



INNOVATIVE FLOOR CLEANING SYSTEMS

Simple & clever

Catalogue 2012/2013

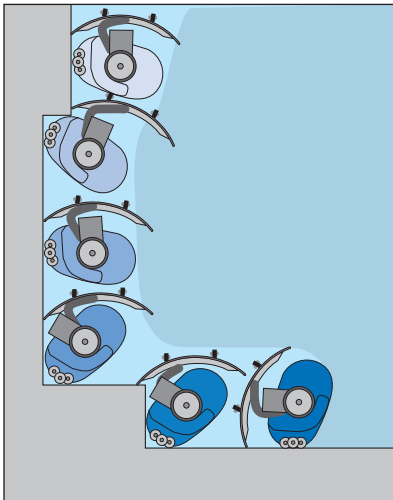


- FLOOR-TREATMENT-SYSTEMS
- VACUUM-SWEEPER SYSTEMS
- SCRUBBER DRIER SYSTEMS
- SPECIAL CLEANING SYSTEMS
- EQUIPMENT



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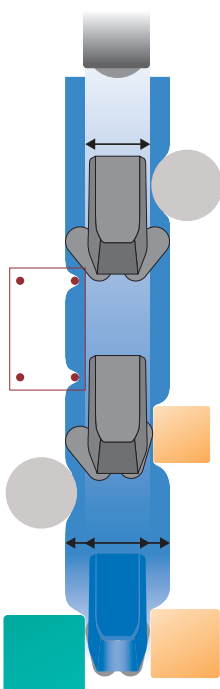
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HEFTER CLEANTECH
UNIQUE TECHNOLOGY

Depending on system implementation, the scrubber drier head, including suction and squeegees, can be rotated between 200° left and right or 360° endless during full operation.

This allows the user to clean and to dry in all working directions, including backward. The scrubber drier head therefore is always operating in working direction. This feature reduces cleaning time and increases cleaning efficiency by reducing manual work.

Cleaning right to the wall, into corners, edges and narrow path's through **TURNADO®** technology.



VARIOTECH® opens up a new dimension when it comes to automatic floor cleaning systems. Cost efficiency, flexibility and reduction of manual work up to 30% reduces over all cost of the total cleaning process.

With the support of this technologie the scrubber drier head including suction can be adjusted to different floor profiles.

This allows cleaning with only one machine in large areas as well as narrow path's and under obstacles, such as shelves.

Labor cost accounts for up to 90% of the total cleaning cost.

Manual cleaning of difficult to reach areas such as niches or under shelves, pallets and pedestals is reduced to a minimum.

Saving time and money is the main reason to use VARIOTECH® technology.

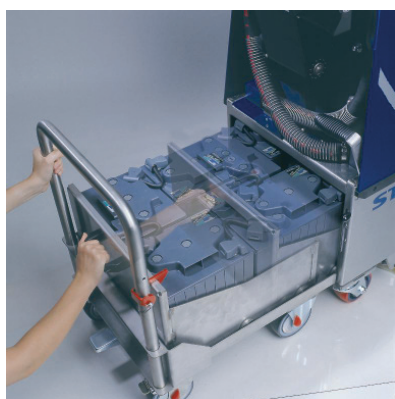


CONVERT® - the only convertable stand on multi-purpose cleaning system for scrubberdrying, burnishing, sweeping, polishing and crystallizing. CONVERT - the best combination between work behind and ride-on.

Simple and fast changing of the various floor care aggregats enables the system to be used for different applications. This opens up a complete new approach to floor care system investments.

By using a carrier system holding different working heads, there is no need to have multiple separate systems available.

This increases efficiency, allows not only to reduce system expenditure but also decreases labor cost.



The Quick-Change-System enables a simple and easy battery change at your HEFTER Cleantech cleaning machine and enlarges the operating time in that way.

Quick-Change works in a simple and timesaving way:

- Just hook the mobile Quick-Change-cart into your cleaning system
- Pull out the Battery-case
- Unhook the cart and attach a cart with a fully charged battery
- Push the new battery-case into the machine

That makes re-charging at your cleaning system a matter of minutes.

After that your HEFTER Cleantech machine is immediately ready for use again. In that way the Quick-Change-System provides very flexible usage times. Even the usage 24 hours a day is possible.

SCRUBBER - DRIER TURNADO 38



Product feature:

- Plastic tank
- Control tower ergonomically designed, adjustable height and angle
- Tool-free changing of brushes!
- Charger onboard

Technical data

TURNADO® 38

Dimensions / volume / weight

Working width	380 mm
Width of curve suction unit	460 mm
Total length	850 mm
Total width	500 mm
Total height	1030 mm
Underclearance	630 mm
Tankvolume freshwater	15 l
Tankvolumen dirtwater	23 l
Total operation weight (incl 25 Ah Gel-battery and water)	77 kg

Working performance

Theoretical cleaning rate	1200 m²/h
Brush pressure	22-28,5 kg
Noise level	71 dB

Motor performanc

Brush motor	250 W
Vacuum motor	300 W

Battery

Voltage	24 V
Capacity (maintenance free gel-batteries)	25 Ah
Working hour per battery (dependent on floor and dirt)	max. 1 h

(HEFTER reserves the right to make technical changes)

version 01.2012

The **TURNADO® 38** has the ideal dimensions for small sized rooms with relative limited space. With a cleaning capacity of 1200 square meters and hour, the **TURNADO® 38** outperforms a mop at any time.

A mop is dipped into the same - already dirty - water every time. In doing that, you dispense the dirt across the whole area. In contrary the **TURNADO® 38** is using fresh water at every centimeter of cleaning.

Additionally the floor is dry again immediately. You can use the machine even while the business is running.

Product advantages.

- Closed dirt water tank
- Simple, easy handling and support
- Flexible and agile
- No separate tank on the steering column
- Permanently high brush pressure
- Extremely compact dimensions
- Simple service access

Ideal for to clean:

- Smaller retail sales rooms
- Small and misaligned storages spaces
- Hotel and Office antrance areas
- Locker room and restrooms
- Kitchen
- Garages
- Verkaufsräume
- and much more

Product versions:

TURNADO® 38 complete incl.	ARTICLE NO:	10057862
25 Ah Gel-battery (max 1. h)	1	
Charger onboard	1	
Brush PP 0,8 mm grey	1	

SCRUBBER - DRIER TURNADO 55



This patented scrubber drier from HEFTER CLEANTECH essentially reduces cleaning-time. Previously inaccessible areas which had to be hand cleaned, e.g. corners and niches, can now benefit from the superior results of a machine. The scrubbing and suction head rotational 400° of the **TURNADO® 55** gives a uniform result over the entire cleaning area.

Convincing advantages:

- Reduction of hand cleaning of difficult areas thanks to the scrubbing and suction head rotational 400°
- Corners and niches, such as shelves, in halls and passage ways can be easily cleaned.
- Cleaning under superstructures like counters, shelves or work benches.
- Long operational time between fill ups thanks to large volume tanks
- Easy handling
- compact dimensions
- very manoeuvrable

Product feature:

- Plastic tank
- Control tower ergonomically designed, adjustable height and angle
- Scrubbing and suction head rotational 400°

Technical data

TURNADO® 55

Dimensions / volume / weight

Working width	550 mm
Rotational scrubbing and suction head TURNADO®	up to 400°
Width of passage	670 mm
Housing width	408 mm
Housing length	710 mm
Total length	920 mm
Total height	1150 mm
Tank volume (dirt- and fresh water tank)	je 45 l
Max. weight (with 100 Ah gel batteries)	223 kg
Max. surface pressure	2,8 N/mm²
Dead weight (with 100 Ah gel batteries)	178 kg

Working performance

Theoretical cleaning rate (at 4,5 km/h)	2475 m²/h
Max. speed	4,5 km/h
Max. water supply	3,5 l/min
Sound insulation SILENT function	yes

Motor performance

Brush motor	2 x 190 W
Vacuum motor	350 W
Drive motor	110 W

Battery

Voltage	24 V
Capacity (maintenance free gel batteries)	100 Ah
Working time per battery (depending on floor and dirt)	up to 2 1/2 h

(HEFTER reserves the right to make technical changes)

version 01.2012

Product versions:

TURNADO® 55 complete incl.	ARTICLE NO:	10052841
100 Ah Gel-battery (up to 2,5 h working time)	1	
Charger	1	
Brush 0,8 mm grey	2	
Pad holder	2	
Pad red	2	

TURNADO® 55 complete incl.	ARTICLE NO:	10062388
Public pool version		
100 Ah Gel-battery (up to 2,5 h working time)	1	
Charger	1	
Brush 0,8 mm grey	2	
Pad holder	2	
Pad red	2	
Conversion kit public pool	1	
Soft wheels	2	

TURNADO® 55 without supplies	ARTICLE NO:	10050693
without battery, charger, brushes, pad holder and pads		

SCRUBBER - DRIER TURNADO 55 PRO



Product feature:

- Aluminium tank
- Control tower ergonomically designed, adjustable height and angle
- Scrubber and suction head endless rotational

Technical data

TURNADO® 55 PRO

Dimensions / volume / weight	
Working width	550 mm
Rotational scrubbing and suction head TURNADO®	endless
Width of passage	670 mm
Housing width	408 mm
Housing length	710 mm
Total length	920 mm
Total height	1150 mm
Tank volume (dirt- and fresh water tank)	each 50 l
Max. weight (with 100 Ah gel batteries)	218 kg
Max. surface pressure	2,8 N/mm ²
Dead weight (with 100 Ah gel batteries)	168 kg
Working performance	
Theoretical cleaning rate (at 4,5 km/h)	2475 m ² /h
Max. speed	4,5 km/h
Max. water supply	3,5 l/min
Sound insulation SILENT function	yes
Motor performance	
Brush motor	2 x 190 W
Vacuum motor	350 W
Drive motor	110 W
Battery	
Voltage	24 V
Capacity (maintenance free gel batteries)	100 Ah
Working time per battery (depending on floor and dirt)	up to. 2 1/2 h
(HEFTER reserves the right to make technical changes)	
version 01.2012	

This patented scrubber drier from HEFTER CLEANTECH essentially reduces cleaning-time. Previously inaccessible areas which had to be hand cleaned, e.g. corners and niches, can now benefit from the superior results of a machine. The scrubbing and suction head rotational 360° of the **TURNADO® 55 PRO** gives a uniform result over the entire cleaning area. Even backwards, the scrubbing and suction head always turns in work-direction itself.

Convincing advantages of the TURNADO 55 are its benefits:

- Reduction of hand cleaning of difficult areas thanks to the scrubbing and suction head endless rotational
- Corners and niches, such as shelves, in halls and passage ways can be easily cleaned.
- Cleaning under superstructures like counters, shelves or work benches
- Large volume tanks provide a long operational time between fill ups
- Easy handling
- compact dimensions
- very manoeuvrable
- 10 years guarantee on the stainless steel chassis

Product versions:

TURNADO® 55 PRO complete incl. ARTICLE NO:	10052842
100 Ah Gel-Battery (up to 2,5 h working time)	1
Charger	1
Brush 0,8 mm grey	2
Pad holder	2
Pad red	2

TURNADO® 55 PRO complete incl. ARTICLE NO:	10062389
Public pool version	
100 Ah Gel-battery (up to 2,5 h working time)	1
Charger	1
Brush 0,8 mm grey	2
Pad holder	2
Pad red	2
Conversion kit public pool	1
Soft wheels	2

TURNADO® 55 PRO without supplies ARTICLE NO:	10050695
without battery, charger, brushes, pad holder und pads	

SCRUBBER - DRIER VARIOTECH 82



This machine is mechanically or automatically operated concerning positioning the scrubber head and the work position of the wing. The permanent cleaning width of 82 cm is reducible by pressure to 61 cm. It is pushed back to its original cleaning width after passing the barrier.

Convincing advantages:

- Reduction of hand cleaning of difficult areas thanks to the infinitely variable swing out scrub and suction units
- Especially effective: cleaning close to edges, shelves, pallets, walls and pedestals
- Economical cleaning of narrow passages and open areas with one machine on the basis of automatic adjustable working width
- Easy handling
- Extremely compact dimensions, thereby very agile
- Less change of water through a big tank volume
- 10 years guarantee on the stainless steel chassis

Product feature:

- Mechanical lifting and lowering of the scrubber head
- 82 cm working width -> manually reducible to 61 cm
- Same control unit as **TURNADO® 55 PRO**
- No Quick-Change - Battery-System

Technical data

VARIOTECH® 82

Dimensions / volume / weight

Working width VARIOTECH®	610 – 820 mm
Housing width	535 mm
Total length	1030 mm
Total height	1130 mm
Tank volume (dirt- and fresh water tank)	each 100 l
Max. weight (with gel batteries)	385 kg mit 180 Ah
Max. surface pressure	1,7 N/mm²
Dead weight incl. gel battery	285 kg with 180 Ah

Working performance

Theoretical cleaning rate (at 4,5 km/h)	4100 m²/h
Max. speed	5 km/h
Max. water supply	8,9 l/min
Sound insulation SILENT function	yes
Control of cleanig wing	mechanical
Stroke mechanism cleaning head	mechanical

Motor performance

Brush motor	500 W
Vacuum motor	530 W
Drive motor	400 W

Brushes / Pads

Pressure brush / pad	1,8/0,4 N/cm²
Diameter	285 mm

Battery

Voltage	24 V
Capacity (maintenance free gel batteries)	160/180 Ah
Working time (dependent on floor and batteries)	up to 2 – 4 h

(HEFTER reserves the right to make technical changes).

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Product versions:

VARIOTECH® 82 complete incl.	ARTICLE NO:	10025154
180 Ah Gel-Battery (up to 3,5 h working time)	1	
Charger	1	
Brush 0,8 mm grey	3	
Pad holder	3	
Pad red	3	

VARIOTECH® 82 complete incl.	ARTICLE NO:	10025153
160 Ah Gel-Batterien (up to 3 h working time)	1	
Charger	1	
Brush 0,8 mm grey	3	
Pad holder	3	
Pad red	3	

VARIOTECH® 82 complete incl.	ARTICLE NO:	10025150
without battery, charger, brushes, pad holder and pads		

SCRUBBER - DRIER VARIOTECH 82 PRO



This machine is mechanically or automatically operated concerning lifting and lowering to the scrubber head and the work position of the wing. The permanent cleaning width of 82 cm is reducible by pressure to 61 cm. It is pushed back to its original cleaning width by a gas spring.

Convincing advantages:

- Reduction of hand cleaning of difficult areas thanks to the infinitely variable swing out scrub and suction units
- Especially effective: cleaning close to edges, shelves, pallets, walls and pedestals
- Economical cleaning of narrow passages and open areas with one machine on the basis of automatic adjustable working width
- Easy handling
- Extremely compact dimensions, thereby very agile
- Less change of water through a big tank volume
- 10 years guarantee on the stainless steel chassis

Product feature:

- Fully automatic lifting and lowering of the scrubber head
- 82 cm working width -> reducible to 61 cm by pressing a button
- Electronical fresh water reserve display
- Quick-Change-Battery-System
- Signal-horn



Technical data

VARIOTECH® 82 PRO

Dimensions / volume / weight	
Working width VARIOTECH®	610 – 820 mm
Housing width	535 mm
Total length	1030 mm
Total height	1130 mm
Tankvolume (dirt- and fresh water tank)	each 100 l
Max. weight (with gel battery)	420 kg with 180 Ah
Max. surface pressure	1,7 N/mm²
Dead weight incl. gel battery	320 kg with 180 Ah
Working performance	
Theoretical cleaning rate (at 4,5 km/h)	4100 m²/h
Max. speed	5 km/h
Max. water supply	8,9 l/min
Speed adjusted water supply	yes
Sound insulation SILENT function	yes
Control of cleanig wing	electrical
Stroke mechanism cleaning head	electrical
Motor performance	
Brush motor	500 W
Varuum motor	530 W
Drive motor	400 W
Brushes / Pads	
Pressure brush / pad	1,8/04 N/cm²
Diameter	285 mm
Battery	
Voltage	24 V
Capacity (maintenance free gel batteries)	160/180 Ah
Quick-Change® Batterie-Schnellwechselsystem	ja
Working time (depending on floor and battery)	up to 2 – 4 h
(HEFTER reserves the right to make technical changes)	

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Product versions:

VARIOTECH® 82 PRO complete. incl.	ARTICLE NO:	10023008
180 Ah Gel-Battery (up to 3,5 h working time)	1	
Charger	1	
Brush 0,8 mm grey	3	
Pad holder	3	
Pad red	3	

VARIOTECH® 82PRO complete. incl.	ARTICLE NO:	10023007
160 Ah Gel-Battery (up to 3 h working time)	1	
Charger	1	
Brush 0,8 mm grey	3	
Pad holder	3	
Pad red	3	

VARIOTECH® 82 PRO	ARTICLE NO:	10023006
without battery, charger, brushes, pad holder and pads		

SCRUBBER - DRIER VARIOTECH 112 PRO



This machine with **VARIOTECH®** technology, automatically operated concerning lifting and lowering to the scrubber head and the work position of the wing. The permanent cleaning width of 112 cm is reducible by pressure to 71 cm. It is pushed back to its original cleaning width by a gas spring.

Convincing advantages:

- Reduction of hand cleaning of difficult areas thanks to the infinitely variable swing out scrub and suction units
- Especially effective: cleaning close to edges, shelves, pallets, walls and pedestals
- Economical cleaning of narrow passages and open areas with one machine on the basis of automatic adjustable working width
- Easy handling
- Extremely compact dimensions, thereby very agile
- Less change of water through a big tank volume
- 10 years guarantee on the stainless steel chassis

Product feature:

- Fully automatical lifting and lowering of the scrubber head
- 112 cm working width -> reducible to 71 cm by pressing a button
- Electronical fresh water reserve display
- Quick-Change-Battery-System
- Additional brush pressure level



Technical data

VARIOTECH® 112 PRO

Dimensions / volume / weight	
Working width VARIOTECH®	710 - 1120 mm
Housing width	640 mm
Total length	1320 mm
Total height	1095 mm
Tankvolume (dirt- and fresh water tank)	each 130 l
Max. weight (with gel battery)	542 kg with 220 Ah
Max. surface pressure	1,8 N/mm²
Dead weight (incl. gel battery)	341 kg with 180 Ah
Working performance	
Theoretical cleaning rate	5500 m²/h
Max. speed	5 km/h
Max. water supply	8,9 l/min
Sound insulation SILENT function	yes
Control of cleanig wing	electrical
Stroke mechanism cleaning head	electrical
Comfort operating tower	yes
Motor performance	
Brush motor	2 x 500 W
Vacuum motor	530 W
Drive motor	400 W
Brush / Pads	
Pressure	800 N
Diameter	285 mm
Battery	
Voltage	24 V
Capacity (maintenance free gel batteries)	180/220 Ah
Working time (depending on floor and battery)	up to 2 - 4 h / set of batteries
(HEFTER reserves the right to make technical changes)	
version 01.2012	

Product versions:

VARIOTECH® 112PRO complete incl.		ARTICLE NO: 10020723
220 Ah gel-batteries (about 3 h working time)	1	
Charger	1	
Brush 0,8 mm grey	4	
Pad holder	4	
Pad red	4	

VARIOTECH® 112PRO complete incl.		ARTICLE NO: 10020722
180 Ah gel-batteries (about 1,75 h working time)	1	
Charger	1	
Brush 0,8 mm grey	4	
Pad holder	4	
Pad red	4	

VARIOTECH® 112PRO without supplies		ARTICLE NO: 10020721
without battery, charger, brushes, pad holder and pads		

SCRUBBER - DRIER TURNADO 82



Product feature:

- plastic tank
- tank volume (fresh/ dirt water) each 100l
- scrubber head rotational up to 400°

Technical data

TURNADO® 82

Dimensions / volume / weight	
Working width TURNADO®	820 mm
Housing width	600 mm
Total length	1500 mm
Total height	1300 mm
Tank volume (dirt- and fresh water tank)	each 100 l
Max. weight (incl battery, driver, detergent)	550 kg
Max. surface pressure	0,7 N/mm²
Dead weight (incl. batterie, driver)	450 kg
Working performance	
Theoretical cleaning rate (at 5 km/h)	4.100 m²/h
Max. speed (transport speed)	6 km/h
Cleaning speed (adjustable)	1,5 - 5 km/h
Max. water supply	8,9 l/min
Speed adjusted water supply	yes
Noise level cleaning / SILENT function	73/65 db
Stroke mechanism cleaning head	electrical
Fast start / stop operator control with just one button	yes
Motor performance	
Brush motor	3 x 190 W
Vacuum motor	530 W
Drive motor	600 W
Brushes / Pads	
Pressure brush / pad	1,4/0,4 N/cm²
Diameter Brushes / Pads	285 mm/11"
Battery	
Voltage	24 V
Capacity (maintenance free gel battery)	160 /180 Ah
Working time (depending on floor and battery)	up to 2-4h/set of batteries
Quick - Change battery system	yes

(HEFTER reserves the right to make technical changes)

version 01.2012

Why walking behind, when you are able to drive on the **TURNADO® 82**? Step-on scrubber drier, 82 cm working width and rotational 400° scrubber head for an effective cleaning. Increase your cleaning productivity with the **TURNADO® 82**! Flexibility and agility of a compact walk behind system and great performance of a ride on system are perfectly combined in the step-up system of the **TURNADO® 82**!

Convincing advantages:

- great flexibility and agility
- simple cleaning of corners, niches and also while driving backwards
- high suction performance
- patented **TURNADO®** system, scrubber head rotational up to 400°
- Quick-Change-Battery-System
- Extremely compact dimensions, therefore very agile
- Less change of water through a big tank volume
- 10 years guarantee on the stainless steel chassis



Product versions:

TURNADO® 82 complete incl.	ARTICLE NO:	10025208
180 Ah gel-Batteries (about. 2,5 h working time)	1	
Charger	1	
Brush 0,8 mm grey	3	
Pad holder	3	
Pad red	3	
TURNADO® 82 without supplies	ARTICLE NO:	10025205
without battery, charger, brushes, pad holder and pads		

FLOOR TREATMENT - SYSTEM CONVERT 82



Technical data

CONVERT®82

Dimensions / volume / weight

Working width TURNADO®	up to zu 820 mm
Housing width	600 mm
Total length	1500 mm
Total height	1300 mm
Tank volume (dirt- and fresh water tank)	each 100 l
Max. weight (incl battery, driver, detergent)	472 kg
Max. surface pressure	0,7 N/mm²
Dead weight (incl battery, driver)	372 kg

Working performance

Theoretical cleaning rate (at 5 km/h)	4.100 m²/h
Max. speed (transport speed)	5,8 km/h
Cleaning speed (adjustable)	1,5 – 5 km/h
Max. water supply	8,9 l/min
Speed adjusted water supply	yes
Noise level cleaning / SILENT function	73/65 db
Stroke mechanism cleaning head	electrical
Fast start / stop operator control with just one button	yes

Motor performance

Scrubbing unit	3 x 190 W
Rotation speed brushes/pads	270 U/min.
High speed burnishing unit	1100 W
Rotation speed burnisher highspeed	1700 U/min.
Vacuum motor	450 W
Drive motor	600 W

Brushes / Pads

Pressure scrubbing unit brush / pad	1,4/0,4 N/cm²
Pressure burnishing unit	100 N
Diameter brushes / pads	285 mm / 11"

Battery

Voltage	24 V
Capacity (maintenance free gel battery)	180 Ah
Working time (depending on floor and battery)	up to 2 – 4 h / set of batteries
Quick-Change Battery system	yes

(HEFTER reserves the right to make technical changes).

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The first and only convertible, multi-purpose cleaning system for different tasks. **CONVERT® 82** features a stand-on application which provides maximum flexibility to the user.

Multi-purpose using saves costs:

- Scrubbing
- Burnishing
- Grinding
- Crystallising

Convincing advantages:

- The working units are very easy to change
- maximum flexibility and agility
- simple cleaning right to the walls, into corners and niches
- simple backwards cleaning
- Patented **TURNADO®** system, working units can be rotated up to 400°
- Quick-change battery system
- extremely compact dimensions, thereby very agile
- Less change of water through big tank volume
- 10 years guarantee on stainless steel chassis



Product versions::

CONVERT® 82 complete incl. ARTICLE NO: 10025207

180 Ah Gel-batteries (about 1,75 h working time) 1

Charger	1
Brush 0,8 mm grey	3
Pad holder	3
Pad red	3

CONVERT® 82 without supplies ARTICLE NO: 10025204

without battery, charger, brushes, pad holder and pads

CONVERT® 82 burnishing head ARTICLE NO: 10038743

High-speed burnishing head
working head for **CONVERT® 82**



RIDE - ON MACHINE FS 82



Crucial facts of floor cleaning:

- reducing cleaning time
- reducing labour costs
- Minimizing the numbers of machines

Technical data

FS 82

Dimensions / volume / weight

Working width	690 - 820 mm
Rotational scrubbing and suction head TURNADO	up to 400°
Housing width	760 mm
Total length	1730 mm
Total height	1370 mm
Width of passage	760 mm
Tank volume (dirt- and fresh water tank)	each 150 l
Max. weight (with 275 Ah-Battery, driver, water)	830 kg
Max. surface pressure	0,6 N/mm ²
Dead weight (with 275 Ah-Battery)	665 kg

Working performance

Theoretical cleaning rate	4510 m ² /h
Max. speed	5,5 km/h
Max. water supply	8,9 l/min
Speed adjusted water supply	yes
Noise level cleaning / SILENT function	72/66 db

Motor performance

Brush motor	500 W
Vacuum motor	1 x 530 W
Drive motor	400 W

Brushes / Pads

Pressure brush / pad	1,8/0,4 N/cm ²
Diameter	285 mm

Battery

Voltage	24 V
Capacity (maintenance free gel battery)	220/275 Ah
Capacity (wet cell - battery)	300 Ah
Working time (depending on floor and battery)	2-4 h / each set of batteries
Quick-Change battery system	yes

(HEFTER reserves the right to make technical changes).

version 01.2012

The HEFTER technologies **VARIOTECH®** and **TURNADO®** are combined in the Ride-on machines. This enables maximum flexibility and agility for mechanical floor cleaning:

- Backwards cleaning
- Cleaning in dead ends, corners and niches
- Easy cleaning close to edges

Convincing advantages:

- Economical cleaning of narrow passages and open areas with just one machine on the basis of automatic adjustable working width
- Easy handling
- Extremely compact dimensions
- Ergonomically designed controls
- Fast start/ stop operator control with just one button
- Around-the-clock use is no problem thanks to Quick-Change-battery-system
- Minimizing the numbers of machines
- Long working time through big tank volume
- 10 years guarantee on stainless steel chassis



Product versions:

FS 82 complete incl.	ARTICLE NO:	10023811
300 Ah wet cell battery	1	
(about 3,5 h working time)		
Charger	1	
Brush 0,8 mm grey	3	
Pad holder	3	
Pad red	3	

FS 82 complete incl.	ARTICLE NO:	10023810
275 Ah gel-batteries (about 3 h working time)	1	
Charger	1	
Brush 0,8 mm grey	3	
Pad holder	3	
Pad red	3	

FS 82 without supplies	ARTICLE NO:	10023807
without battery, charger, brushes, pad holder and pads		

RIDE - ON MACHINE FS 112



Crucial facts of floor cleaning:

- reducing cleaning time
- reducing labour costs
- Minimizing the numbers of machines

Technical data

FS 112

Dimensions / volume / weight

Working width	710 - 1120 mm
Rotational scrubbing and suction head TURNADO	up to 400°
Housing width	760 mm
Total length	1730 mm
Total height	1370 mm
Width of passage	830 mm
Tank volume (dirt- and fresh water tank)	each 150 l
Max. weight (with 275 Ah-Battery, driver, water)	830 kg
Max. surface pressure	0,65 N/mm²
Dead weight (with 275 Ah-Battery)	680 kg

Working performance

Theoretical cleaning rate	8960 m²/h
Max. speed	8 km/h
Max. water supply	8,9 l/min
Speed adjusted water supply	yes
Noise level cleaning / SILENT function	72/66 db
Fast start / stop operator control with just one button	yes

Motor performance

Brush motor	2 x 500 W
Vacuum motor	2 x 530 W
Drive motor	900 W

Brushes / Pads

Pressure brush / pad	2,3/0,5 N/cm²
Diameter	285 mm

Battery

Voltage	24 V
Capacity (maintenance free gel battery)	220/275 Ah
Capacity (wet cell - battery)	300 Ah
Working time (depending on floor and battery)	2-4 h / each set of batteries
QUICK-Change battery system	yes

(HEFTER reserves the right to make technical changes).

version 01.2012

The HEFTER technologies **VARIOTECH®** and **TURNADO®** are combined in the Ride-on machines. This enables maximum flexibility and agility for mechanical floor cleaning:

- Backwards cleaning
- Cleaning in dead ends, corners and niches
- Easy cleaning close to edges

Convincing advantages:

- Economical cleaning of narrow passages and open areas with just one machine on the basis of automatic adjustable working width
- Easy handling
- Extremely compact dimensions
- Ergonomically designed controls
- Fast start/ stop operator control with just one button
- Around-the-clock use is no problem thanks to Quick-Change-battery-system
- Minimizing the numbers of machines
- Long working time through big tank volume
- 10 years guarantee on stainless steel chassis
- Additional brush prerssure level



Product versions

FS 112 complete incl.	ARTICLE NO:	10023814
300 Ah wet cell battery	1	
(about 3 h working time)		
Charger	1	
Brush 0,8 mm grey	4	
Pad holder	4	
Pad red	4	

FS 112 complete incl.	ARTICLE NO:	10023813
275 Ah gel-batteries (about 2,5 h working time)	1	
Charger	1	
Brush 0,8 mm grey	4	
Pad holder	4	
Pad red	4	

FS 112 without supplies	ARTICLE NO:	10023808
without battery, charger, brushes, pad holder and pads		

FS 112 SERVO without supplies	ARTICLE NO:	10040356
without battery, charger, brushes, pad holder and pads		

Rough dust admission Option	ARTICLE NO:	10023868
For FS 112		



VACUUM - SWEEPER

KS 80



The **KS 80** is the economic sweeper with the Tandem-Roller-System. With 2 counterrotatable main brushes, the **KS 80** cleans all kinds of dirt.

This proves the **KS 80** to be the entry level model for private areas and small business.

Convincing advantages:

- Very easy to handle
- Impact-prove plastic
- Extremely easy technical service
- Height-adjustable sweeper roller and lateral brushes
- Space-saving folding hoop

Technical data

KS 80

Power supply	manual
Sweeping principle	TRS
Sweeping width main roller	470 mm
Sweeping width (with 2 side brushes)	800 mm
Power transmission	round belt
Capacity of dirt collector	40 l
Recommended net cleaning surface	up to 1000 m²
Theoretical sweeping performance	2800 m²/h
Practical sweeping performance	1680 m²/h
Total length	800 mm
Total width	660 mm
Total height	330 mm
(HEFTER reserves the right to make technical changes)	
version 01.2012	

Product versions:

KS 80 complete incl.	ARTICLE NO:	10062385
Side brush	2	
Tandem Roller System	1	

VACUUM - SWEEPER
KS 90



The **KS 90** with the unique TRS principle removes dirt and rubbish ranging from dust particles to beverage cans exceptionally thoroughly. In just one work step two counter-rotation brush rollers transport the dirt by means of a throw-over principle to the waste collector, which is filled from the top.

The **KS 90** is easy to operate, even in corners and along edges.

Convincing advantages:

- Dust removal
- Brush drive
- Suitable for indoor and outdoor use
- Suitable for sand and fine dust particles
- Suitable for coarse dirt in areas of extreme application
- Suitable for areas with narrow niches
- Operates exceptionally smoothly
- Dust free
- Internal charger
- Dust - vibrator for filter cleanig

Technical data

KS 90

Total sweeping width (2 side brushes)	900 mm
Sweeping roller width	600 mm
Sweeping principle	TRS
Power transmission	Chain
Powered sweeping roller	yes
Electrical dust removal	yes
Calculated sweeping performance	3150 m ² /h
Capacity of dirt collector	50 l
Filter surface	1,1 m ²
Cleaning filter	mechanical
Battery (Ah)	12 V 28 Ah
Charger (onboard)	4 A
Operating time	1,5 h
Total length	1.091 mm
Total width	760 mm
Total height	416 mm

(HEFTER reserves the right to make technical changes).

version 01.2012

Product versions:

KS 90 incl. battery	ARTICLE NO:	10034035
28 Ah Batterie (up to 1,5 h working time)	1	
Charger	onboard	
Side brush	2	
Tandem Roller System	1	

VACUUM - SWEEPER

KS 95



The **KS 95** is the universal hand-guided sweeper. It combines the advantages of extremely powerful dust extraction with the technically superior Tandem-Roller-System.

The extremely strong and impact-resistant construction ensures the **KS 95** is suitable for use in the harshest of working environments. Because of the double-thickness, rotational moulded panel design the machine works especially quiet. The large filter surface area of 2.5 m² ensures dust-free sweeping, even in critical applications. The traction drive enables the cleaning of large surface areas in a short space of time with no fatigue.

Convincing advantages:

- Applicable for sand and fine dust
- For inside and outside
- Deep discharge protection
- Drive motor
- Very silent and agile
- Suction-shutoff
- 2 side brushes are standard
- Handle adjustable in height

Technical data

KS 95

Sweeping width (with 2 side brushes)	900 mm
Sweeping principle	TRS
Sweeping width main roller	500 mm
Power transmission	toothed belt
Automatic main broom drive	Yes
Suction system	Yes
Filter cleaning	mechanical
Filter surface	2.5 m ²
Airflow volume	250 m ³ /h
Capacity of dirt collector	60 l
Recommended net cleaning surface	Up to 3000 m ²
Theoretical sweeping performance	3600 m ² /h
Practical sweeping performance	2340 m ² /h
Speed	3,7 km/h
Gradability	20 %
Total length	1150 mm
Total chassis width	790 mm
Total height	600 mm
Weight incl. battery	105 kg
Operating time (depends on floor, dirt)	2 h
Battery	12 V, 80 Ah

(HEFTER reserves the right to make technical changes)

version 01.2012

Product versions:

KS 95 complete incl.	ARTICLE NO:	10062386
80 Ah Battery (up to 2 h working time)	1	
Charger	1	
Side brush	2	
Tandem-Roller-System	1	

VACUUM - SWEEPER

KS 100



KS 100 is the powerful sweeper for inside and outside. Unmatched performance for all areas makes the **KS 100** an indispensable work device in all areas, where a maximum of performance is needed: the industries, the service sector, municipal applications and more.

The particularly powerful dust suction combined with the ingenious Tandem-Roller-System makes the **KS 100** ideal for removal of fine and coarse refuse for pros.

Convincing advantages:

- Tandem-Roller-System provides unmatched sweeping performance
- Very agile and silent
- Surdy frame combined with impact-proof, rotational moulded polyethylene trim panel
- Especially large dust container and filter
- Quick-to-change mechanism for rollers and lateral brushes
- Extremely easy technical access
- Differential drive of both rear wheels
- Powerful motor

Technical data

KS 100

Sweeping width (with 2 side brushes)	1000 mm
Sweeping principle	TRS
Sweeping width main roller	600 mm
Power transmission	chain drive
Automatic main broom drive	Yes
Suction system	Yes
Filter cleaning	mechanical
Filter surface	3 m ²
Airflow volume	600 m ³ /h
Capacity of dirt collector	70 l
Recommended net cleaning surface	Up to 5000 m ²
Theoretical sweeping performance	400 m ² /h
Practical sweeping performance	2600 m ² /h
Speed	4 km/h
Gradability	20 %
Total length	1190 mm
Total chassis width	790 mm
Total height	820 mm
Weight incl. battery	125 kg
Operating time (depends on floor, dirt)	2 h
Battery	2 x 12 V à 80 Ah

(HEFTER reserves the right to make technical changes)

version 01.2012

Product versions:

KS 100 complete incl.	ARTICLE NO:	10062387
80 Ah Battery (up to. 2 h working time)	2	
Charger	1	
Side brush	2	
Tandem-Roller-System	1	

RIDO - ON VACUUM SWEEPER

FKS 100 PRO



With its especially solid and robust construction, the **FKS 100 PRO** is the ideal machine for daily use even under the most difficult conditions.

The technically sophisticated tandem-roller system (TRS) makes the **FKS 100 PRO** a machine for the optimal removal of fine and coarse dirt in professional working areas - operating quickly, thoroughly and simply.

Convincing advantages:

- Frame: solid, powder-coated welded laser construction, combined with extremely impact-resistant, rotation sintered polyethylene covering
- Exceptionally dust collector and dust filter
- Quick-change mechanism for roller brushes and side brooms
- Standard: 2 side brooms
- Very easy access to technical components
- Differential drive on both back wheels

Technical data

FKS 100 PRO

Sweeping width (2 side brooms)	1.000 mm
Sweeping roller width	600 mm
Sweeping principle	TRS
Operating time	approx. 2,5 h
Capacity of dirt collector	70 l
Filter surface	3 m²
Filter cleaning	electrical
Gradability	20 %
Forward speed maximum	6 km/h
Theoretical sweeping performance	6.000 m²/h
Practical average sweeping performance	4.200 m²/h
Recommended net cleaning area	approx. 8.000 m²
Total length	1.190 mm
Total width	790 mm
Total height	1.089 mm
Weight (without Battery)	130 kg
Drive	Battery
Low maintenance battery (wet cell)	2 x 12 V a 105 Ah

(HEFTER reserves the right to make technical changes).

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Product versions:

KS 100 PRO complete incl.	ARTICLE NO:	10039260
105 Ah wet cell- battery	2	
Charger	1	
Side brush	2	
Tandem Roller System	1	

RIDE - ON VACUUM SWEEPER FKS 110 PRO



The **FKS 110 PRO** is the productive ride-on vacuum-sweeper with the unique tandem-roller system (TRS). The system combines agility and exceptionally high sweeping performance. The FKS 110 provides comfort and performance.

Convincing advantages:

- Load-bearing parts of powder-coated, solid steel construction
- Covering made of extremely impact resistant polyethylene (rotation formed)
- Highest possible ease of operation
- Very easy access to technical components
- Low maintenance drives due to avoidance of belts
- 2 side brooms
- No front rubber deflector: no hindrance of reception of large sweepings
- Vacuum-cleaning with 900 m³/h air volume in 4 m² dust filter
- Very large, robust and yet light dust collector

Crucial facts:

- Extremely small turning circle
- Swivelling side brooms: avoid obstacles automatically
- Clear view of the side brooms and all sides of the chassis
- No tools necessary for changing rollers and filters

Technical data

FKS 110 PRO

Sweeping width (2 side brooms)	1.110 mm
Sweeping roller width	700 mm
Sweeping principle	TRS
Operating time	approx. 4 h
Capacity of dirt collector	90 l
Filter area	4 m²
Filter cleaning	electrical
Gradability	20 %
Forward speed maximum	6 km/h
Theoretical sweeping performance	6.600 m²/h
Praktical average sweeping performance	4.620 m²/h
Recommended net cleaning area	up to approx. 12.000 m²
Total length	1.450 mm
Total width	900 mm
Total height	1.165 mm
Weight (without Battery)	209 kg
Drive	Battery
Low maintenance battery	4 x 6 V a 180 Ah

(HEFTER reserves the right to make technical changes).

version 01.2012

Product versions:

FKS 110 PRO complete incl.	ARTICLE NO:	10034036
Gel-Battery	4	
Charger	1	
Side brush	2	
Tandem Roller System	1	

FKS 110 PRO	ARTIKELNUMMER:	10043329
Gasoline engine	4,8 kW	
Side brush	2	
Tandem Roller System	1	

ESCALATOR AND MOVING PAVEMENT CLEANER

RF 40 / RF 40 light



The **RF 40 / RF 40 light** are units with patented technology which is supplied ready for operation together with a modified industrial vacuum cleaner.

The **RF 40 / RF 40 light** cleans step by step as well as the riser of the escalator leaving each step super clean.

Convincing advantages:

- Top cleaning effect on steps and risers at minimum expenditure of time
- Short set up and simple operation
- Easy transportation
- Cleaning can be done autonomous or by operator
- Just a short setup and you can start cleaning
- Cleans every type of stairs

Product versions:

RF 40 light without shifting device	ARTICLE NO:	10023561
Shifting device RF 40 light	ARTICLE NO:	10023760

RF 40 light varied version:

- Cleaning of risers of the escalator **not** possible!

Product versions:

RF 40 complete incl. shifting device	ARTICLE NO:	10023558
	1	
RF 40 without shifting device	ARTICLE NO:	10023556
Shifting device RF 40	ARTICLE NO:	10023710

Technical data

RF40 light

RF40

Total weight (with empty tank)	49 kg	59,5 kg
Transport dimensions max.	1400 x 720 x 1100 mm	1400 x 720 x 1100 mm
Working width	2 x 170 mm (2 roller brushes)	2 x 170 mm (2 roller burshes)
Total width of cleaning unit	520 mm	520 mm
Detergent/dirty water tank	20 l-refillable/ 60 l	20 l-refillable/ 60 l
Detergent applied to stair treads	200 / 300 / 400 ml per min	200 / 300 / 400 ml per min
Detergent applied to stair faces	not possible	50 / 100 / 150 ml per min
Power supply	230 Volt/16 A (mains power)	230 Volt/16 A (mains power)
Total power consumption	approx. 3 kW	approx. 3 kW
Single-button start of all units	yes	yes
Vacuums of all kind and quantities of dirt	yes	yes

(HEFTER reserves the right to make technical changes).

version 01.2012

CLEANING SYSTEM VARIOCLEAN



With its many application possibilities the **VARIOCLEAN** Cleaning System provides the ideal solution for non-contacting cleaning of all wet-room areas.

Five cleaning systems in one:

- Low-Pressure Spray Cleaner
- Low-Pressure Foam Cleaner
- Wet Vacuum
- Machine for Floor Scrubbing
- Spray Extraction Machine

Convincing advantages:

- Contact-free working
- Without buckets, sponges, scrubber brush, strip washer and squeegees
- Reduces working time
- Reduces usage of detergent and chemicals
- Low-Pressure cleaning technology enables dirt splashing in cleaning areas
- Prevents cross-contamination
- Reaches even small edges and niches
- Agile and compact design, applications even in smallest restrooms with long hoses

Technical data

VARIOCLEAN

Electrical connection

Alternating current	230 V / 50 Hz
Fusing of power feed	10 A
Total wattage	1600 W
Main power cable (H07 RN-F 3G1,0)	15 m

Pump motor

Performance	150 W
Spraying pressure	2 - 12 bar
Water consumption with spray lance	2,0 l / min.
Water consumption with injektor and foam lance	1,7 l / min.

Vacuum motor

Performance	1.250 W
Air circulation	3.200 l / sec.
Vacuum	2.500 mm / Ws
Noise level	72,8 dB

Tank capacity

Fresh water / max. temperature	35 l / 40°C
Dirt water tank	40 l

Suction hose

Length	4 m
Diameter	38 mm

Pressure hose

Length	5 m
Diameter	12 mm

Weight / dimensions

Dead weight	39 kg
Length / width / height	820 / 410 / 840 mm

(HEFTER reserves the right to make technical changes).

version 01.2012

Product versions:

VARIOCLEAN PRO complete incl. ARTICLE NO: 10040355

Hard floor adapter	1
Carpet adapter	1
Polster adapter	1

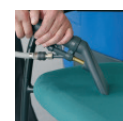
VARIOCLEAN basic machine ARTICLE NO: 10040354

Without extra supplies

Carpet spray-extraction set ARTICLE NO: 10043137



Upholstery adaptor 8 cm ARTICLE NO: 10034014



Hard-floor cleaning set ARTICLE NO: 10043138



PADS / PAD HOLDER
IDENTICAL FOR ALL SYSTEMS*

Article no:	Description
10017955	Superpad black ϕ 280 mm
10017956	Superpad brown ϕ 280 mm
10017957	Superpad beige ϕ 280 mm
10017958	Superpad red ϕ 280 mm - standard
10017959	Superpad green ϕ 280 mm
10017960	Superpad white ϕ 280 mm
10023272	Microfibre-pad ϕ 280 mm
10057909	Melamin pad, ϕ 280 mm
10000009	Longlife power pad, ϕ 280 mm
10017954	Pad holer for superpad
10023273	Pad holer for microfibre-pad
10061505	Pad holer for Superpads with long side bristles for pre-sweeper



* Except for TURNADO 38

BRUSHES

IDENTICAL FOR ALL SYSTEMS*

Article no:	Description
10017946	Nylon brush yellow fibre thickness 0,6 mm
10017947	Nylon brush grey fibre thickness 0,8 mm - standard
10017948	Nylon brush blue fibre thickness 1,0 mm
10017949	Nylon brush black fibre thickness 1,2 mm
10017962	Grit brush grey grain 80
10017963	Grit brush green grain 120
10017964	Grit brush blue grain 180
10017965	Grit brush red-brown grain 240
10017966	Grit brush brown grain 46
10024261	Brush for rough dust admission with extra long side bristles

* Except for TURNADO 38



OVERALL ACCESSORIES (IDENTICAL FOR THE FOLLOWING SYSTEMS)*

TURNADO 55 / 55 PRO
VARIOTECH 82 / 82 PRO
VARIOTECH 112 PRO
FS 82 / 112

Article no:	Description		
10020819	Squeegee blade (front) short (2) 440 mm x 60 mm x 3,0 mm		
10020939	Squeegee blade (front) long (1) 666 mm x 60 mm x 3,0 mm		
10021074	Squeegee blade (back) 4mm; short (2) 448 mm x 60 mm x 4,0 mm		
10021077	Squeegee blade (back) 4mm; long (1) 740 mm x 60 mm x 4,0 mm		
10020809	Squeegee blade (back) 5mm; short (2) 448 mm x 60 mm x 5,0 mm		
10020940	Squeegee blade (back) 5mm; long (1) 740 mm x 60 mm x 5,0 mm		
10021075	Squeegee blade (back) 6mm; short (2) 448 mm x 60 mm x 6,0 mm		
10021076	Squeegee blade (back) 6mm; long (1) 740 mm x 60 mm x 6,0 mm		
10028053	Run - off hose Length 850mm, Width 32 mm		
10037071	Run - off hose; highly tearproof - optional Length 750 mm, Width 32 mm		
10020949	Vacuum hose for back suction unit		
10020804	Vacuum hose for side suction unit		
10060134	Filling tool HEFTER with 2 m tube		

* Except for TURNADO 38

(1) for suction unit TURNADO 55 / 55 PRO und main suction unit VARIOTECH 82 / 82 PRO, VARIOTECH 112 PRO, FS 82 / 112

(2) for wing suction unit VARIOTECH 82 / 82 PRO, VARIOTECH 112 PRO, FS 82 / 112

ACCESSORIES SCRUBBER - DRIER TURNADO 38



Artikelnummer:	Beschreibung	
10051885	Squeegee blade (front) 580 mm x 50 mm x 2,0 mm	
10051884	Squeegee blade (back) 2,0 mm 630 mm x 50 mm x 2,0 mm	
10052613	Gel-battery, 25 Ah, 12 V	
10057485	Super pad red ϕ 380 mm	
10057486	Super pad beige ϕ 380 mm	
10057487	Super pad green ϕ 380 mm	
10057488	Super pad black ϕ 380 mm	
10057489	Super pad brown ϕ 380 mm	
10057491	Microfibre pad ϕ 380 mm	
10057490	Pad holder super pad & microfibre pad ϕ 380 mm	
10057483	Brush SN ϕ 380 mm	
10051869	Brush PP ϕ 380 mm - Standard	
10057484	Grit brush, TY ϕ 380 mm	

ACCESSORIES SCRUBBER - DRIER




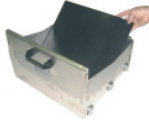


TURNADO 55 / 55 PRO

VARIOTECH 82 / 82 PRO

TURNADO 55 / 55 PRO

Article no:	Description	
10020134	SSet of squeegees 4mm front and back squeegee (4 mm)	
10063510	Charger 24V 15A for 105 Ah - Gel Batteries	
10020122	Battery set cpl. 105 Ah Gel batteries	

VARIOTECH 82 / 82 PRO

Article no:	Description	
10023266	Set of squeegees 4 mm 2 front and 2 back squeegee (4 mm)	
10023268	Set of squeegees 5 mm - standard 2 front and 2 back squeegee (5 mm)	
10023270	Set of squeegees 6 mm 2 front and 2 back squeegee (6 mm)	
10063512	Charger 24V 30A for 160/180 Ah Gel batteries - VARIOTECH 82	
10063513	Charger 24V 30A for 160/180 Ah Gel batteries - VARIOTECH 82 PRO	
10023257	Battery set cpl. 160 Ah* Gel batteries	
10023258	Battery set cpl. 180 Ah* Gel batteries	
10023091	Battery Quick-Change drawer for gel- and wet cell batteries	
10023097	Battery Quick-Change trolley stainless steel	
10023060	Crash bars for VARIOTECH 82 / 82 PRO Protect your scrubber drier against damage	

* For a second battery set (160 Ah or 180 Ah) for the use in Quick-Change battery exchange system you need the following articles

10023091	1 x	Battery Quick-Change drawer
10023097	2 x	Battery Quick-Change trolley
and the charger fitting to the machine		
10063512	1 x	Charger 24V 30A for 160 / 180 Ah gel batteries - VARIOTECH 82
10063513	1 x	Charger 24V 30A for 160 / 180 Ah gel batteries - VARIOTECH 82 PRO

ACCESSORIES SCRUBBER - DRIER

VARIOTECH 112 PRO

VARIOTECH 112 PRO

Article no:	Description	
10021038	Set of squeegees 4 mm 3 front and 3 back squeegee (4 mm)	
10021040	Set of squeegees 5 mm 3 front and 3 back squeegee (5 mm)	
10021042	Set of squeegees 6 mm 3 front and 3 back squeegee (6 mm)	
10021043	Set of squeegees 4/5 mm - standard 2 front and 2 back squeegee (5 mm), 1 front and 1 back squeegee (4 mm)	
10063513	Charger 24V 30A for 160/180 Ah gel batteries	
10063515	Charger 24V 30A for 220 Ah gel batteries	
10021023	Battery set cpl. 180 Ah* Gel batteries	
10021024	Battery set cpl. 220 Ah* Gel batteries	
10020843	Battery Quick-Change drawer or gel- and wet-cell-batteries	
10020890	Battery Quick-Change trolley stainless steel	
10020758	Crash bars for VARIOTECH 112 PRO Protect your scrubber drier against damage	







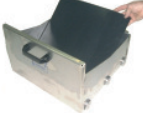

* For a second battery set (160 Ah, 180 Ah or 220 Ah) for the use in Quick-Change battery exchange system you need the following articles:

10020843	1 x	Battery Quick-Change drawer
10020890	2 x	Battery Quick-Change trolley
and the charger fitting to the battery:		
10063513	1 x	Charger 24V 30A für 160 / 180 Ah - gel batteries
10063515	1 x	Charger 24V 30A für 220 Ah - gel batteries

ACCESSORIES SCRUBBER - DRIER

CONVERT 82 / TURNADO 82

CONVERT 82 / TURNADO 82

Article no:	Description	
10025303	Squeegee (front) 3 mm Yellow	
10025320	Squeegee blade (back) 4 mm 876 mm x 60 mm x 4,0 mm	
10025301	Squeegee blade (back) 5 mm - standard 876 mm x 60 mm x 5,0 mm	
10025325	Squeegee blade (back) 6 mm 876 mm x 60 mm x 6,0 mm	
10025527	Set of squeegees 4 mm front and back squeegee	
10025528	Set of squeegees 5 mm - standard front and back squeegee (5 mm)	
10025529	Set of squeegees 6 mm front and back squeegee (6 mm)	
10028071	Run - off hose Transparent	
10063514	Charger 24V 30A for 160/180 Ah gel batteries	
10025509	Battery set cpl. 180 Ah* Gel batteries	
10025356	Battery Quick-Change drawer for gel- and wet-cell-batteries	
10025358	Battery Quick-Change trolley stainless steel	


* For a second battery set (160 Ah or 180 Ah) for the use in Quick-Change battery exchange system you need the following articles:

10025356	1 x	Battery Quick-Change drawer
10025358	2 x	Battery Quick-Change trolley
10063514	1 x	Charger 24V 30A für 160 / 180 Ah gel batteries

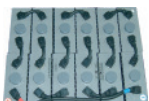
ACCESSORIES RIDO- ON MACHINES

FS 82 / FS 112

FS 82

Article no:	Description	
10023266	Set of squeegees 4 mm 2 front and 2 back squeegee (4 mm)	
10023268	Set of squeegees 5 mm - standard 2 front and 2 back squeegee (5 mm)	
10023270	Set of squeegees 6 mm 2 front and 2 back squeegee (6 mm)	

FS 82 / 112

Article no:	Description	
10063515	Charger 24V 30A for 220 Ah gel batteries	
10063516	Charger 24V 30A for 275 Ah gel batteries	
10063517	Charger 24V 30A for 300 Ah wet-cell batteries	
10024024	Battery set cpl. 220 Ah* Gel batteries	
10024025	Battery set cpl. 275 Ah* Gel batteries	
10024026	Battery set cpl. 300 Ah* Wet-cell batteries	
10024006	Batterie Quick-change drawer for gel- and wet-cell-batteries	
10024017	Battery Quick-change trolley stainless steel	

* For a second battery set (220 Ah, 275 Ah or 300 Ah) for the use in Quick-Change battery exchange system you need the following articles:

10024006	1 x	Battery Quick-change drawer
10024017	2 x	Battery Quick-change trolley
and the charger fitting to the battery:		
10063515	1 x	Charger 24V 30A für 220 Ah - gel batteries
10063516	1 x	Charger 24V 30A für 275 Ah - gel batteries
10063517	1 x	Charger 24V 30A for 300 Ah - wet-cell batteries

ACCESSORIES RIDE-ON MACHINES

FS 82 / 112

FS 112

Article no:	Description	
10021038	Set of squeegees 4 mm 3 front and 3 back squeegee (4 mm)	
10021040	Set of squeegees 5 mm 3 front and 3 back squeegee (5 mm)	
10021042	Set of squeegees 6 mm 3 front and 3 back squeegee (6 mm)	
10021043	Set of squeegees 4/5 mm - Standard 2 front and 2 back squeegee (5 mm), 1 front and 1 back squeegee (4 mm)	
10024235	Brush for rough dust admission (back)	
10024237	Brush for rough dust admission (front)	
10024261	Brush with extralong side bristles for rough dust admission	
10021077	Squeegee blade (back) for rough dust admission (740 mm x 60 mm x 4 mm)	
10020809	Squeegee blade (back) for rough dust admission (448 mm x 60 mm x 5 mm)	
10021045	Front squeegee transparent for rough dust admission (440 mm x 60 mm x 3 mm)	
10021046	Front squeegee transparent for rough dust admission (666 mm x 60 mm x 3 mm)	

ACCESSORIES SWEEPER

KS 90

KS 105

FKS 100 PRO

FKS 110 PRO

KS 90

Article no:	Description
10044832	Gel battery 26 Ah



10044830	Charger 4 Ah for original equipment
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10044831	Charger 8 Ah for additional battery
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FKS 100 PRO

Article no:	Description
10044834	Battery 105 Ah



10044833	Charger 10 A
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FKS 110 PRO

Article no:	Description
10044836	Gel battery 180 Ah



10044835	Charger 25 A
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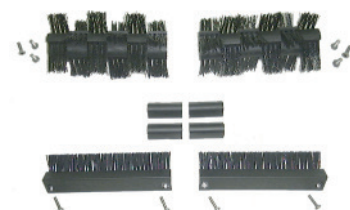
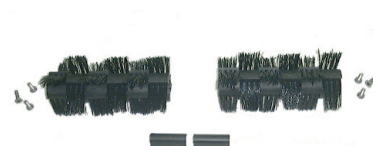


ACCESSORIES ESCALATOR AND MOVING PAVEMENT CLEANER

RF 40

RF 40

Article no:	Description
10023775	Set of brushes 0,8 mm wavy 1 brush right, 1 brush left, 2 glider, 6 countersunk screws
10023776	Set of brushes 0,75 mm grit 1 brush right, 1 brush left, 2 glider, 6 countersunk screws
10023777	Set of brushes 0,5 mm wavy 1 brush right, 1 brush left, 2 glider, 6 countersunk screws
10023784	Set of brushes 0,8 mm long 1 brush right, 1 brush left, 2 glider, 6 countersunk screws
10023790	Set of brushes 0,5 mm wavy, double bristle brush right, 1 brush left, 2 glider, 6 countersunk screws
10023793	Wear part - set of brushes 0,5 mm wavy (2 brush slide, 1 brush right, 1 brush left, 4 guides, 6 countersunk screws, 4 oval head screws)
10023794	Wear part - set of brushes 0,8 mm wavy (2 brush slide, 1 brush right, 1 brush left, 4 guides, 6 countersunk screws, 4 oval head screws)
10023795	Wear part - set of brushes 0,8 mm long (2 brush slide, 1 brush right, 1 brush left, 4 guides, 6 countersunk screws, 4 oval head screws)
10023796	Wear part - set of brushes 0,75 mm grit (2 brush slide, 1 brush right, 1 brush left, 4 guides, 6 countersunk screws, 4 oval head screws)
10023797	Wear part - set of brushes 0,5 mm wavy (2 brush slide, 1 brush right, 1 brush left, 4 guides, 6 countersunk screws, 4 oval head screws).
10035180	Special escalator cleaning detergent for RF 40



ACCESSORIES SPECIAL CLEANING SYSTEMS VARIOCLEAN

VARIOCLEAN

Article no:	Description
10043907	Foam lance for VARIOCLEAN

10045215	Spray lance for VARIOCLEAN
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10043137	Carpet spray-extraction set
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10043138	Hard floor cleaning set
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10034014	Upholstery adapter 8 cm
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ORDER FORM

We hereby order in accordance with the general terms and conditions of HEFTER cleantech GmbH.

System: _____

Articel no.: _____

Quantity: _____

Unit price: _____ Euro

Prices are net ex works without prescribed legal value added-tax. Shipment charges will be adeed

Adress for account:

Adress for delivery (if different from above):

Customer no.

Name orderer (in block letters)

Location, Date

legally binding signature / company-stamp

[illegible]

NOTES

[illegible]

General Terms and Conditions

1. Area of application

The following General Terms and Conditions (T's & C's) apply to all deliveries and services. They take priority over any general terms and conditions of the contractual partner in all cases. Any changes or amendments agreed must be in writing.

2. Offers – Offer documents

Cost estimates and offers from HEFTER CLEANTECH (HCT) are subject to confirmation. Documents regarding both individual and standard performance only give approximate dimensions unless dimensions are explicitly designated as binding. HCT retains ownership of all documents provided.

3. Placing of orders

Orders, including orders arranged by third parties, are only deemed to be accepted when the order has been confirmed in writing. This does not apply to the fulfilment of a purchase commitment. The supplier is not liable for errors and mistakes in unclear verbal information or documentation from by the ordering party.

4. Prices

The price list only contains recommended list prices excluding value added tax. Prices apply respectively ex works Hefter Manufacturing plus delivery costs plus actual value added tax.

If there are more than four months between the conclusion of contract and delivery, the supplier is entitled to pass on to the purchaser increases in material and/or wage costs of up to 10%. A substantial rise over and above entitles the purchaser to cancel the contract.

With regard to custom-made products, HCT is obliged to inform the customer about this directly or via its sales partner, unless performance is required for which there is an express estimate. Such performance will be separately remunerated. The same applies if services are used, which are charged at cost.

5. Payment

The payment period is 10 days from date of invoice. On expiry of the payment period HCT is entitled to charge interest on amount overdue of 8% above the respective discount rate of the European Central Bank without further notice. The right to declare further claims for damages arising from delayed payment is reserved. If payments are outstanding, HCT is additionally entitled to make any delivery subject to immediate settlement. This applies to all unpaid accounts receivable arising from the business relationship.

6. Deliveries

Delivery takes place at cost and risk of the ordering party. Acts of God, which include labour disputes and other unforeseen events, discharges HCT from adherence to the delivery deadline. HCT is obliged to inform the purchaser immediately in such cases. If the delivery deadline has to be cancelled for this reason, both parties are entitled to withdraw from the contract.

7. Acceptance

Acceptance takes place on handover to the recipient, irrespective of Clause 6. For custom-designed products, acceptance applies within one week (seven calendar days).

8. Right of withdrawal with business man (trader, entrepreneur)

Redemption of goods / Costs of storage with business man (trader, entrepreneur)

- Return of goods – without acknowledgement of our legal duty – only in good reasons within 10 days after purchase and against presentation of the invoice / delivery note possible. The warranty stays unaffected.
- Only goods in proper, saleable condition, which are not custom-designed, can be considered for redemption.
- With deliverance of goods, the customer receives a credit note, reimbursing the value of goods, reduced by a storage fee. The costs of storage are flat at 15% of the value of goods. For electronic parts a

testing fee of 60,00 € applies per piece. In case of a wrong delivery, there is no storage fee.

9. Warranties

The purchaser is obliged to examine the delivery item immediately. Any defects must be reported to HCT within two working days (48 hours).

Later reporting of apparent defects is excluded. With custom designed products, the declaration of apparent defects is excluded following acceptance, even if such defects arise during operation of the equipment. Any intervention by third parties to the equipment will lead to the loss of warranty. The statutory regulations apply in all other instances.

Warranty periods of scrubber dryer (Except TURNADO 38) and RF 40:

10 years: all stainless steel chassis; 5 years: all plastic, aluminium and stainless steel tanks; 2 years or max. 1400 hours: flexible diaphragm panels and driving motors; 1 year or max. 700 hours: brush motors, vacuum motors, wing motors and pumps. All models have 1 year warranty on brush heads, cleaning heads, electronic touch pads, electronic boards, batteries, charger and RF 40 vacuum.

Warranty periods of sweeper, VARIOCLEAN:

The warranty on all parts is 1 year.

Warranty periods of TURNADO 38:

The warranty on all parts is 6 month.

Warranty exceptions:

Transport damage; misuse or wrong use (this also includes the use of non-permitted or aggressive chemicals or the use of materials not approved for the machine); lack of care and maintenance; use of batteries and chargers not tested and released by HCT. All wear parts such as brushes, roller brushes, filter, glider, squeegees etc.

The supplier is entitled to make a minimum of two attempts to rectify the damage before statutory entitlements apply.

10. Compensation

HCT's liability is determined exclusively by these General Terms and Conditions. Claims for compensation, no matter on what legal grounds, are excluded, unless they are based on deliberate or forceful careless breach of contract or action by HCT.

11. Reservation of ownership

All goods remain the property of HCT until payment has been made in full. Appropriate use (onward sale or use) of the delivery items is permitted, in which case the reservation of ownership is carried forward; this applies to the proceedings of sale or remuneration for services to the extent that the ownership rights are reduced through use.

If the purchaser acts in breach of contract, HCT is entitled to take back the delivery items and the purchaser is obliged to return them. Any cost arising will be born by the purchaser.

Due to the reservation of ownership, the purchaser may neither pledge the objects supplied nor infringe the reservation of ownership in any other way. HCT must be informed immediately of dispositions by third parties.

12. Miscellaneous

- In the event of direct delivery by HCT to the end user, the General Terms and Conditions apply accordingly. In such an event HCT is entitled to have the customer's rights arising from the General Terms and Conditions implemented by his sales licence partner in the relevant territory. The customer must allow this as place of fulfilment by HCT.
- Lowest order value for end user is 50,00 € net. There is a extra charge of 10,00 € net, plus VAT for orders lower than this value.
- Place of fulfilment is Prien am Chiemsee/Germany.



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