0510,0509



42,0510,0525

**FAST BOND** is mostly used pad. This pad is made with very resistant material. For both cleaning and polishing.

mostly used for **cleaning operations**.



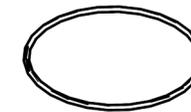
42,0510,0514

**PTFE Ring**



42,0510,0513

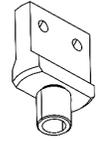
**PTFE Ring**



42,0510,0532

Accessories used to clean/polish **large workpieces**.

 MagicCleaning

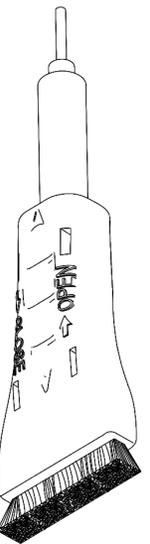


42,0510,0531



42,0510,0529

**Carbon brush** is used to clean **corners** or areas **difficult to reach** (tubes).



42,0510,0530

**Flat Carbon brush** is used to clean **large workpieces**.

# Print Set (Optional)

For printing on stainless steel, the print set (42,0510,0540) is required:



Existing print foils can still be used – see pricelist



# Overview Liquids

## Cleaning/Polishing red



### Using for:

- Intensive & highly demanding cleaning
- Fast cleaning
- Polishing

### Classification:



## Cleaning blue



### Using for:

- Normal Cleaning operation
- Lower CLP classification
- Easier to store and transport

### Classification:



## Printing



### Using for:

- Printing operation

### Classification:

Printing white:



Printing black:



## Neutralizer



### Using for:

- Neutralizing the surface after electro-chemical process

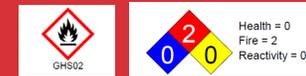
### Classification:

EU: -

USA:



MX,BRA,UK:



# Overview Liquids

## Cleaning/Polishing Liquids MagicCleaner 150

42,0510,0380	Cleaning/Polishing red 0,1L MC 150
42,0510,0381	Cleaning blue 0,1L MC 150

## Cleaning/Polishing Liquids MagicCleaner 300

42,0510,0382	Cleaning/Polishing red 1,0L MC 300
42,0510,0384	Cleaning/Polishing red 5,0L MC 300
42,0510,0387	Cleaning blue 1,0L MC 300
42,0510,0388	Cleaning blue 5,0L MC 300

## Neutralization MagicCleaner 150/300

42,0510,0385	Neutralizer 1,0L MC 150/300
42,0510,0386	Neutralizer 5,0L MC 150/300

## Print Liquids MagicCleaner 150/300

42,0510,0390	Print Electrolyte Black 0,1L
42,0510,0391	Print Electrolyte White 0,1L

More information you will find in the safety datasheets ...



[www.fronius.com/magiccleaner](http://www.fronius.com/magiccleaner)



# Additional Equipment

MC 300

MC 150



4,077,019

**TU Car 2 Easy**



4,101,229

**ToolBox 210**



42,0510,0283

**ToolCase 120**



42,0510,0234

**ToolCase 60**

Option: 4,101,128 **OPT platform**  
**Easy** – for additional working  
height

# Further Information ...



## Landing page

[www.fronius.com/magiccleaner](http://www.fronius.com/magiccleaner)



## Spare part catalogue

<https://spareparts.fronius.com/>



## Extend warranty

<https://warranty.fronius.com/>





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