

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. High tech and quality

"made in Germany" are important pillars of our success, just as much as our innovative

ideas and outstanding service competence, which help us to turn our high-quality

products into ideal solutions that meet every challenge with superior performance.

Scrubmaster series comprising the models B75 R, B120 R and B175 R is our response to these ever-growing requirements.

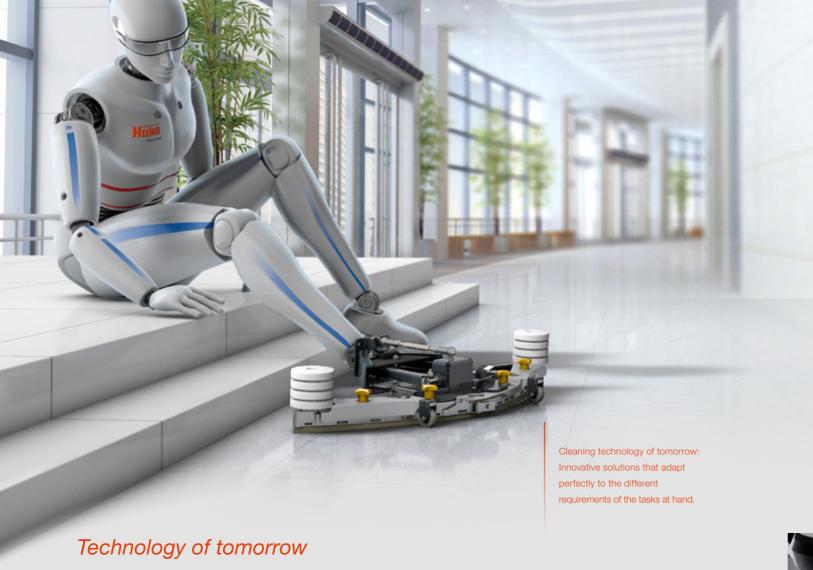
Always the best solution

As the requirements for modern cleaning technology increase, the opportunities we are able to offer our customers also continue to grow. We keep developing both our walk-behind and ride-on sweepers and vacuum sweepers, scrubber-driers and combi machines further in order to offer ideal solutions – now and in the future – for professional in- and outdoor cleaning tasks. Our most recent example: the new ride-on scrubber-driers Scrubmaster B120 R and B175 R, which, together with the Scrubmaster B75 R, set new standards in terms of ergonomics, efficiency, and future-proof technology. By offering innovative solutions, matching accessories and services as well as a wide range of procurement to every task at hand, to each customer, at any time.

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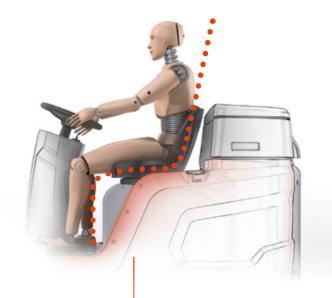
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Or as we call it: Cleanliness without compromise. CI alternatives, we make sure that our machines are perfectly in tune with our customers' individual applications and requirements. In this vein, we offer solutions that fit perfectly:



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.



Ergonomically designed workplace: for safe, fatigue-free working.

The requirements for cleaning technology are constantly increasing. Hako designs and manufactures machines that meet all practical demands: they are cost-efficient, user-friendly and safe – and particularly ergonomic and comfortable.











Everything under control: The large and clearly arranged colour display informs the user about important data such as the filling level of the water tank and the battery state charge indicator.

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.

All vehicle information instantly available

Scanning the QR code gives the user full access to the entire machine data and other details, which can be viewed on the display of the operating panel. It even enables the driver to place service orders directly from the cockpit. Everything at a glance – and fully transparent: to provide the highest possible machine availability.









Cleanserv

Wet & dry vacuum cleaners

- With total outputs of up to 3,600 Watt
- From small and manoeuvrable to compact and powerful
- Areas of application: industrial and commercial facilities

We measure performance in m²/h

Cleaning machines for every challenge: from hygienic cleanliness in retail areas to dirt-free hangar floors – perfectly adapted to the tasks and floor surfaces at hand.







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

Sweepmaster sweepers and vacuum sweepers

- Walk-behind sweepers and vacuum sweepers with area performances of between 2,300 and up to 4,350 m²/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





PowerBoss Nautilus and Armadillo 9XR

Vacuum sweepers and combi machines

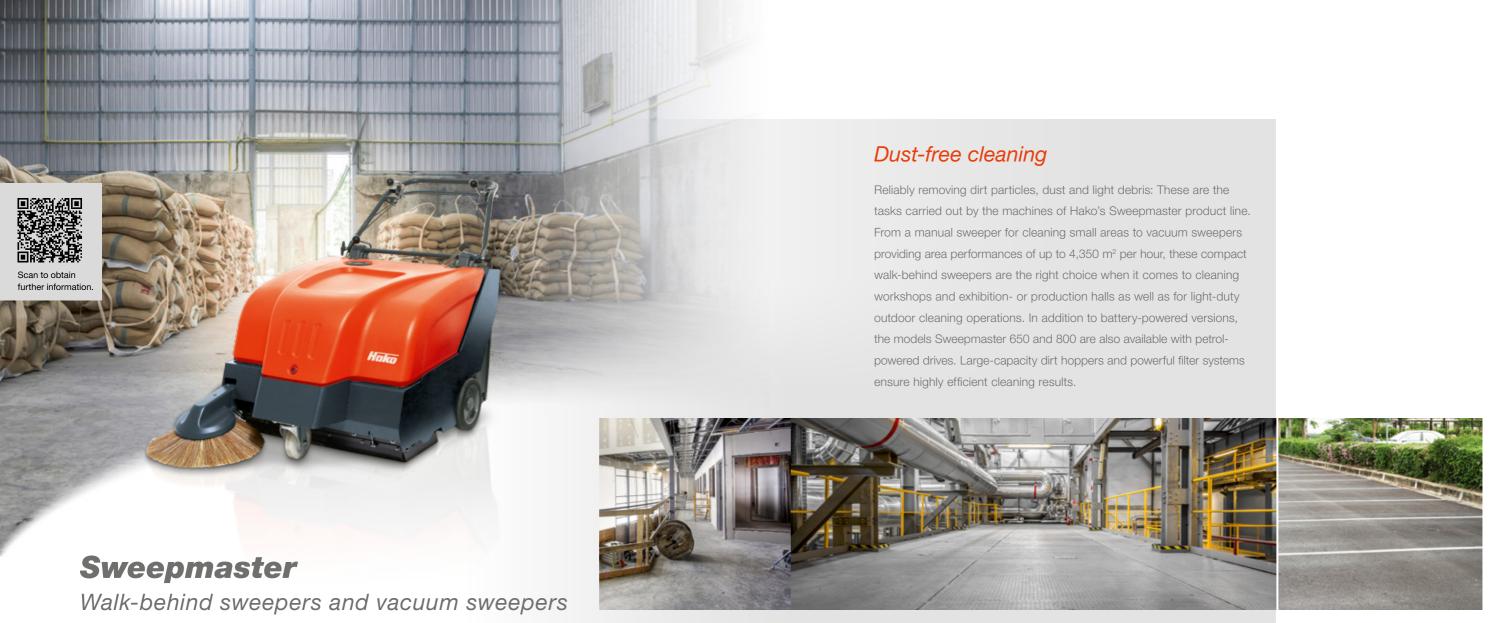
- With area performances of up to 25,000 m² per hour
- Powerful drive- and hydraulic motors
- Highly manoeuvrable
- Areas of application: large floor surfaces, from logistic facilities and multi-storey car parks to the heavy industry sector

Scrubmaster scrubber-driers • Ergonomically officient wet close

- Ergonomically efficient wet cleaning. The machines provide area performances of between 1,400 and up to 9,250 m²/h
- Budget- and environmentally friendly: Hako-AquaControl ensures an economical use of the cleaning solution
- Innovative tank technology for long operating times
- Suitable cleaning components for every type of floor.



Scrubmaster scrubber-driers, walk-behind, ride-on and combi machines







Technical data		M600
Working width with 1 SB/2 SB	cm	67
Theoretical area performance	m²/h	2,300
Manual drive		manuel
Working speed	km/h	4
Dirt hopper capacity	I	40
Length	cm	133-155
Width	cm	79
Height above the seat (handle bar)/overhead guard	cm	90-106
Total weight, ready for use	kg	24



Sweepmaster B500

Technical data		B500
Working width with 1 SB/2 SB	cm	60
Theoretical area performance	m²/h	2,400
Manual drive		battery
Working speed	km/h	4
Dirt hopper capacity	1	40
Length	cm	80-100
Width	cm	70
Height above the seat (handle bar)/overhead guard	cm	60-120
Total weight, ready for use	kg	56



Sweepmaster 650

Technical data		650
Working width with 1 SB/2 SB	cm	70,5
Theoretical area performance	m²/h	3,525
Manual drive	battery/p	petrol
Working speed	km/h	5
Dirt hopper capacity	I	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/2 SB	cm	87	
Theoretical area performance	m²/h	4,350	
Manual drive	battery/	battery/petrol	
Working speed	km/h	5	
Dirt hopper capacity	I	40	
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	



Sweeping and vacuuming while comfortably seated

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

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	I	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	410-620



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/p	petrol/diesel
Working speed	km/h	8/9
Dirt hopper capacity	I	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	10,200-14,580
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



Compact, fast, efficient

From a compact machine that easily fits into the boot of a car to an extra-hygienic specialist machine for demanding work environments: Hako's walk-behind scrubber-driers provide economically efficient wet cleaning of non-textile floors – with area performances of between 1,400 and up to 4,200 m² per hour. User-friendly operation, an optimal view onto the working area as well as the ergonomic design provide perfect working conditions. The model Scrubmaster B45 CLH meets even the highest hygiene requirements, for example when working in hospitals, nursery homes or in the food processing industry.



The tank has an antibacterial feature: for optimum hygiene, reduced odour development and a reduced need for disinfectants in the tank (option).



Scrubmaster B45 CLH

Technical data		B45 CLH
Working width	cm	51
Theoretical area performance	m²/h	2,300
Number/type of brushes	1/disc l	orushes
Brush speed	RPM	210
Solution/recovery tank	1	42/42
Length with squeegee	cm	134.5
Width without/with squeegee	cm	56/86
Height	cm	111.6
Total weight, ready for use	kg	230

Scrubmaster

Walk-behind scrubber-driers



Scrubmaster E10/B10

	E10/B10
cm	35
m²/h	1,400
2/cylindrical brushes	
RPM	650
I	10/11
cm	68.5
cm	45
cm	-
kg	54-85
	m²/h 2/cylindri RPM I cm cm



Scrubmaster B12

Technical data		B12
Working width	cm	38
Theoretical area performance	m²/h	1,500
Number/type of brushes	1/disc	brushes
Brush speed	RPM	130
Solution/recovery tank	I	16/22
Length with squeegee	cm	80
Width without/with squeegee	cm	47
Height	cm	-
Total weight, ready for use	kg	80



Scrubmaster B30

Technical data		B30	
Working width	cm	43	
Theoretical area performance	m²/h	1,700-1,900	
Number/type of brushes	2/disc brushes		
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	



Scrubmaster B45

Technical data		B45
Working width	cm	43-65
Theoretical area performance	m²/h	1,700-2,90
Number/type of brushes		brushesl cal brushes
Brush speed	RPM	170-210 80
Solution/recovery tank	I	42/42
Length with squeegee	cm	123.5-136
Width without/with squeegee	cm	50-67/76-9
Height	cm	111.6
Total weight, ready for use	kg	204-240



Scrubmaster B70

B45	Technical data		B70
43-65	Working width	cm	60-85
1,700-2,900	Theoretical area performance	m²/h	3,000-4,20
brushesl al brushes	Number/type of brushes		brushesl cal brushes
170-210 800	Brush speed	RPM	185 850
42/42	Solution/recovery tank	I	72/74
123.5-136.5	Length with squeegee	cm	153-171
50-67/76-95	Width without/with squeegee	cm	59/95-110
111.6	Height	cm	115
204-240	Total weight, ready for use	kg	325-393



Scrubmaster B90 CL/B120

Technical data		B90 CL	B120	
Working width	cm	60	85	
Theoretical area performance	m²/h	3,000	4,200	
Number/type of brushes		1-2/disc brushesl cylindrical brushes		
Brush speed	RPM	185	850	
Solution/recovery tank	1	85/85	110/115	
Length with squeegee	cm	164	166	
Width without/with squeegee	cm	59/95	70/110	
Height	cm	115	115	
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 work process. 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 9,250 m² of floor space per hour – for a wide range of possible applications.

Excellent combination:

The optional Sweepmaster B175 R pre-sweep unit collects loose dirt prior to wet-cleaning the floor, which saves laborious pre-cleaning.





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	I	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		
Working width	cm	70-90		
Theoretical area performance	m²/h	4,800-5,800		
Number/type of brushes	2, 0.00	2/disc brushesl cylindrical brushes		
Brush speed	RPM	210 850		
Solution/recovery tank	1	120/120		
Length with squeegee	cm	167		
Width without/with squeegee	cm	81-95 96-112		
Height	cm	148		
Total weight, ready for use	ka	707-738		



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	2101850	
Solution/recovery tank	I	175/175	
Length with squeegee	cm	189	
Width without/with squeegee	cm	87 113-129	
Height	cm	145/202	
Total weight, ready for use	kg	1,000-1040	



Scrubmaster B310 R

Technical data		B310 R
Working width	cm	96-123
Theoretical area performance	m²/h	7,200-9,25
Number/type of brushes		brushesl al brushes
Brush speed	RPM	220 900
Solution/recovery tank	I	310/310
Length with squeegee	cm	215
Width without/with squeegee	cm	113-133/12
Height	cm	140/200
Total weight, ready for use	kg	1,445-1,67

Scrubmaster B310 R CL

	1	
Technical data		B310 R CL
Working width	cm	102-123
Theoretical area performance	m²/h	7,100-8,600
Number/type of brushes	2/disc b	rushes
Brush speed	RPM	210
Solution/recovery tank	1	310/310
Length with squeegee	cm	215-262
Width without/with squeegee	cm	120-133/126
Height	cm	140/200
Total weight, ready for use	kg	1,787-1,944







Cleanserv

PowerBoss

Cleaning areas the size of 2.3 football pitches per hour

Both our diesel- and LPG-driven high-performance machines provide up to 25,000 m² of cleaned floor space per hour. Both the powerful hydraulic motors driving the cleaning brushes and the large high-capacity dirt hopper ensure long operating times and perfectly clean floors. For efficient in- and outdoor applications. The machines can easily manage inclines of up to 16 %.



Nautilus

Technical data		Nautilus	
Working width	cm	114-152	
Theoretical area performance	m²/h	11,400-15,200	
Number/type of brushes	2/cylino	drical brushes	
Brush speed	RPM	425	
Solution/recovery tank	1	341-397/341-397	
Length with squeegee	cm	241	
Width without/with squeegee	cm	142	
Height/overhead guard	cm	166/212	
Total weight, ready for use	kg	2,177	



Armadillo 9XR

Technical data		Armadillo 9XR
Working width with 1 SB/2 SB	cm	156/193
Theoretical area performance	m²/h	20,300/25,100
Working speed	km/h	13
Dirt hopper capacity	1	600
Length	cm	279
Width	cm	152.4
Height above the seat (handle bar)/overhead guard	cm	147/220
Total weight, ready for use	kg	1,710

For professional indoor cleaning

They make marble gleam or they clean large and highly-frequented carpeted areas: polishing machines and wet & dry vacuums for industrial and commercial use – from a small manoeuvrable model for cleaning offices and hotels to industrial vacuum cleaners that can cope even with oily fluids, right up to compact carpet cleaning machines.



Cleanserv PE53/1100





Cleanserv SD43 Cleanserv PB51/2000



As much as necessary, as little as possible

Both ecological and economic: Hako's technology solutions ensure an extremely efficient use of cleaning chemicals. On-board dosing systems prevent under- or overdosing. Light soiling can be removed without the need for chemicals to save costs. At just the push of a button, detergent can be added at any time during the cleaning process to remove more stubborn dirt or stains - optimal dosing allows limiting the use of cleaning detergents to an absolute minimum. This protects the environment and goes easy on your budget.



Good for the environment – and for

your budget.

further information. With many models, cleaning detergents can be added at the push of a button and only when necessary.



Always correctly dosed: Depending on the amount of water used, the on-board dosing system automatically adds the right amount of cleaning detergents.







Hako's quick-charge technology provides longer operating times and interim charging at any



Hako-LessChem

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

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hygienic sensitive areas such as hospitals or the shops of retail chains – our versatile and flexible cleaning machines are supplemented by a wide range of specialist cleaning chemicals to achieve optimum cleaning results.

BLUECOMPETENCE

Partner of the Engineering Industry Sustainability Initiative

Blue Competence is an initiative of the VDMA (www.vdma.org). By using

the trademark "Blue Competence" we commit ourselves to these twelve

Sustainability Guidelines of the Mechanical Engineering Industry":

www.bluecompetence.net/about

Alliance Member



Hako-AntiBac®

The solution and recovery tank can be equipped with Hako-AntiBac® as an option. The feature inhibiting fungal and bacteria growth provides improved hygiene and reduces odour development as well as costs due to the lower consumption of disinfectants required to clean the tank.



Hako-AquaForce®

Chemical-free cleaning: with demineralised water that helps to dissolve and remove dirt and reduces re-soiling without the need for expensive cleaning chemicals.



Hako has the right solution

in terms of hygiene.

even for the highest demands

Saves up to 50% of water through intelligent brush systems and automatically stops the water supply when the machine comes to a standstill.

aqua

control



Hako-DaytimeCleaning

conventional 230-V power outlet.



Hako-Fleet-Recorder

Always up-to-date: The feature Hako-Fleet-Recorder records both the operating times and current condition of the machines. This data enables the fleet manager to identify users and determine the operating status of a machine, which helps to reduce machine damage and optimise machine utilisation. Another additional benefit for professional contract cleaners: Fleet-Recorder analyses can be used as a performance record. Access all the information you need with just one click – that's how easy machine management is today.









Hako Fleet Management Solutions

Different users identification via electronic key



Hako-Fleet-Report

All economically important data pooled online in a compact compilation: machine and contract data, information about service or maintenance intervals, service records and job sites. Individually configurable for each member of staff. And always up to date online. Hako-Online-Service supports you in using your cleaning machines efficiently – with analyses that are available 24/7 and can be retrieved easily thanks to the intuitive user interface.



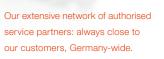
The more machines in your fleet, the more important is a clear overview of all relevant machine data in order to ensure economically efficient operation. For this purpose, Hako offers its customers an online-based fleet management system for cleaning machines that collates all the important key data for centralised access – from your PC or smartphone.



Available 24/7

125 service technicians are available around the clock all across Germany. GPS-controlled service visit planning.

Maximum availability of spare parts with direct delivery to the service technicians. Hako-Service ensures that downtimes of cleaning machines due to repair work are reduced to a minimum. Service works are always carried out fast and as soon as possible. Another big benefit in terms of efficiency.



Economically efficient cleaning

Buying? Renting? Leasing? Hako Finance offers customers interesting options to finance their cleaning machines, tailored to the client's individual requirements. This offer includes special financing models that can be perfectly adapted to seasonal or project-oriented conditions and demands. Or all-inclusive solutions offering financing, maintenance and insurance, all from a single source. Another clean solution made by Hako.

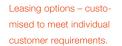




Service you can rely on

Our sales and service organisation is one of our biggest plus points. We are always in your close vicinity, offering qualified expert advice and reliable service. All around the clock. To ensure trouble-free operation – and to give you a good feeling.







Rental contract

ALL-IN-plus: financing,
maintenance and
insurance included!



Adapt your rental payments to your seasonal earnings.



Hire-purchase – customised monthly payments in line with your liquidity.



Every day and all around the clock – our service technicians are available when needed.



Always one step ahead

To make sure our solutions still meet the requirements of tomorrow, we constantly develop them further: in close cooperation with users, focussed on current trends and by considering future requirements. That is why we keep pushing our research and development further towards efficiency-enhancing and more environmentally-friendly measures as well as important future topics such as digitised processes and autonomous driving.

Hako: Your strong partner also in the field of Municipal Technology

We offer a full range of solutions in terms of outdoor cleaning, green area maintenance and winter service: from highly flexible and manoeuvrable city sweepers to compact multifunctional implement carriers and transporters which can be equipped fast and easily for every application, following the modular principle.

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