



Quality Tools for Smart Cleaning

HiFlo™ CARBONTEC SYSTEM

ENVIRONMENTALLY FRIENDLY: Cleaning without chemicals!
HiFlo™ CarbonTec is the chemical free and environmentally friendly cleaning system for all solar systems!



Especially at farms the solar output can be increased due to the high soilage by dust and dirt.



The HiFlo System is particularly effective on mixed glass / solar facades.



Extremely quick and easy cleaning of modules in residential areas.



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CONVENIENT AND SECURE: No ladders needed!
Regular cleaning with HiFlo™ CarbonTec increases the solar output by up to 30%!

With HiFlo™ CarbonTec the cleaning of solar panels becomes quick, easy and effective. Without using ladders or cranes and even without walking on the roofs, the modules can be cleaned in no time. The cleaning results are immediately visible and the solar output already rises considerably during the cleaning itself.

Easy, quick and secure cleaning for immediately visible increased solar output.



For optimum accessibility even without ladders or climbing on roofs.

Immediately visible cleaning results – quick and easy removal of dirt.



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PATENT PENDING!

HiFlo™ CarbonTec – The choice of professionals The water-fed pole system for professional cleaning of solar modules. One system – one solution.

The HiFlo™ CarbonTec system is the standard for cleaning solar panels, offering numerous advantages compared to other systems:

- **Low follow-up costs**
 - Rapid return on investment
- **Cleaning with ultrapure water, completely without chemicals**
 - Environmentally friendly, no disposal costs.
- **Reaching 15 m without difficulty.**
 - No ladders required; increased safety.
- **Lightweight pole elements (Ø 45mm) made of solid carbon fibres.**
 - Simple and efficient performance.
- **Optimal grip, textured surface**
 - Ergonomic design to reduce fatigue.
- **Hard anodized aluminium compounds**
 - Long service life, low follow-up costs.

Flexible cleaning height by inserting or removing pole elements, convenient tap at flow adapter, optimal module cleaning by means of 120° angle adapter, high-quality brushes with abrasive nylon bristles – cleans more thoroughly than other systems, e.g. spray systems.

WATER FILTER SYSTEMS – Water softener systems
For quick production of ultrapure water

- **Unger RO Water System:**
Professional RO (Reverse Osmosis) Water System for the Window Cleaning Industry
- **HiFlo™ DI225 SYSTEM**
“Plug-and-Play” deionized water system for spot-free cleaning results.





EFFICIENT: Up to 30% higher solar output! Even solar panels soil: Yield losses due to pollution!

Even if some manufacturers claim that solar stations are self-cleaning – the opposite is true! Dirt from the clouds and the atmosphere like dust, oil etc. are absorbed by the rain and deposited on the panels (see pic. 2). It is true that rain removes part of the existing dirt, but it also deposits new dirt on the surface. The effect is that some of the sunlight is stopped by that soilage and can no longer produce electrical energy (see pic. 3)

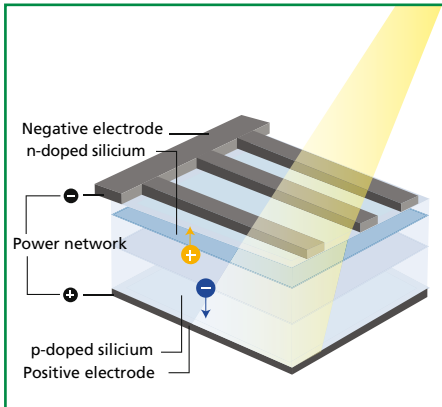


Fig. 1: Functional principle

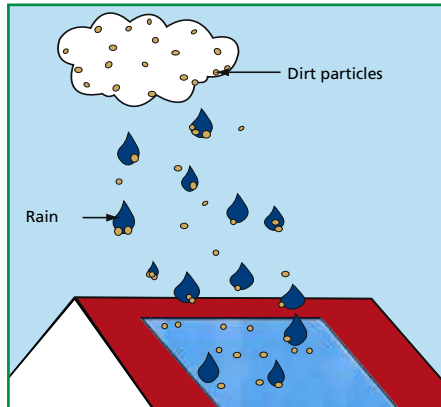


Fig. 2: Soilage

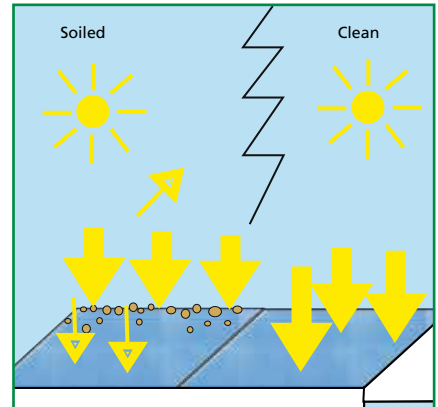
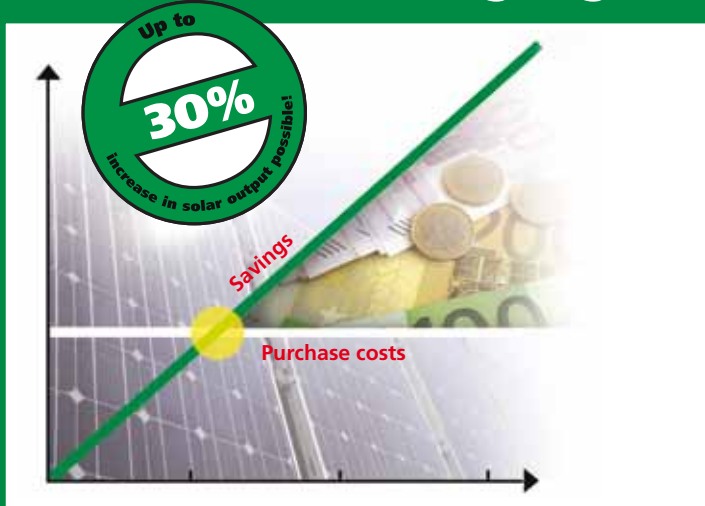


Fig. 3: Reduced incidence of light

Efficient – Saving right from the beginning!



The purchasing costs of the HiFlo™ CarbonTec system amortize themselves – depending on the size and the frequency of usage of the solar panels – within a very short period of time. Saving of time due to easy and quick cleaning as well as the increased solar output due to the now possible shorter cleaning intervals lead to major savings. The high-quality manufacturing of HiFlo™ CarbonTec results in long durability and low maintenance costs.



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HiFlo™ CARBONTEC SYSTEM

PATENT PENDING!

The ultimate pole system for true professionals: Complete and with a wide range of accessories!

NEW



HiFlo™ CARBONTEC SYSTEM

Complete kit –poles, all accessories.

- Cleaning up to a height of 15 m / 9 m.
- Convenient shoulder/carrying bag.
- Rubber end piece for stability.

Item no.	Content	Unit
CTKI3	Carrying bag (sports bag), angle adapter with brush 10 m hose complete, water feed adapter 10 pole elements (total of 15 m), end piece	1
CTKI6	Like CTKI3, but with 6 pole elements (total of 9 m)	1



HiFlo™ NATURAL BRISTLE BRUSH

For extra strong cleaning power.

- Back made of mahogany wood – extra hard, no warping.
- Light-weight, long service life

Item no.	Size	Unit
CB27B	27 cm	1
CB40B	40 cm	1

HiFlo™ CARBONTEC ANGLE ADAPTER, COMPLETE

Conveniently reaches all places.
Complete angle adapter with brush, water nozzles, and pole connection, ready to attach to pole.



- High-quality nylon brush in 2 sizes.
- Anodized aluminium connections - extremely high quality.
- Internal water feed.

Item no.	Size	Unit
CT27S	Angle adapter short, brush 27 cm	1
CT27L	Angle adapter long, brush 27 cm	1
CT40S	Angle adapter short, brush 40 cm	1
CT40L	Angle adapter long, brush 40 cm	1

HiFlo™ CARBONTEC BRUSHES

Spare brushes for angle adapters.
Available in two sizes:
27 cm and 40 cm.



- Special nylon bristles allow glass cleaning with demineralized water.
- Available in two sizes

Item no.	Size	Unit
CT27B	27 cm	1
CT40B	40 cm	1

HiFlo™ ADVANCE POLES

The new HiFlo Advanced poles by Unger allow you to work safely up to 10 m height, and are extremely flexible in the process.



- Very solid and lightweight due to carbon and glass fibre.
- Resistant against chemicals.
- Solid clamps permit one-hand operation.

Item no.	Version	Sections	Material	Size	Unit
FT28G	HiFlo Advance	2 sections	Glass fibre	1,50 - 2,80 m	1
FT40G	HiFlo Advance	3 sections	Glass fibre	1,50 - 4,00 m	1
FT52G	HiFlo Advance	4 sections	Glass fibre	1,50 - 5,20 m	1
FT70G	HiFlo Advance	5 sections	Glass fibre	1,80 - 7,00 m	1
FT84G	HiFlo Advance	6 sections	Glass fibre	1,80 - 8,40 m	1
FT84H	HiFlo Advance+	6 sections	Glass fibre + carbon	1,80 - 8,40 m	1
FT94H	HiFlo Advance+	7 sections	Glass fibre + carbon	1,80 - 9,40 m	1
FT1XH	HiFlo Advance+	8 sections	Glass fibre + carbon	1,80 - 10,00 m	1

HiFlo™ RO WATER SYSTEM

Professional RO Water System

HiFlo™ DI225 SYSTEM

"Plug-and-Play" Water System

- High flow capacity
- Mobile use on site
- Very low maintenance costs



Item no.	Size	Unit
RO100	Unger RO-System complete with test kits	1
DI225	HiFlo DI225 System	1



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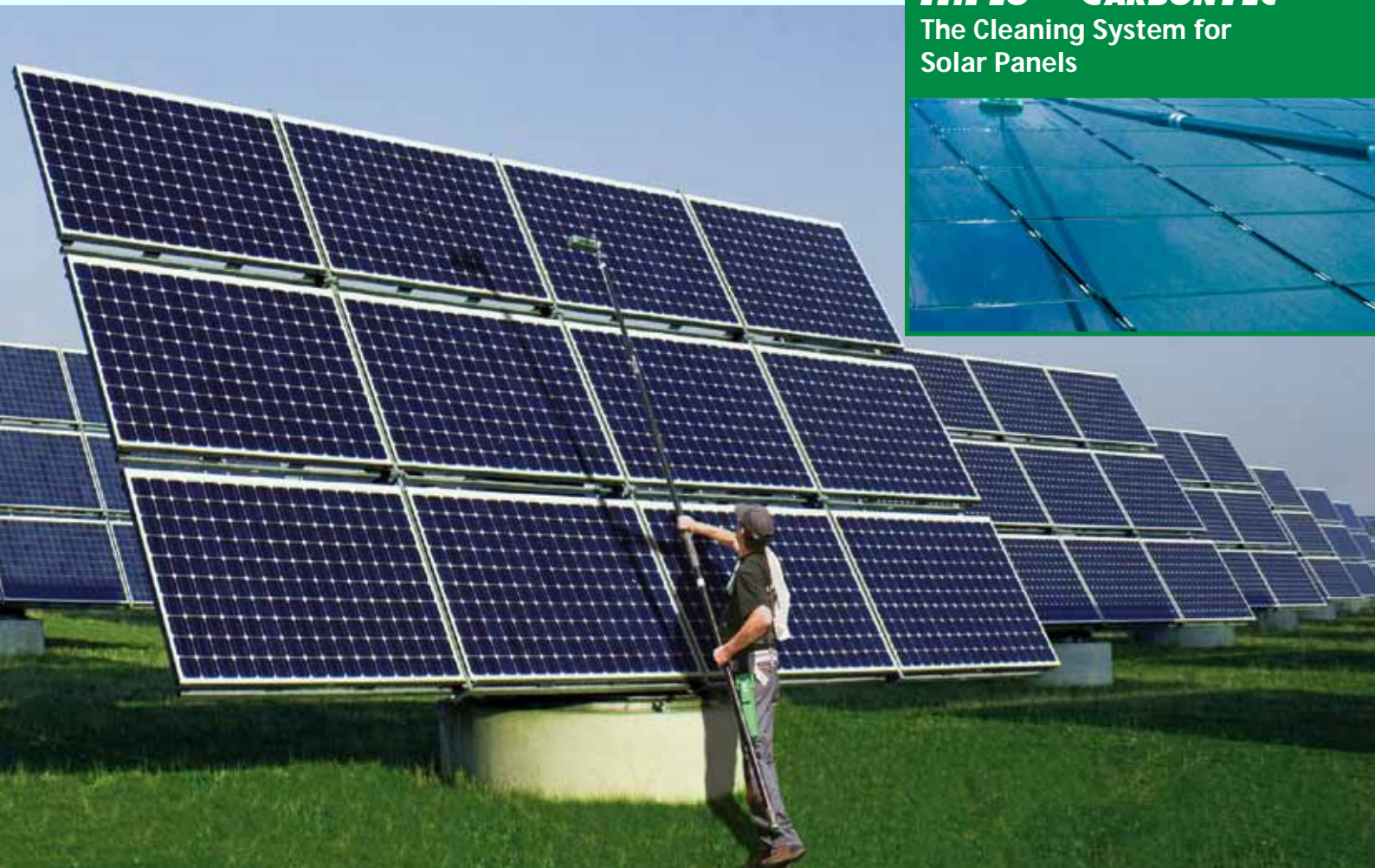
Professional Cleaning of Solar Panels

HiFlo™ CarbonTec – the most efficient cleaning solution

- **EFFICIENT:** up to 30% higher solar output
- **ENVIRONMENTALLY FRIENDLY:** Cleaning without chemicals
- **SECURE:** No ladders necessary

HiFlo™ CARBONTEC

The Cleaning System for Solar Panels



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