

Choosing Your Filter System

There are 2 recognised methods of pure water production in the window cleaning industry – **Reverse Osmosis** and **Deionisation**.

The **UNGER** range includes filters utilising either of these methods. This page will help you to decide which method suits your cleaning requirements best and will deliver the highest return on your investment.

HYDRO POWER® ULTRA DEIONISATION FILTER (DI)

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These filters utilise ion exchange resin which removes ionised salts and impurities from water, producing 100 % deionised pure water, with no waste water.

Though DI filters require a relatively low initial investment when compared to RO, frequent replacement of old resin with new is necessary for 100 % pure water production.

Mobile design and portability, with no need for power or pumps, our DI filters can be easily set up anywhere – all you need is a tap water supply.

RECOMMENDED FOR:

- Areas with soft or medium water hardness level
- Small size filters are ideal for cleaning small to moderate size areas, as well as an entry level solution for professional cleaning
- Large sizes – for frequent cleaning of large areas
- Use as final stage of water purification process, after RO membrane, to achieve 100 % pure water

HYDRO POWER® REVERSE OSMOSIS FILTER (RO)

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The **UNGER RO** utilizes 3 stage water purification system. First, the combi-pre-filter captures chlorine and sediments from the incoming water, then the water is directed towards 2 RO membranes which remove up to 98 % of dissolved minerals and contaminants.

At this point, the water flow is split into waste water (concentrate) that requires drainage facility and pure water which is directed to DI Polisher where any remaining impurities are filtered by ion exchange resin to produce 100 % pure water.

RECOMMENDED FOR:

- Areas with hard or very hard water level
- Constant, high volume pure water production

B PURE WATER FILTERS

HYDRO POWER® ULTRA FILTER

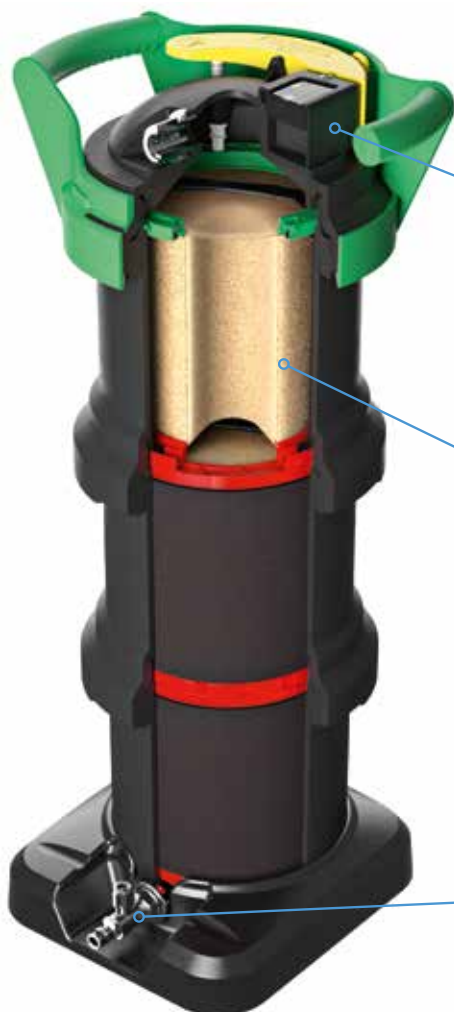
THE HYDRO POWER® ULTRA SYSTEM

The Most Efficient DI Pure Water System Ever! Performance at the highest level:

The **UNGER HydroPower®** Ultra is setting a new standard in deionising filter technology for pure water cleaning. A definite value-add for every professional glass and building cleaner.

OVER 30%* MORE PURE WATER PER RESIN FILLING

- Every Ultra resin pack contains a pre-portioned amount of **UNGER** premium ion-exchange resin with a **new formula, perfected for glass cleaning**
- The **FloWater technology 2.0** in every Ultra resin pack ensures an efficient flow of water through the whole tank which optimises the **resin saturation**
- Intuitive colour coded system + KeyLock function eliminates risk of operating errors



Ultra Resin Packs



Premium Ultra Resin
Perfected ion exchange resin, as required for cleaning glass



TDS-METER



ULTRA RESIN PACKS



WATER CONNECTIONS



*In comparison with standard DI systems (e.g. **UNGER HydroPower®** DI filters). Source: test results from the independent testing laboratory Miontec GmbH, 2019.

SIMPLE AND EFFECTIVE HANDLING



TDS-Meter

- Integrated digital measuring device displays the water hardness of the pure water coming out in ppm
- At a TDS value >10ppm the Ultra Resin Packs have to be changed



Easily removable cover

- Quick and easy changeover
- Ultra resin packs can be changed as easily as a coffee pad in a coffee machine



FastLock quick-fit fastener

- Easy to open and close the tank
- Safe, self-locking mechanism with pressure-relief valve



High-quality metal connections

- Stable quick-fit metal hose connector
- Reliable quick release connectors, suitable for most hoseslock type fittings commonly used on most water fed poles
- Practical shut-off valve prevents leakage during transport

Choose from 2 filter sizes depending on the volume of pure water required and frequency of use to maximise your return on investment. All 3 versions are supplied complete with **Ultra Resin Packs** and integrated **TDS meter** to monitor the outgoing water hardness.



DIUH1
HydroPower® Ultra S

DIUH2
HydroPower® Ultra L

DIUH3
HydroPower® Ultra LC

FILTER OUTPUT

In particular the water hardness and the hydrogen carbonate content of the input water have a strong influence on the amount of pure water. The following values correspond to the output of **UNGER HydroPower® Ultra** with *average tap water*:

HydroPower Ultra S (DIUH1)



Factor	Value
Resin fill	1 × 6 l
Pure water quantity per resin filling	710 l
Working hours*	approx. 6 h
Coverage in m ² **	approx. 600 m ²

HydroPower Ultra L (DIUH2)



Factor	Value
Resin fill	3 × 6 l
Pure water quantity per resin filling	2.450 l
Working hours*	approx. 20 h
Coverage in m ² **	approx. 2.000 m ²

HydroPower Ultra LC (DIUH3)



Factor	Value
Resin fill	3 × 6 l
Pure water quantity per resin filling	2.450 l
Working hours*	approx. 20 h
Coverage in m ² **	approx. 2.000 m ²

The pure water quantities (TDS < 10 ppm) were determined by an independent test laboratory at a water flow rate of 180 l/h and under the following conditions for the input water:

TDS: 275 ppm

Sum of cations and anions: 5,5 meq/l

Hydrogen carbonate content of anions: 60%.

With *soft water* (<100 ppm) the pure water output can increase **more than 3 times**. With very hard water (>400 ppm), depending on the hydrogen carbonate content and ion concentration, the output can **decrease by more than half**.

* at a water flow rate of 120 l/h

** with an area output of 100 m²/h

HydroPower® Ultra FILTER

Part No.	Base	Height	Resin Packs	Cart
DIUH1	30 × 31 cm	35 cm	1 (6 l)	-
DIUH2	30 × 31 cm	77 cm	3 (18 l)	-
DIUH3	30 × 31 cm	107 cm	3 (18 l)	✓

B PURE WATER FILTERS

HYDRO POWER® ULTRA KITS

STARTER KIT



HydroPower® Ultra S + nLite® Connect ALU

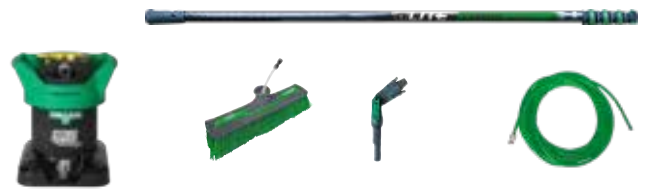
Content:

DIUH1 HydroPower® Ultra Filter S
 AN60G nLite® Connect Alu Master pole 6 m
 NLR27 nLite® Angle Brush 27 cm
 FTG05 HiFlo MultiLink Adapter
 NL20G nLite® Hose 20 m
 TMOOV HiFlo Control

Length
6,00 m

Part No.	Pack
DIUK1	1

ADVANCED KIT



HydroPower® Ultra S + nLite® CARBON COMPOSITE

Contents:

DIUH1 HydroPower® Ultra Filter S
 CC60T nLite® CarbonComposite 6,00 m
 NGS15 nLite® Angle adapter kit S, 15 cm
 NFF28 nLite® Power Brush, spliced, 28 cm
 DLS25 DuroFlex hose, 25 m

Length
6,00 m

Part No.	Pack
DINK1	1

EXPERT KIT L



HydroPower® Ultra L + nLite® CARBON 24K

Contents:

DIUH2 HydroPower® Ultra Filter L
 CF86G nLite® Carbon 24K 8,60 m
 NGS30 nLite® Angle adapter kit M, 42 cm
 NFK28 nLite® Power Brush, spliced, 28 cm
 DLS25 DuroFlex hose, 25 m

Length
8,60 m

Part No.	Version	Pack
DINK2	without cart	1

EXPERT KIT LC



HydroPower® Ultra LC + nLite® CARBON 24K

Contents:

DIUH3 HydroPower® Ultra Filter LC
 CF86G nLite® Carbon 24K 8,60 m
 NGS30 nLite® Angle adapter kit M, 42 cm
 NFK28 nLite® Power Brush, spliced, 28 cm
 DLS25 DuroFlex hose, 25 m

Length
8,60 m

Part No.	Version	Pack
DINK3	with cart	1

HydroPower® Ultra KITS	STARTER KIT	ADVANCED KIT	EXPERT KIT L	EXPERT KIT LC
Part No.	DIUK1	DINK1	DINK2	DINK3
HydroPower® Ultra Filter	S	S	L	LC
nLite® telescopic pole	Aluminium 6 m	Carbon Composite 6 m	Carbon 24K 8,60 m	Carbon 24K 8,60 m
Angle adapter	MultiLink	S	M	M
Brush	Angle 27 cm	Power 28 cm	Power complete 28 cm, spliced	Power complete 28 cm, spliced
Hose	20 m	DuroFlex 25 m	DuroFlex 25 m	DuroFlex 25 m

B PURE WATER FILTERS

ION EXCHANGE RESIN

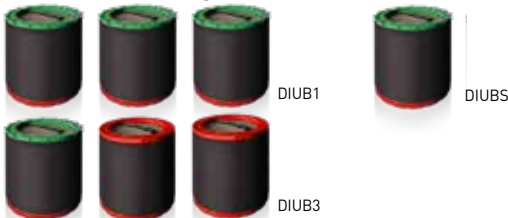


Quality Tools for Smart Cleaning



Ultra RESIN PACKS FOR HYDRO POWER® ULTRA FILTER

Over 30 %* more pure water per resin filling



Every Ultra resin pack contains a pre-portioned amount of **UNGER** premium ion-exchange resin with a **new formula, perfected for glass cleaning**

The **FloWater technology 2.0** in every Ultra resin pack ensures an efficient flow of water through the whole tank which optimises the **resin saturation**

Ultra RESIN PACKS

Part No.	Info	Pack
DIUB1	3 x Ultra Resin Packs for DIUH1, DIUK1	1
DIUB5	1 x Ultra Resin Pack for DIUH1, DIUK1	1
DIUB3	Kit with 3 Ultra Resin Packs for DIUH2, DIUH3	1



QuickChange RESIN BAGS FOR HYDRO POWER® DI FILTER

High comfort



The **QuickChange** Resin Bags allow users to speed up the resin change process - simply remove the bag with expired resin and insert a new one.

The **QuickChange** Resin Bags offer fast and easy resin replacement on the spot with minimal mess - anytime and anywhere!



QuickChange RESIN BAGS 6 L

Part No.	Info	Pack
DIB64	4 bags (24 l) in air tight bucket	1
DIB84	4 bags (24 l) in air tight bag	1

PREMIUM GRADE VIRGIN MIXED BED RESIN

High capacity virgin mixed bed ion exchange resin for total de-ionisation and purification of water. Immediately produces 100% pure water for streak free glass cleaning.

Consisting of a mixture of a gel, type I strong basic anion exchanger, and a gel, strong acid-cation resin, for the direct demineralization of water. 40 % cation, 60 % anion, pH range 0-14.

Suitable for use in:

- Refillable DI cartridges
- DI pressure vessels
- Filters for Pure Water Window Cleaning



PREMIUM GRADE VIRGIN MIXED BED RESIN

Part No.	Product	Pack
DIB25	Bag 25 l	1
DIP25	Bucket 25 l	1

i RESIN CHANGE

The conductivity measurement is used to monitor water quality. If a conductivity measurement (integrated TDS-metre) indicates a value of > 10 ppm, the resin must be replaced.

*In comparison with standard DI systems (e.g. **UNGER HydroPower®** DI filters).Source: test results from the independent testing laboratory Miontec GmbH, 2019.