

magnetic®

# Heating water treatment

The solution for the professional



magnetic® ...einfach besser

### magnetic GmbH & Co. KG

Am Richtbach 5  
74547 Untermünkheim  
Germany

Phone.: +49 7944 94199-0  
Fax.: +49 7944 94199-19  
info@magnetic-online.de  
www.magnetic-online.de

### Managing Shareholder

Michael Bader  
VAT ID No.: DE 255 018 730  
Commercial Register No.: HRA 571362  
Registration Court: Amtsgericht Schwäbisch Hall

### Partnership with „Kinderglück“

The team around Michael Bader supports the foundation Kinderglück Dortmund e.V. financially and thereby helps disadvantaged children...



Qualitätsmanagementsystem  
ISO 9001

- Kundenorientierung
- Kundenzufriedenheit
- Fortlaufende Verbesserung
- System- bzw. Prozesswirksamkeit

ID 15 100 1810186

www.tuev-thueringen.de



# Our Team

By working with magnetic...

...you save time and money for you and your customer.

...you reduce complaints.

...your customers receive a high quality product standard.

...your employees will become professionals when it comes to water.

...your employees learn to communicate with customers in the best possible way.

...your employees are motivated by easy-to-understand products.

→ This increases your good reputation, your sales and your profit!

→ This increases the satisfaction of your customers!

# Heating water

## Heating water – properly treated

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- Provides safety
- Ensures warranty
- Protects against damage and complaints
- Maintains efficiency

## But what does “properly treated” mean?

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The German guideline VDI2035 defines the water quality for heating systems. In order to make water non-corrosive electrical conductivity, pH value and oxygen need to be managed.

**Following values are binding:**

Electrical conductivity < 100  $\mu\text{S}/\text{cm}$

pH 8,2-10 (aluminum 8,2-8,5)

Oxygen < 0,02mg/ l

According to it, in the most cases, water softening is not sufficient.

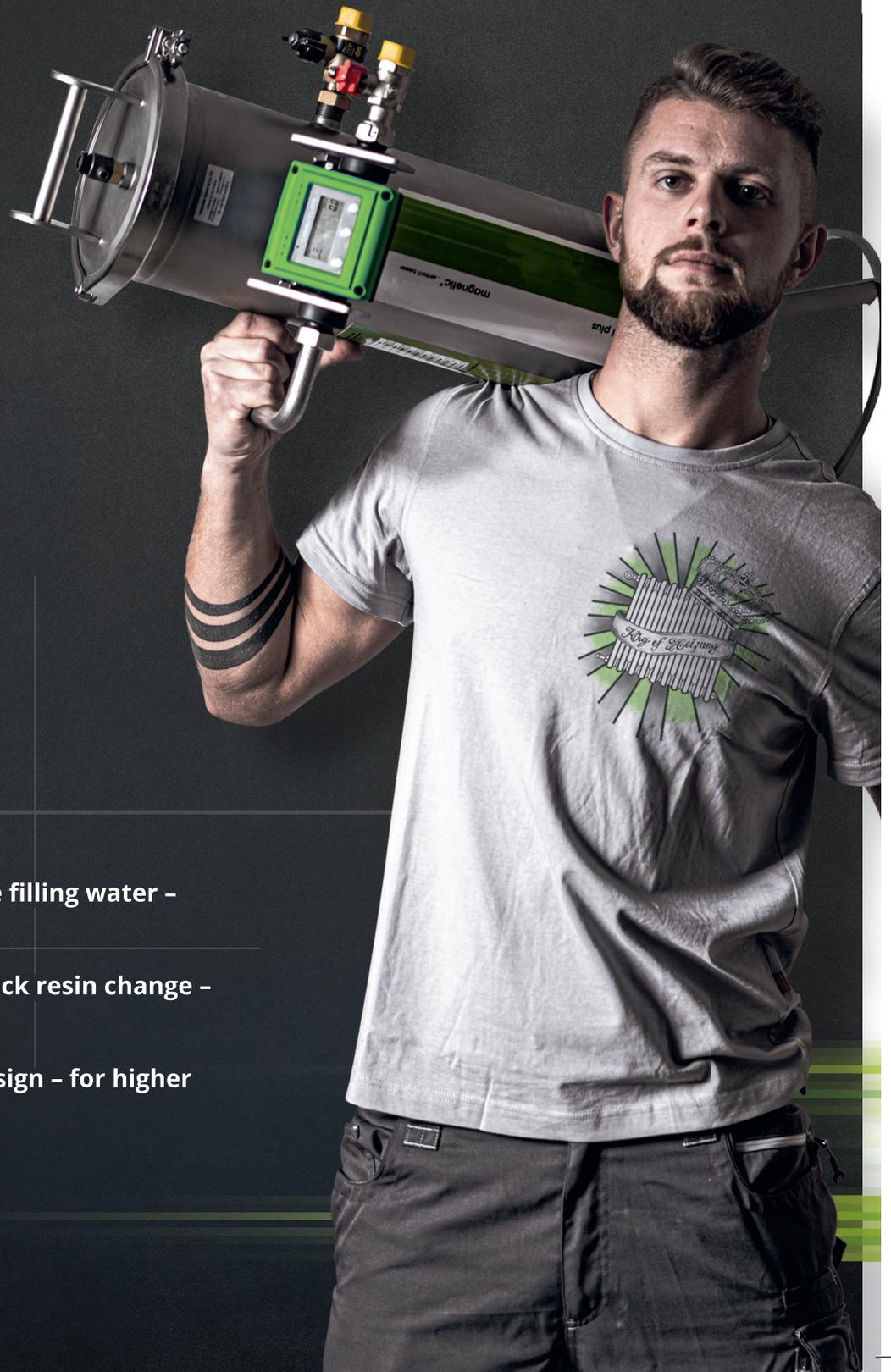
The VDI (Verein Deutscher Ingenieure) (English: Association of German Engineers) is the largest engineering association in Western Europe. The association promotes the advancement of technology and represents the interests of engineers and of engineering businesses in Germany. If the heating water does not meet the standards, this can jeopardize warranty.



# The filling stations

## Heating water – treated quickly and easily

To make everyday business easier, we offer solutions tailored to your needs. From the small and light filling station to the profi device for large systems, we always have the right fit for you.



## Your benefits

- + Precise monitoring of the filling water – for more security
- + High filling speed and quick resin change – for efficient work
- + Robust stainless steel design – for higher longevity

## Which filling station suits you?

	basic mobil mini	basic mobil plus	profi mobil plus
Resin fill quantity	6,5 l	12,5 l	25 l
Filling rate up to	420 l/h	1000 l/h	1500 l/h
Filling capacity at 20°dH/35,6°fH	500 l	1200 l	2400 l
Weight (including resin)	10 kg	21 kg	60 kg
Measuring computer, inlet			+
			

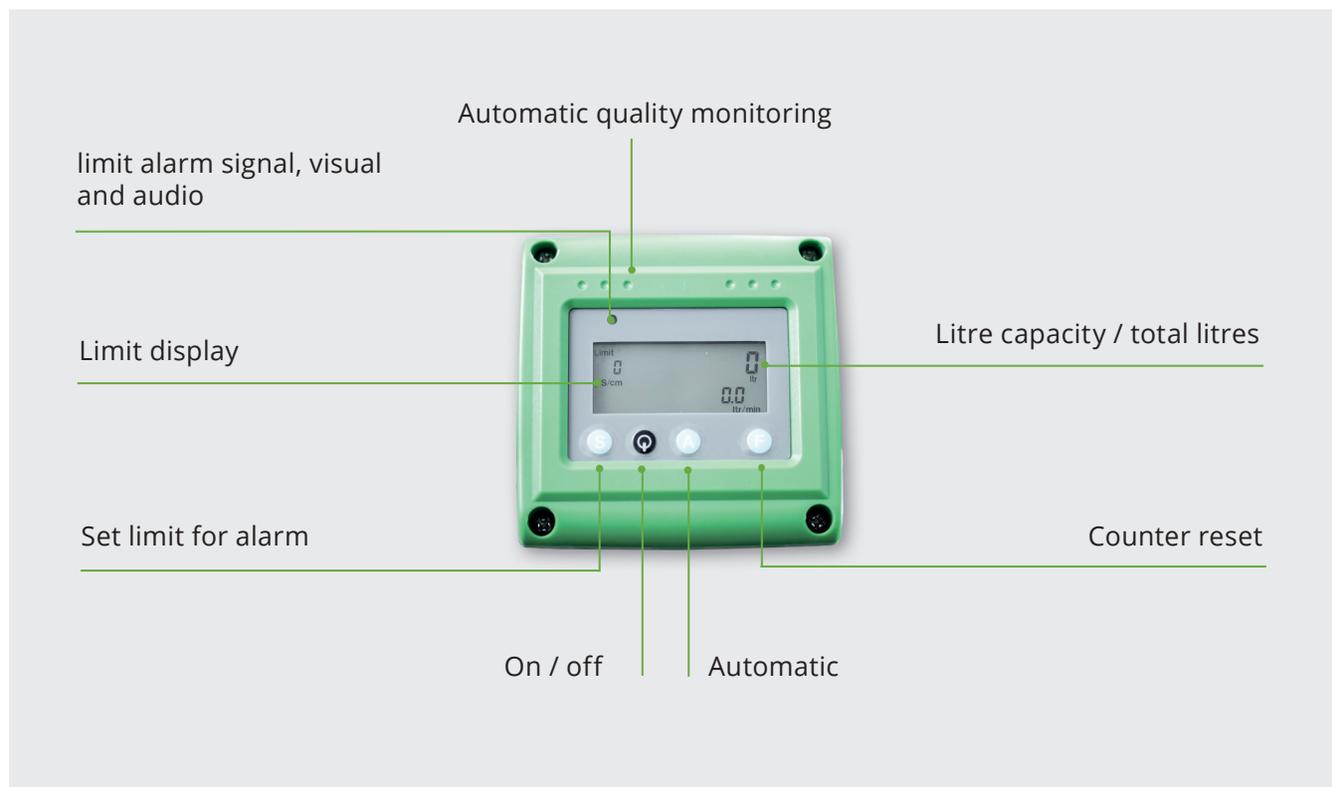
High quality -  
quick and easy  
demineralization

**magnetic**<sup>®</sup> ...einfach besser

# The measuring computer

## Safe and easy monitoring

The measuring computer ensures automatic and complete control of the heating water. That way you always know which water quality you are filling into the heating system. That gives you security.



## Circulation demineralization

With our measuring computer you are always able to demineralize the heating water during operation. The circulation demineralization enables you to meet the requirements of any heating system.



Magnetische Servis-Service GmbH  
Wasser- & Abwasser-Technik  
Lindendamm 11  
D-42699 Solingen

Wasser-Wert	Wasser-Parameter	Wasser-Parameter
75	1,7 / 1,8	
100	1,8 / 1,9	
125	1,9 / 2,0	
150	2,0 / 2,1	
175	2,1 / 2,2	
200	2,2 / 2,3	
225	2,3 / 2,4	
250	2,4 / 2,5	
275	2,5 / 2,6	
300	2,6 / 2,7	
325	2,7 / 2,8	
350	2,8 / 2,9	
375	2,9 / 3,0	
400	3,0 / 3,1	
425	3,1 / 3,2	
450	3,2 / 3,3	
475	3,3 / 3,4	
500	3,4 / 3,5	
525	3,5 / 3,6	
550	3,6 / 3,7	

Kapazität magnetische Induktionsanlage pro Tag  
100 / 100  
200 / 100  
300 / 100  
400 / 100  
500 / 100  
600 / 100  
700 / 100  
800 / 100  
900 / 100  
1000 / 100

magnetic Servicetelefon: +49 7564 5411

Demineralization  
during operation

# The refill stations

## For safe and simple refilling

Refilling is just as important as filling itself. Incorrect water feed can lead to damage and complaints. Here you will find the right option for every requirement.

## Your benefits

- + Extremely low operating costs
- + Available in different sizes – for every requirement
- + 100% control with the measuring computer
- + Quick and easy resin replacement



## The perfect solution for any job

	NF 2	NF 6	NF 12	NF 25
Resin fill quantity	2,7 l	6,5 l	12,5 l	25,0 l
filling rate up to	300 l/h	420 l/h	1000 l/h	1500 l/h
Filling capacity at 20°dH/35,6°fH	225 l	500 l	1200 l	2400 l
Weight (including resin)	6,5 kg	9,5 kg	23 kg	53,5 kg
				

## Additional equipment

- Backflow preventer BA DN 20
- Automatic report / shutdown, when the capacity is exhausted
- Refill combination - auto-refill in case of pressure loss

Everything  
included - ready  
for installation

# The demineralization cartridge 300

## The convenient alternative

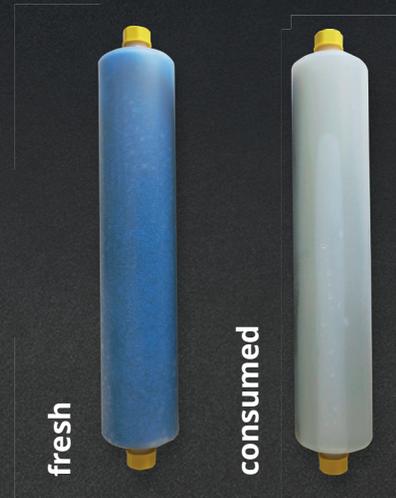
Often only small amounts of water have to be topped up, for example during a service or when replacing radiators. For these cases we developed the magnetic demineralization cartridge 300 – convenient on the road and to perform refill services for the final customer.



## Your benefits on a glance

Based on the color change in the cartridge, it can be seen at a glance if the capacity is exhausted.

- + Excellent value for money
- + Ideal for customer service
- + No measuring device for monitoring needed
- + Varied use in the household (steam iron, window cleaning)



## Accessories – for your end customer

With the magnetic assembly-set for the demineralization cartridge 300, you can mount the cartridge in the boiler room. That way there is always access to fully demineralized water for water feed or consumption in the household.

- + Cartridge always ready-for-use by wall-mounted installation
- + Simple replacement of "old" with "new" cartridge



Perfect  
for  
service

**magnetic**<sup>®</sup> ...einfach besser

# The premium mixed bed resin

## When it comes to resin quality we don't compromise!

Not all resin is created equally. You cannot tell the quality of a mixed bed resin by its appearance. We therefore examine every delivery in the laboratory to determine whether the resin meets the high requirements. The resin is only dispatched when it has passed this test.

The quality of the resin determines the quality of the heating water and thus the longevity and efficiency of the heating system. It is therefore very important to not accept any compromise in respect of the resin quality.

## Why magnetic premium mixed bed resin?

- + **Vacuum-packed for retention of the capacity**
- + **Optimum mix ratio**
- + **Supports self-alkalization (pH value increase)**
- + **Meets the current guidelines and standards**
- + **Disposal with domestic waste**
- + **Certification verifiable via QR code**



A mixed bed resin is a 2-component resin with anions and cations. It removes salts and scale formers from the water and thus lowers the electrical conductivity ( $\mu\text{S}$ ). The mix ratio and the quality of the components are crucial for the quality of the heating water.

**Vacuum  
packed -  
So that quality  
remains!**

# We don't just talk about quality – we make it visible!

With the QR code you can see the quality of the mixed bed resin at any time. Thus this gives you the security to always deliver first-class results.

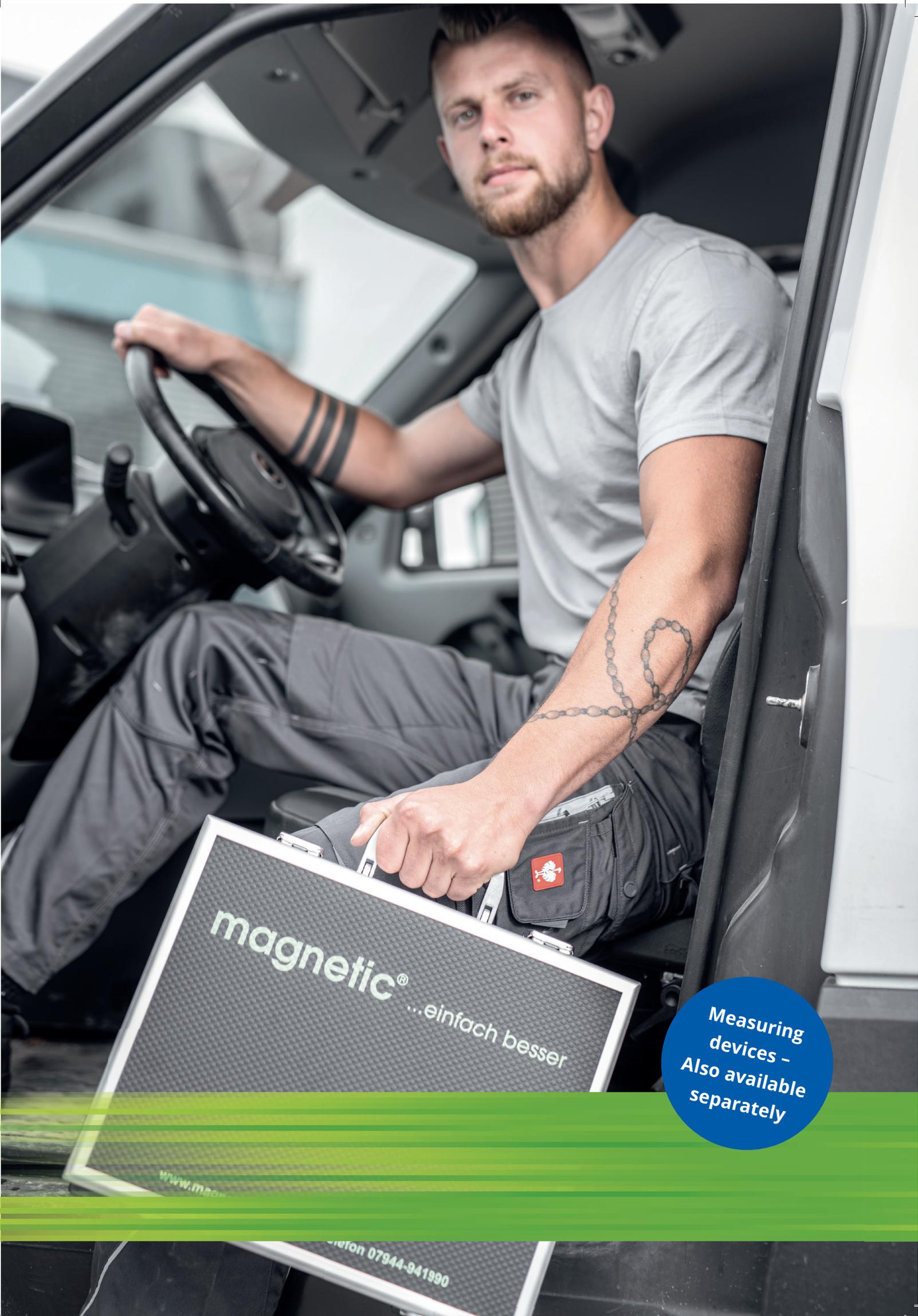


# The measuring-kit

Trust is good - control is better

Heating water can have many different facets. But what's really inside? With our measuring-kit you have all the measuring devices you need for the analysis of heating water. This means that you can quickly and easily carry out a heating water analysis at the customer's site with professional measuring devices and take immediate action.





magnetic® ...einfach besser

Measuring devices -  
Also available separately

www.imb...

Telefon 07944-941990

# The heating water filter mobil

## For quick and easy filtering

Sludge accumulations and magnetite deposits are not uncommon in heating systems. However, a change of the heating water is often too time-consuming. In this case, the heating water filter mobil comes into play. Installed in the bypass during operation, all particles  $< 1\mu\text{m}$  are filtered out and magnetite is separated by a strong neodymium magnet.

### Before



### After



# Ideal for cleaning of existing installations

- + Filters all particles > 1µm reliably
- + Can be used during ongoing heating operation
- + Device works independently and turns off automatically

- + Ideal in combination with a filling station in circulation procedure (basic mobil plus or profi mobil plus)





# The Cleaner

## Time to get rid of the sludge!

The efficiency of the heating system is ranked first for most customers.

Therefore it is not only important, that heat is generated efficiently, but that it is also transferred optimally.

Up to 20% of the generated energy can be lost through the sludge in the heating water. The whole system should therefore always get refurbished, not only the heat generator.



## Your benefits

- + **Efficient heat transfer to every room**
- + **Gently removes deposits - Acid-free**
- + **One container sufficient for up to 1000l of system water**
- + **Can be drained into the sewage system with rinsing water**
- + **Can be used during ongoing operation - exposure time minimum 7 days**

# One stop shopping

We offer a complete system for water treatment.

## Analyzing

... with professional equipment from magnetic



- Measuring computer
- Portable analysis kit
- Measuring instruments

## Cleaning and filtering

... during operation



- Cleaner
- Heating water filter mobil

## Filling and circulation demineralization

... with our magnetic filling stations



- basic mobil mini
- basic mobil plus
- profi mobil plus
- Mixed bed resin premium

## Refilling

... with magnetic refill station for every need



- Refill station 2 plus
- Refill station 6 plus
- Refill station 12 plus
- Refill station 25 plus
- Demineralization cartridge 300

## Regulating

... with magnetic heating water regulators



- Free and dissolved gases
- Regulates the pH value
- Filters magnetite sludge

Something  
for  
everyone!

**magnetic GmbH & Co. KG**

Am Richtbach 5  
74547 Untermünkheim  
Germany

Phone.: +49 7944 94199-0  
Fax.: +49 7944 94199-19  
info@magnetic-online.de  
www.magnetic-online.de

**Managing Shareholder**

Michael Bader

VAT ID No.: DE 255 018 730

Commercial Register No.: HRA 571362

Registration Court: Amtsgericht Schwäbisch Hall

**Cost efficient heating**

Your magnetic representative will be  
happy to advice you: