

# Dürr Dental Hygowater® Just to make sure

Legally secure water hygiene for treatment units



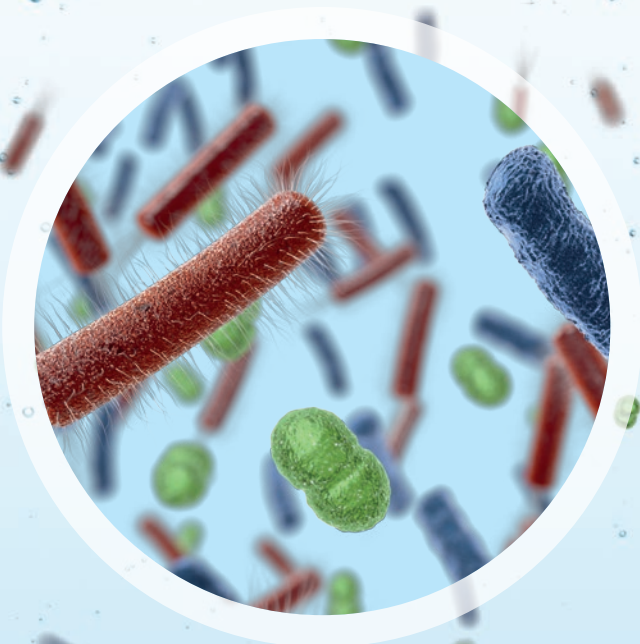
COMPRESSED AIR  
SUCTION  
IMAGING  
DENTAL CARE  
HYGIENE

# Process water as a safety hazard: Biofilms, legionella and other germs

Wherever there is water there will be living things, and these living things often go unnoticed in the form of microorganisms and biofilms. For the proprietors of dental practices, the potential hazards that can be present in water pose a risk that must not be underestimated, because it is they who bear the responsibility for the quality of the drinking water in treatment units.

According to the 'Infection Prevention in Dentistry / Hygiene Requirements' notification issued by the Commission for Hospital Hygiene and Infection Prevention (KRINKO for short) at the Robert Koch Institute in Germany, the process water supplied to treatment units must meet quality requirements for drinking water. Even when compliant with this standard, the water supply systems used for treatment units are often still populated by a variety of microorganisms. These microorganisms colonise

and multiply to form a biofilm which attaches itself to the surface of the interior walls of water supply systems. KRINKO also recommends a bacterial concentration of less than 100 colony-forming units per millimetre of water (100 CFU/ml). To rule out the possibility of infections caused by germ-laden water, the water needs to be treated before it is supplied to the dental unit. This is exactly where Dürr Dental comes in with Hygowater®.



# Hygowater® – Unique technology for legally compliant treatment

Hygowater® eliminates microorganisms from the process water used in dental units and provides long-lasting protection against biofilms forming inside lines. The water is filtered and disinfected by means of electrolysis. Hygowater® operates in full compliance with all legal requirements.

Keeping everything clean: Hygowater® combats microorganisms and is kind to the environment at the same time. The provisions of the German Drinking Water Ordinance (the requirement for minimisation, for example) are taken into consideration, as are the strict regulations of water hygiene directive 075-002 published by the Association of the Scientific Medical Societies in Germany or the 'free outlet' safety device specified as a requirement in DIN EN 1717/EN 1988-100.

Hygowater® works on the basis of a clever activation principle, not on treatment using disinfectants. As such, Hygowater® is easy to use, safe to handle, cost-effective and requires little maintenance. The uninterrupted reprocessing of the process water ensures that water of drinking water quality is continuously available and no additional sterilisation is required.



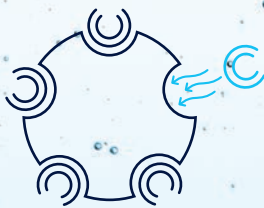
# High-tech process to fight particles and microorganisms

Hygowater® represents a unique combination of technologies. As part of a finely tuned process chain, particles are filtered out of the water concurrently and certain chemical compounds are adsorbed by activated carbon. Hygowater® uses electrolysis to convert the salt content of the water into a disinfectant hypochlorous acid. The last remaining germs are eliminated in a special reaction zone and a downstream ultrafilter filters the process water once again before it reaches the treatment unit.



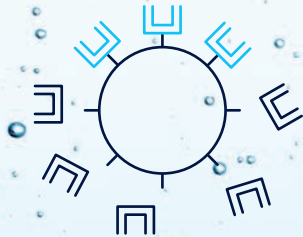
**1**  
**PRE-FILTER**

Holds back suspended matter and particles



**2**  
**ACTIVATED CARBON FILTER**

Adsorbs chlorine, pigments and odorous substances

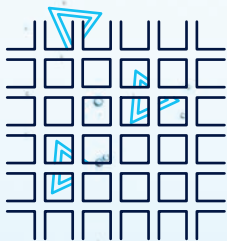
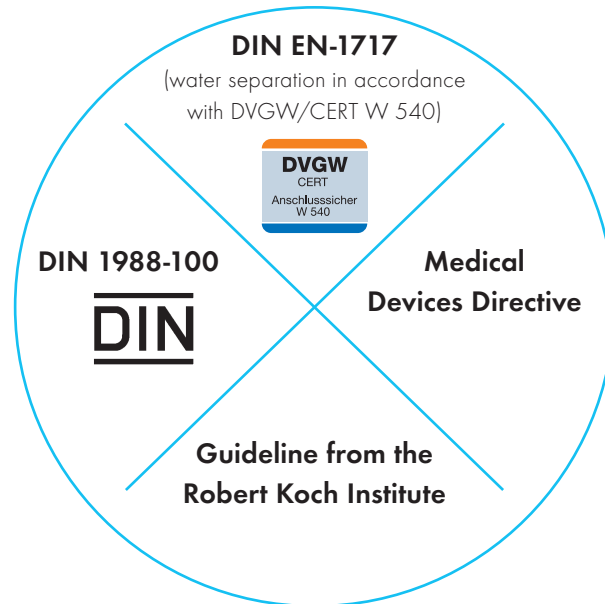


**3**  
**ION EXCHANGER**

Softens the water – protects lines and devices against calcification

Hygowater® has clearly demonstrated its potential impact. Hygowater® impressed independent testers when subjected to strict test conditions and criteria.

Minimum requirement for water  
in treatment units



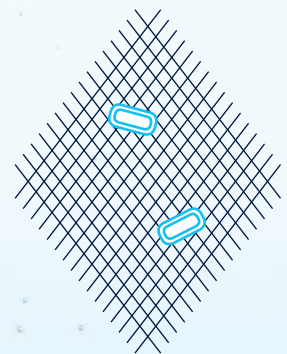
**4**  
**FINE FILTER**

Removes microparticles  
up to > 1 µm



**5**  
**ELECTROLYSIS**

Effective water disinfection  
by means of electrolysis



**6**  
**ULTRAFILTER**

Removes ultrafine particles,  
impurities and microbiological  
contamination

# One system for all possible scenarios

Dürr Dental's portfolio features a number of high-performance devices which support Hygowater® technology and are able to rise to the challenge of legally compliant and straightforward water hygiene. Hygowater®, Hygowater® Compact, Hygowater® Booster and Hygowater® Filling Station can offer the ideal solution based on the size of a practice or the equipment it uses.

## Key features:

- Unique combination of filtration and electrolysis
- Softens and filters process water
- Optimum disinfecting effect (< 100 CFU/ml)
- Minimises the risk of infection for both patients and therapists
- Prevents the formation of biofilms, removes biofilm presence with long-lasting effect
- Little maintenance is required
- Easy use and handling, low noise level
- Plug-and-play installation
- No handling of chemicals: complies with the requirement for minimisation set out in the drinking water ordinance
- DVGW certificate W 540



**HYGOWATER®**

Water treatment device with free outlet in accordance with DIN EN 1717 for up to 2 treatment units



**HYGOWATER® COMPACT**

Water treatment device for up to 2 treatment units



**HYGOWATER® BOOSTER**

Device module for Hygowater® / Hygowater® Compact, central supply of up to 6 treatment units



**HYGOWATER® FILLING STATION**

Device module for Hygowater® Compact, filling station for bottle systems

# Accessories

Dürr Dental offers a range of practical accessories for Hygowater®. They enable users to carry out specific processes for servicing and testing Hygowater® devices independently.



## **PREFILTER FOR HYGOWATER®**

Filter cartridge for filtering particles, chlorine and calcium carbonate from the water.

For Hygowater® and Hygowater® Compact.



## **ULTRAFILTER FOR HYGOWATER®**

Membrane filter for the ultrafiltration of particles, impurities and microbiological contamination from the water.

For Hygowater® and Hygowater® Compact.



## **ULTRAFILTER FOR HYGOWATER® BOOSTER**

Membrane filter cartridge set for the ultrafiltration of particles, impurities and microbiological contamination from the water.

For Hygowater® Booster.



## **CHLORINE TEST STRIPS FOR HYGOWATER®**

Test strips for measuring the concentration of free chlorine in the water.

Quick test for Hygowater® and Hygowater® Compact.

Package size: one package contains 50 test strips

# The technology at a glance

	Hygowater®	Hygowater® Compact	Hygowater® Booster	Hygowater® Filling Station
<b>Dimensions (H x W x D)</b>	45.2 x 16.6 x 43 cm	38 x 16.6 x 28 cm	45.2 x 17.6 x 43 cm	43 x 14.5 x 9.5 cm
<b>Weight</b>	5 kg	4.4 kg	6 kg	1.9 kg
<b>Electrical data</b>	110 V/230 VAC PE max. 368 W Standby mode: < 10 W	110 V/230 VAC PE max. 230 W Standby mode: < 10 W	110 V/230 VAC PE max. 78 W Standby mode: < 10 W	110 V/230 VAC PE max. 230 VA Standby mode: < 10 W
<b>Water line</b>	AD 8 mm hard pipe material	AD 8 mm hard pipe material	-	AD 8 mm hard pipe material
<b>Water inlet/outlet connection (push in)</b>	Ø 8 mm	Ø 8 mm	Ø 8 mm	Ø 8 mm (water inlet only)
<b>Inlet pressure</b>	1.5 - 6 bar (adjustable)	1.5 - 6 bar (adjustable)	-	-
<b>Outlet pressure</b>	2.6 - 2.9 bar	2.6 - 2.9 bar	6 bar	-
<b>Water flow rate</b>	max. 3 l/min	max. 3 l/min	approx. 4 l/min	approx. 1.6 l/min
<b>Conformity</b>	DIN EN ISO 13485, DVGW W540 (DIN EN 1717-AB), EN 60601- 1:2006 + A1:2012 and EN 60601-1-2:2007	Directive 93/42/EEC, DIN EN ISO 13485, DIN EN 1717-EA, EN 60601- 1:2006 + A1:2012 and EN 60601-1-2:2007	DIN EN ISO 13485	Directive 93/42/EEC, DIN EN ISO 13485, DIN EN 1717-EA

Use Hygowater® water with caution. Always read the label and product information before use.