Cleaning Technology Municipal Technology Waterjet Technology





# Cleaning Technology

Cleanliness without compromise

High-tech. Service. Management.



## Performance redefined

Sweeping, vacuum sweeping, scrubber-drying: We develop cleaning technology products that meet the most exacting requirements. Our focus is always the same: maximum customer satisfaction. By keeping in mind the specific requirements for carrying out individual tasks when developing our products, our machines enable both efficient and flexible working and are comfortable to use. Innovative ideas, outstanding service competence and our high quality standards are the key drivers of our success. This is how a high-quality product becomes a perfect solution that meets every challenge with superior performance. Or as we call it: Cleanliness without compromise.

#### Contents

#### Always the right solution

We are constantly developing our walk-behind and ride-on sweepers, scrubber-driers and combination machines to always have the right answer for indoor and outdoor cleaning service providers now and in the future. This also includes incorporating sustainability into the design of our cleaning machines right from the product development stage: with production using environmentally friendly, CO<sub>2</sub>-saving processes in modern plants, economical, eco-friendly use as well as recycling and disposal. With strong services ranging from consulting and financing to responsive on-site service and individual service contracts, we ensure maximum availability and optimally match our machines to the intended areas of application and needs of our customers. We offer solutions that fit exactly: to every task, to every customer, at any time.

Sweepmaster	4
Sweepmaster Walk-behind sweepers and vacuum sweepers)	6
Sweepmaster Ride-on vacuum sweepers)	8
Scrubmaster	10
Scrubmaster Autonomous scrubber-drier)	12
Scrubmaster Walk-behind-scrubber-driers)	14
Scrubmaster Ride-on scrubber-driers)	18
Scrubmaster B400 R Series Ride-on scrubber-driers and combi machines)	20
Performance X-AC	21
Bustainability	22
Quick-Connect-System	23
lako-Service	24
dako-Fleet-Management	26







The side broom jacket Dust Stop (option) reduces the development of dust and fine particulates during dry sweeping by up to 90% in

# A simple idea with maximum effect!

The side broom jacket Dust Stop can be retrofitted easily – no technical installation required! Unlike conventional dust control systems, Dust Stop uses no water, which means: no streaky floors! In comparison to working with naked bristles, Dust Stop minimises the danger of debris being catapulted out of the sweeping path. Sweeping close to walls or racks is possible without restrictions – and without damaging any objects.

#### Benefits:

• Allows dust-reduced sweeping

comparison to conventional side brooms.

- Reduces fine dust and noise pollution
- No use of water
- Easy handling
- No additional energy consumption (rotates with the side broom)

## Sweepmaster

Sweepers and vacuum sweepers, walk-behind, ride-on with high dump or take-it-easy dump

- Walk-behind sweepers and vacuum sweepers with area performances of between 2,300 and up to 4,350 m<sup>2</sup>/h
- Ride-on vacuum sweepers with area performances of up to 16,200 m²/h
- Superior cleaning performance for both in- and outdoor areas
- Powerful filter systems provide reliable dust control
- Service- and maintenance-friendly



#### Effective dust filter

The cassette filter system with large filter surface and patented R<sup>2</sup>S filter cleaning technology ensures clean exhaust air and long operating times.



#### Particularly convenient

The Take-it-Easy hopper system of the Sweepmaster 650 enables easy emptying with just one hand.



#### Easy changing of the cylinder

Changing the sweeping cylinder is particularly easy; no tools needed.



#### Two working steps in a single cleaning pass

Hako's quick-connect system allows upgrading of the Sweepmaster models 900 R and 980 R/RH with a "light debris collector" tool. Coarse dirt can be picked up manually with a gripper directly from the machine and collected in the litter bin.



#### Take-it-Easy

The two dirt hoppers can be removed separately and emptied with ease. The hopper lifting system is particularly easy to operate and allows checking the filling level or throwing coarse pieces of debris into the hoppers at any time.



## Reliably cleaned surfaces

Thoroughly removing dirt, dust and light debris: These are the tasks carried out by the machines of Hako's Sweepmaster product line. From a manual sweeper for cleaning small areas to vacuum sweepers providing area performances of up to 4,350 m<sup>2</sup> per hour, these compact walk-behind sweepers are the right choice when it comes to cleaning workshops and exhibitionor production halls as well as for light-duty outdoor cleaning operations. In addition to battery-powered versions, the models Sweepmaster 650 and 800 are also available with petrol-powered drives. Large-capacity dirt hoppers and powerful filter systems ensure highly efficient cleaning results.







## Sweepmaster Walk-behind sweepers and vacuum sweepers











Technical data		650	
Working width with 1 SB	cm	70,5	
Theoretical area performance	m²/h	3,525	
Manual drive	battery	battery/petrol	
Working speed	km/h	5	
Dirt hopper capacity	1	35	
Length	cm	120	
Width	cm	68,5	
Height above the seat (handle bar)/overhead guard	cm	71.5/100	
Total weight, ready for use	kg	105-122	



Sweepmaster 800

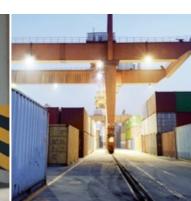
Technical data		800
Working width with 1 SB	cm	87
Theoretical area performance	m²/h	4,350
Manual drive	battery/petrol	
Working speed	km/h	5
Dirt hopper capacity	1	50
Length	cm	120
Width	cm	85
Height above the seat (handle bar)/overhead guard	cm	71.5/100
Total weight, ready for use	kg	112-165



## Drive, sweep, vacuum

Hako's range of ride-on vacuum sweepers comprises various different models: from a compact and highly manoeuvrable machine to a universal model providing an area performance of 16,200 m² per hour. Efficient dust filter systems provide a filtering degree of 99.5%, the optimised vacuum system binds both dust and dirt particles effectively. The comprehensive range of accessories available offers customers the right solution for almost any sweeping task in trade and industry or in commercial contract cleaning.





## Sweepmaster Ride-on vacuum sweepers



#### Sweepmaster B800 R

Sweepmaster B800 R		
Technical data		B800 R
Working width with 1 SB/2 SB	cm	89/110
Theoretical area performance	m²/h	5,340/6,600
Manual drive		battery
Working speed	km/h	6
Dirt hopper capacity	1	50
Length	cm	128
Width	cm	90.8-99.8
Height above the seat (handle bar)/overhead guard	cm	124
Total weight, ready for use	kg	282



Sweepmaster 900 R

Technical data		900 R
Working width with 1 SB/2 SB	cm	95/120
Theoretical area performance	m²/h	5,700/7,200
Manual drive	battery/	/petrol
Working speed	km/h	6
Dirt hopper capacity	1	60
Length	cm	150
Width	cm	100
Height above the seat (handle bar)/overhead guard	cm	133
Total weight, ready for use	kg	370-460



Sweepmaster 980 R/RH

Technical data		980 R/RH
Working width with 1 SB/2 SB	cm	95/120
Theoretical area performance	m²/h	5,700/7,200
Manual drive	battery	petrol /
Working speed	km/h	6
Dirt hopper capacity	1	60/75
Length	cm	150
Width	cm	100
Height above the seat (handle bar)/overhead guard	cm	133/200
Total weight, ready for use	kg	380-620



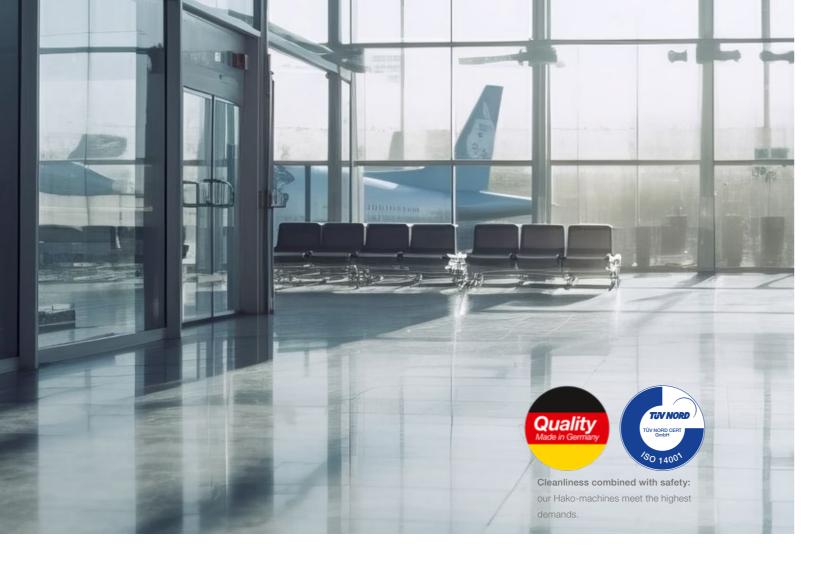
Sweepmaster 1200 RH

Technical data		1200 RH	
Working width with 1 SB/2 SB	cm	116/147	
Theoretical area performance	m²/h	9,300-13,200	
Manual drive	battery	battery/petrol/diesel	
Working speed	km/h	8/9	
Dirt hopper capacity	1	130	
Length	cm	199.8	
Width	cm	114.2	
Height above the seat (handle bar)/overhead guard	cm	152/199.9	
Total weight, ready for use	kg	763-1100	



Sweepmaster 1500 RH

Technical data		1500 RH
Working width with 1 SB/2 SB	cm	127/162
Theoretical area performance	m²/h	10,200-16,200
Manual drive	battery/	petrol/diesel
Working speed	km/h	8/10
Dirt hopper capacity	1	250
Length	cm	223
Width	cm	133.5
Height above the seat (handle bar)/overhead guard	cm	159/198.5
Total weight, ready for use	kg	1100-1715





#### Technical benefits in every detail

Hako machines are equipped with elaborated technical features to provide maximum safety and ease-of-use. Components such as brushes and sweeping units can be changed quickly and easily. All operating displays are clearly arranged and provide detailed information on the cleaning functions and the battery status. Both the on-board chargers and batteries can be charged at any conventional power outlet.

#### **Back-friendly overall machine concept**

Hako's ride-on Scrubmasters have been awarded the quality label by Aktion Gesunder Rücken e.V. (AGR). This makes Hako the first manufacturer worldwide to have received this accolade for its scrubber-driers! The award includes ergonomic details such as an individually adjustable comfort seat, clearly arranged controls and a height- and tilt-adjustable steering wheel.

## Scrubmaster

#### Scrubber-driers, walk-behind, ride-on and combi machines

- Ergonomically efficient wet cleaning. The machines provide area performances of between 1,400 and up to 14,000 m<sup>2</sup>/h
- Benefits both the environment and your budget: Hako-AquaControl for a more economical use of water and chemicals
- Innovative tank technology for long operating times
- Suitable cleaning components for every type of floor
- Service- and maintenance-friendly



#### With Eco mode:

With low levels of soiling, the machines can be operated efficiently and in an environmentally friendly manner with less power to minimise noise emissions and save energy.



#### Lighting according to StVO:

For better visibility, for example when working in outdoor areas, the Scrubmasters can be fitted with lighting equipment.



#### Everything at a glance:

The large 4.3-inch colour display shows all information. The chemical dosage is also conveniently adjustable.



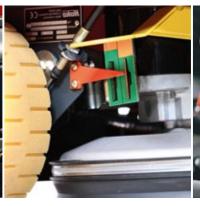
#### Intuitive, clear, direct:

Pictograms on the operating panel enable a quick overview and make it easy to select the functions – in every work situation. Another feature providing ease-of-use: the 1-button operating system activates all the cleaning functions at the push of a button.



## Provides more safety when handling chemicals:

Depending on the quantity of water applied in the cleaning process, the on-board dosing system automatically adds just the right amount of cleaning detergents – and the system is fully integrated into the machine design.



#### Everything at a glance and within easy reach

Sufficient material thickness of the brushes and pads is essential to ensure permanently good cleaning results. The mechanical wear indicator shows the operator when it is time to change the brush or pad. Scanning the QR code gives the user full access to the entire machine data on the operating panel. Even service orders can be placed directly from the cockpit.





# Technology that understands

Mapping technologies allow routes to be recorded and stored during the cleaning journey. The machine can be intuitively operated and programmed via an 8-inch touchscreen.

The Scrubmaster B75 i effectively increases productivity as it can autonomously perform cleaning tasks at any time of the day or night – efficiently and safely, saving time and resources.



#### Always the right system:

Equipped with a disc brush system or a cylindrical brush unit and two additional side brooms with Dust Stop for dustand fine particulates-reduced sweeping.





## Scrubmaster B75 i Autonomous scrubber-drier

The Scrubmaster B75 i cleans learned routes autonomously, reliably and safely. The 3D camera system and certified LiDAR sensors not only enable efficient navigation, but also compliance with safety standards. Operation and learning new routes are as simple as they are intuitive. Another advantage: For quick cleaning jobs in between, the Scrubmaster B75 i can also be operated manually as a conventional walk-behind scrubber-drier – and is particularly ergonomic thanks to the extendable handle.



#### Options for more efficiency:

The docking station for battery charging, recovery tank emptying and solution tank filling with fresh water as well as the Clean Guard front shield for unimpeded cleaning in areas with increased coarse dirt.

#### Autonomous - and safe!

Reliable safety sensors, 3D cameras and collision protection systems detect obstacles and ensure that the machine avoids people or objects in time. The data is also safe: In order to protect the data collected during teach-in and the cleaning journey, all EU regulations are complied with during storage and evaluation.

#### **Benefits:**

- Autonomous driving and cleaning with innovative, image-processing technology
- Simple, intuitive route learning
- Compliance with safety standards
- With disc or cylindrical brush
- Can also be used as a conventional walk-behind scrubber-drier
- Ergonomic in manual operation
- Optionally with Hako-AntiBac® for use in hygiene-sensitive areas

Gechnical data Scrubmaster B75 i	
Norking width disc brush/cylindrical brush	65 cm
Effective squeegee width	76 cm
Theoretical area performance disc brush cylindrical brush	2,340 m <sup>2</sup> /h 1,980 m <sup>2</sup> /h
Battery	Lithium
Theoretical running time (math. calc.)	120 to 180 min
Solution tank	751
Recovery tank	751
Total weight max. (depending on battery)	330 kg
Dimensions:	
Length	105 cm
Width (above bumper)	74.5 cm
Height at the operating handle	120 cm



# Scrubmaster Walk-behind scrubber-driers

#### Clean can be this easy

With working widths of 33 to 43 cm and an area output of up to 1,900 m²/h, the walk-behind scrubber-driers in the smaller performance range improve the cleaning quality on small to medium-sized areas. At the same time, they are so compact, light and easily manoeuvrable that they can even reach into narrow areas. And to increase area accessibility even further, our product developers have implemented a number of brilliant features: from the innovative Hako-Delta-Cleaning-System of the Scrubmaster B5 to the adjustable operating handle of the Scrubmaster B25, which also can be folded.



for cleaning or other utensils and the optional mop holder.





## Scrubmaster B5

#### For corners and edges

With its innovative Hako-Delta-Cleaning-System, the Scrubmaster B5 makes even narrow and angled areas accessible for machine-assisted cleaning – with great agility, excellent manoeuvrability and little effort on the part of the operator. The flat, delta-shaped cleaning head enables cleaning close to walls, right into corners and under superstructures with a floor clearance of as little as 120 mm. And the ergonomic, dynamic operating handle optimally supports the user in his/her movements.







#### Scrubmaster B5

Technical data		B5
Working width	cm	43
Theoretical area performance	m²/h	1,300
Solution/recovery tank	1	5/5
Width squeegee	cm	-
Battery capacity	Ah	12.8
Running time	min	60
Weight	kg	21





Technical data		B/E8
Working width	cm	33
Theoretical area performance	m²/h	1,320
Number/type of brushes	1/cylind	Irical brush
Brush speed	RPM	800
Solution/recovery tank	1	8/8
Width squeegee	cm	45
Battery capacity	Ah	10/20
Running time	min	60
Weight with/without battery	ka	30.5-37.7



Scrubmaster B12

B/E8	Technical data		B12
33	Working width	cm	38
1,320	Theoretical area performance	m²/h	1,500
ical brush	Number/type of brushes	1/disc b	orush
800	Brush speed	RPM	130
8/8	Solution/recovery tank	1	16/22
45	Length with squeegee	cm	80
10/20	Width without/with squeegee	cm	47
60	Height	cm	-
30.5-37.7	Total weight, ready for use	kg	80



Scrubmaster B25

Technical data		B25	
Working width	cm	43	
Theoretical area performance	m²/h	1,700-1,900	
Number/type of brushes	1/disc brush		
Brush speed	RPM	210	
Solution/recovery tank	1	30/30	
Length with squeegee	cm	126.5	
Width without/with squeegee	cm	50/76	
Height	cm	109,5	
Total weight, ready for use	kg	179-190	



## Compact, fast, efficient

With a wide range of working widths, high area outputs of up to  $4,200 \; \text{m}^2$  per hour and numerous options for more working comfort, efficiency and hygiene, the walk-behind scrubber-driers in the larger performance range offer the right solution for every application. The comfortable operation, the optimal view of the working environment and the ergonomic design ensure perfect working conditions. Even the highest hygiene requirements can be met: for example, with the Scrubmaster B45 CLH.







Easy disc brush change

The automatic, tool-free brush ejection and pick-up system facilitates daily service work on the machine.

## Scrubmaster Walk-behind scrubber-driers







Scrubmaster B30		Scrubmaster B45			
Technical data		B30	Technical data		
Working width	cm	43	Working width		
Theoretical area performance	m²/h	1,700-1,900	Theoretical area performance		
Number/type of brushes	1/disc	brush	Number/type of brushes		
Brush speed	RPM	210	Brush speed		
Solution/recovery tank	1	30/30	Solution/recovery tank		
Length with squeegee	cm	126,5	Length with squeegee		
Width without/with squeegee	cm	50/76	Width without/with squeegee		
Height	cm	109.5	Height		
Total weight ready for use	ka	170.100	Total weight ready for use		

Technical data		B45	
Working width	cm	43-65	
Theoretical area performance	m²/h	1,700-2,900	
Number/type of brushes	1-2/disc brushesl cylindrical brushes		
Brush speed	RPM	170-210 800	
Solution/recovery tank	1	42/42	
Length with squeegee	cm	123.5-136.5	
Width without/with squeegee	cm	50-67/76-95	
Height	cm	111.6	
Totalinht	Lon	004.040	

Scrubmaster B45 CLH

Technical data		B30	Technical data		B45	Technical data		B45 CLH
Working width	cm	43	Working width	cm	43-65	Working width	cm	51
Theoretical area performance	m²/h	1,700-1,900	Theoretical area performance	m²/h	1,700-2,900	Theoretical area performance	m²/h	2,300
Number/type of brushes	1/disc	brush	Number/type of brushes		c brushesl cal brushes	Number/type of brushes	1/disc	brush
Brush speed	RPM	210	Brush speed	RPM	170-210 800	Brush speed	RPM	210
Solution/recovery tank	1	30/30	Solution/recovery tank	1	42/42	Solution/recovery tank	1	42/42
Length with squeegee	cm	126,5	Length with squeegee	cm	123.5-136.5	Length with squeegee	cm	134.5
Width without/with squeegee	cm	50/76	Width without/with squeegee	cm	50-67/76-95	Width without/with squeegee	cm	56/86
Height	cm	109.5	Height	cm	111.6	Height	cm	111.6
Total weight, ready for use	kg	179-190	Total weight, ready for use	kg	204-240	Total weight, ready for use	kg	230



#### Scrubmaster B70

Technical data		B70
Working width	cm	60-85
Theoretical area performance	m²/h	3,000-4,200
Number/type of brushes	,	c brushesl cal brushes
Brush speed	RPM	185 850
Solution/recovery tank	1	72/74
Length with squeegee	cm	153-171
Width without/with squeegee	cm	68-88/95-110
Height	cm	115
Total weight, ready for use	kg	325-393



Scrubmaster B90 CL

	Technical data		B90 CL
	Working width	cm	60-85
,200	Theoretical area performance	m²/h	3,000-4,200
S	Number/type of brushes		brushesl al brushes
)	Brush speed	RPM	185/850
	Solution/recovery tank	1	85/85
	Length with squeegee	cm	164
5-110	Width without/with squeegee	cm	68-88/95-110
	Height	cm	115
3	Total weight, ready for use	kg	415-480



## "Right of way" for cleanliness

Working widths of between 55 and 123 cm. For narrow aisles in high-bay warehouses or large halls. Scrubbing and drying or sweeping and vacuuming in a single working step. An ergonomic workplace with superior operating comfort and an optimal view onto the working area. Thanks to their sophisticated technology, Hako's ride-on scrubber-driers can clean between 3,000 and 8,600 m² of floor space per hour – for a wide range of possible applications.

Available are cylindrical brushes with additional pre-sweep function for coarsely textured floors,

and disc brushes for smooth to medium-textured floors, including a wide range of working





## Optionally available for the Scrubmaster models B175 R and B260 R

the pre-sweep unit collects loose dirt prior to wet-cleaning the floor to save laborious pre-cleaning. The overhead guard provides increased safety.

## Scrubmaster Ride-on scrubber-driers



#### Scrubmaster B75 R

Technical data		B75 R	
Working width	cm	55-65	
Theoretical area performance	m²/h	3,000-3,500	
Number/type of brushes	1/2/disc brushes		
Brush speed	RPM	180	
Solution/recovery tank	1	75/75	
Length with squeegee	cm	147	
Width without/with squeegee	cm	72-76/86	
Height	cm	121	
Total weight, ready for use	kg	389-447	



#### Scrubmaster B120 R

Technical data		B120 R	T
Working width	cm	70-90	V
Theoretical area performance	m²/h	4,800-5,800	Т
Number/type of brushes		brushesl ical brushes	N
Brush speed	RPM	210 850	В
Solution/recovery tank	1	120/120	S
Length with squeegee	cm	167	L
Width without/with squeegee	cm	81-95/ 96-112	V
Height	cm	148	Н
Total weight, ready for use	ka	707-738	Т



Scrubmaster B175 R

Technical data		B175 R	
Working width	cm	85-108	
Theoretical area performance	m²/h	5,950-7,560	
Number/type of brushes	2/disc brushesl cylindrical brushes		
Brush speed	RPM	210 850	
Solution/recovery tank	1	175/175	
Length with squeegee	cm	189	
Width without/with squeegee	cm	94-112/ 113-129	
Height	cm	145/208	
Total weight, ready for use	kg	1,000-1040	



Different brush units for every type of floor

materials such as brushes, pads and microfibre.

#### Scrubmaster B260 R

Technical data		B260 R
Working width	cm	108-123
Theoretical area performance	m²/h	7,560-8,610
Number/type of brushes		brushesl cal brushes
Brush speed	RPM	210 640
Solution/recovery tank	1	260/260
Length with squeegee	cm	202
Width without/with squeegee	cm	115-129/129
Height without/with overhead guard	cm	149/209
Total weight, ready for use	kg	1,350-1,410



www.agr-ev.d

Hako's Scrubmaster ride-on scrubber-driers have been designed as mobile, ergonomic workplaces. They are the first ride-on scrubber-driers worldwide to have been awarded the AGR (Aktion Gesunder Rücken e.V.) quality label for their back-friendly overall machine concept.





## Configurable in every detail

The demands put on professional cleaning technology products are just as individual as their application areas. Each of our Scrubmaster B400 R Series models can therefore be upgraded with a wide range of individual extras and tools - for more efficiency, flexibility and safety at work.



Scrubmaster		B400 R/RM/RH 1230	B400 R/RM/RH 1550
Working width scrubbing	cm	123	155
Squeegee width	cm	136	166
Theoretical area performance	m²/h	11,000	14,000
Max. climbing capacity in cleaning mode without/with X-AC	%	6/15	6/15
Working speed	km/h	8-9	8-9
Brush system/number of brushes		disc brushes/3	disc brushes/3
Brush pressure	kg	55/75/95	80/110/140
Solution and recovery tank capacity	I	400	400
Take-it-Easy system/manual emptying* High dump**	I	2 x 44 150	2 x 44 150
Nominal voltage	V	36	36
Total output	kW	14,7	16
Battery capacity max.	Ah	540/810	540/810
Length with squeegee	cm	202/281/281	202/281/281
Width without/with squeegee	cm	130/136	160/166
Height without/with overhead guard	cm	150/212	150/212
Weight, ready to use, without driver	kg	2.110/2.260/ 2.420	2.130/2.280/ 2.440
Noise level at the operator's ear	dB(A)	68/74/74	68/74/74

\*Scrubmaster B400 RM \*\*Scrubmaster B400 RH

## Scrubmaster B400 R Series

#### Full flexibility for very large areas

The new Scrubmaster B400 R Series ensures long, uninterrupted working and a high area output of up to 14,000 m<sup>2</sup>/h: thanks to the 400-litre solution and recovery tank as well as the maximised battery capacity provided by the optional battery changing system. Equipped with a 3-disc-brush unit, which is available in working widths of 123 cm or 155 cm, and many extras as a standard, this new machine series is ready for any major cleaning task.



Scrubmaster B400 RH Vacuum sweeper & scrubber-drier combi machine with high dump



Scrubmaster B400 RM Vacuum sweeper & scrubber-drier combi machine for manual emptying with Take-it-Easy system



Scrubmaster B400 R Scrubber-drier

## X-AC front and rear drive

#### **Excellent performance also on inclines**

Scrubmaster ride-on scrubber-driers can be equipped with an electronically modulating X-AC front and rear drive, which provides improved traction in cleaning mode. Our X-AC variants can effortlessly clean ramps and inclines without any loss of performance. This enables cleaning not only of level floors but also of ascending and descending surfaces in a single cleaning pass, which saves both time and costs.

#### X-AC front and rear drive variants





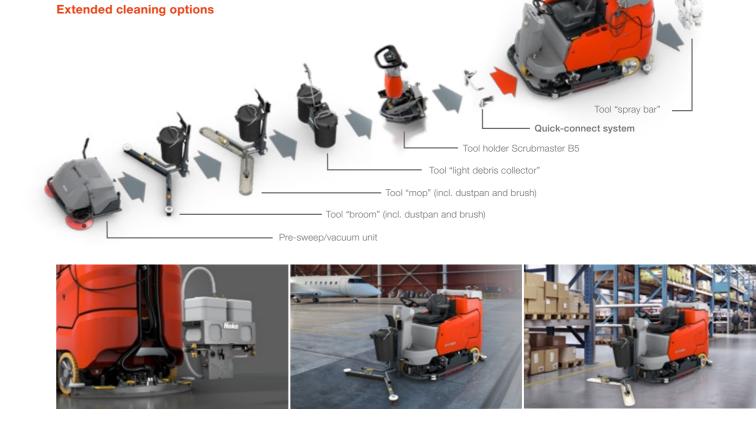






real drive variants					
X-AC	B175 R	B260 R	B400 RH	B400 RM	B400 R
Disc brush 900 mm Disc brush 900 mm + pre-sweep/ vacuum unit Cylindrical brush + side broom Cylindrical brush + pre-sweep/ vacuum unit	:				
Disc brush 1080 mm HD Cylindrical brush + side broom Cylindrical brush + pre-sweep/ vacuum unit		•			
Disc brush 1230			•	•	•
Disc brush 1550			•	•	•





## 100% for the environment

#### Sustainable machine deployment

The walk-behind scrubber-drier Scrubmaster B25 is more than efficient: the machine's solution and recovery tank made from 100 % recycled plastic is a cradle-to-cradle product. By reprocessing the industrial recyclate from our in-house production, we can maintain the same high quality as new Hako products and close the internal loops. However, we are not resting on our laurels of course. After all, the Scrubmaster B25 is just one of many adjustments we are making to improve sustainability before, during and after use.



#### Hako-AntiBac®

The antibacterial tank feature ensures reduced fungal and bacterial development and reduces both odour development and the consumption of disinfectants for tank cleaning.



#### **Hako-AquaControl**

Thanks to the intelligent brush system with water retention device,
Hako-AquaControl saves up to 50% water during operation.



#### Hako Eco mode

With low levels of soiling, the machine can be operated with less power to minimise working noise and to save energy.



#### Hako-LessChem

Saves cleaning detergents and protects the environment: prevents incorrect dosing and ensures reliably good cleaning results with only small amounts of chemicals – thanks to Hako's dosing and filling systems.

#### System-based application diversity!

Hako's quick-connect system makes cleaning processes in certain environments even more efficient. It allows uncomplicated upgrading of vacuum sweepers and scrubber-driers with pre-cleaning tools and tools for special applications to carry out several working steps in a single cleaning pass.

Quick-Connect-System

#### Cleaning and disinfecting with Hako

Selected Hako machines can also be equipped with tools for special applications installed at the rear of the machine to carry out various different cleaning tasks including surface disinfection or effortlessly removing oil spills and tyre marks.

	Scrubmaster					Sweepmaster
	B75 R	B120 R	B175 R	B260 R	B400 R	980 R/RH
Quick-Connect-System			•	•	•	•
Pre-sweep/vacuum unit			•	•		
Tool "broom"			•	•	•	
Tool "mop"			•	•	•	
Tool "light debris collector"			•	•	•	•
Tool "spray bar"	•	•	•	•		
Tool B5 holder			•	•	•	•



Flexible co-driver: with a special holder, the Scrubmaster B5 can be easily taken on board and transported to the next job site.

# Service from the professionals makes the difference!

Excellent service from Hako turns a premium quality machine into a top solution that fulfils all your requirements: with competent service technicians in the field, in fully equipped workshops, with a regular contact person and with uncomplicated, solution-oriented processing of your service requests.



#### Customer service - full availability, full security

Our qualified service technicians are available for you around the clock. Another big plus: our efficient spare parts logistics, which delivers spare parts overnight if the worst comes to the worst.

#### **Customised and scalable services for:**

- Maximum machine availability and high efficiency
- Cost transparency and greater cost-effectiveness
- Improved quality of results
- Sustainability in use and through extended service life and value retention of your machine





# 220 mobile service technicians with the shortest response times

#### On-site service: always quickly on the spot

- Qualified service technicians optimally prepared thanks to efficient deployment planning
- Fully equipped service vehicles with suitable spare parts for all common service cases
- Fast and professional troubleshooting

## Service is our DNA

Your satisfaction is our benchmark. That's why you get much more than a top product from Hako: you get a solution that always fits perfectly; to suit you, your goals, the area of application and our machines.

## Renting instead of buying!

#### Scalable financing and rental options that always fit!

- Short-term hire for increased flexibility the fleet can be quickly adapted to changing needs
- Always the latest technology at hand
- Lower investment costs and thus protection of liquidity
- Cost certainty and predictability
- All-round carefree package with maintenance and service contracts

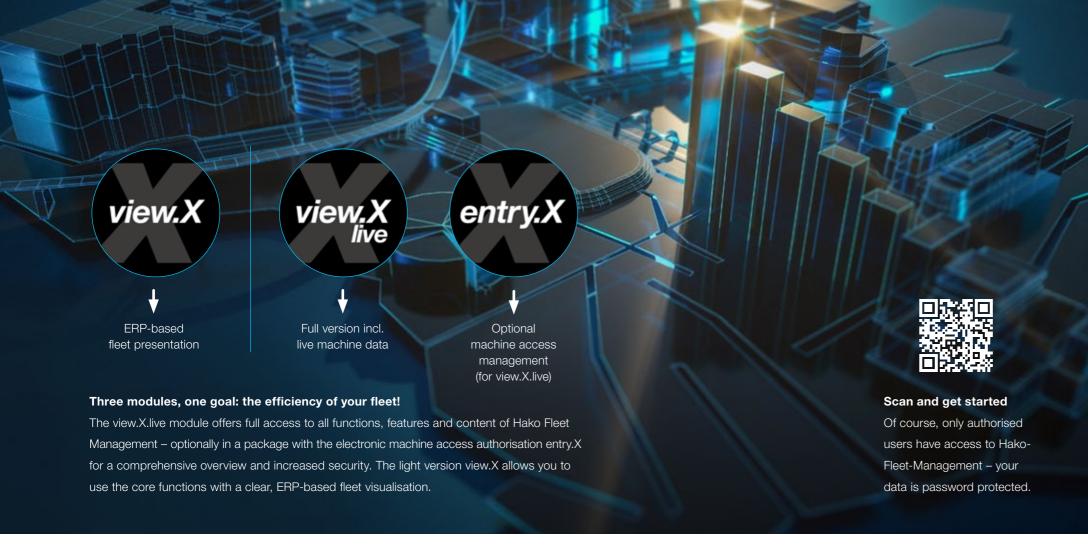












#### From immediate support to predictive maintenance

If the worst comes to the worst, service notifications can be sent directly from the portal. The current machine status and service codes are immediately transmitted to service technicians in your area – traceable for you in the system at all times. This means that an expert with the right Hako original spare parts is quickly at your site. With modern technology and data analysis, Hako Fleet Management can also predict maintenance requirements and act proactively before breakdowns occur. This increases machine availability and reduces service costs, extends machine life and thus contributes to sustainability in fleet operation.





# From real-time tracking to resource optimisation

As the size of the machine fleet increases, so does the importance of effective management. Hako Fleet Management helps you to manage your fleet efficiently, coordinate its deployment and keep an eye on all relevant key figures in real time. As a central machine management tool, it ensures fully automated transparency and provides the data basis for optimising the use of resources. For increased efficiency, reduced costs and more sustainable fleet management.

- The entire fleet at a glance from anywhere, at any time
- Clear and transparent visualisation in the web portal on your PC, smartphone or tablet
- Recording of all important cost, contract and service data as well as operating statuses while the machine is working



More graphics, improved visualisations and interactive analyses for faster insights



Hako Fleet Management with a new dashboard: more functions, more usability, more options.

#### Hako-Fleet-Management – here is why

- Cost transparency and control
- High machine availability
- Prevents machine damage
- Performance records
- Efficiency analysis
- Optimised fleet management
- Management of mixed fleets through an interface to third-party providers such as ToolSense



#### For a clean future

Cleanliness is more than just an excellent cleaning result. In fact, it starts long before that: with the development of our products, and with every idea that makes our machines even more resource-saving and efficient and keeps the environmental impact as low as possible throughout the entire, long product life. That is why we are constantly driving our research and development further in the direction of efficiency-increasing and even more environmentally friendly measures, as well as important future topics such as digitalised processes and autonomous driving. So that cleanliness is not only visible, but becomes an exciting experience!



## We are also active in the field of Municipal Technology and Waterjet Technology

We offer a comprehensive solution programme in the professional outdoor cleaning segment: from flexible, highly manoeuvrable city sweepers and compact, multifunctional implement carriers and transporters for all-season use to efficient waterjet technology for industrial and commercial application.

Hako GmbH Hamburger Str. 209-239 23843 Bad Oldesloe Tel. +49 4531 806-0 info@hako.com www.hako.com





Blue Competence is an initiative of VDMA (www.vdma.org). By engaging in this partnership, we are committed to comply with the twelve sustainability principles applied in the field of mechanical and system engineering (www.bluecompetence.net/about).