

**"Hako" stands for: Super performance, making the most of the possibilities to suit your requirements.**



**Without pre-sweep:** wet scrubbing and dry vacuuming, without problem even in narrow passageways/aisles.



**With pre-sweep:** sweeping, wet scrubbing and dry vacuuming in only one operation.



**With pre-sweep:** even larger debris is kept under control "from the word go". Industrial cleaning really can be this quick and safe.



**With pre-sweep:** complete cleanliness right up to the edge, even in airport terminals. Inviting, attractive, appealing and presentable.

# Performance and quality down to the very last detail.

## Technical data: Hakomatic B 1100

Area performance:		Electrical equipment:	
max. theoretical	up to 7.000 m <sup>2</sup> /h	Rated voltage	36 V
Wet cleaning unit:		Drive battery	36 V/640 Ah <sub>5</sub> PzS
Working width brush head	102 cm	Protection class (VDE 0700)	III
Brush diameter (2 units)	53 cm	Drive:	
Brush revolutions	210 rpm	Drive motor	2400 W
Brush motor (2 units)	2 x 700 W	Working speed up to	7,0 km/h
Brush pressure	up to 540 N	Drive speed up to	8,0 km/h
Specific brush pressure	up to 0,17 N/cm <sup>2</sup>	Climbing ability, empty/full	20%/15%
Squeegee (working width)	126 cm	Dimensions and weights:	
Flexible wall tank	310 litres	Length without/with pre-sweep	215/262 cm
Sweeping system:		Width with squeegee/pre-sweep	126/138 cm
Working width	138 cm	Height without/with overhead guard	140/200 cm
Sweeping principle	Front throwing	Diameter of turning circle	240 cm
Dust filter (dust category)	U/BIA	Weight, empty, without drive batteries	707 kg
		Total weight,	
		ready for operation	1787 kg

## Choice of further equipment/special accessories available

- Pre-sweep unit
- Side scrubbing unit
- Dirty water recycling system
- Cleaning agent dosage system
- Solid wall or flexible wall tank
- Overhead guard with rear-view mirror
- Warning beacon
- Working lights
- Hand held suction hose
- Various types of brushes and pads



The Hakomatic B 1100 offers the highest product quality and long lifetime as a result of modern manufacturing processes and a strict quality assurance system. The Hakomatic B 1100 has been manufactured in accordance with the CE guidelines and fulfils the European safety norm EN 60 335. Hakomatic B 1100 – Quality "made by Hako".

In the interest of technical progress we reserve the right to alter equipment without prior notice.

## Hako is the right partner:



**Cleanliness with safety**  
Hako machines adhere to strict quality regulations/standards. Quality made by Hako. We also take care of what we sell – world-wide.



**Sales, hire, leasing, rental**  
Hako allows you to individually plan capital investments depending upon customer's demands and the available means.



**We are there for you day and night**  
Reliable after-sales service and excellent logistics guarantee that machines can be ready for operation around the clock.



**Hako is never far away**  
The efficient Hako sales and service network means that Hako is always close at hand.

**Hako**  
Clean ahead

Hako-Werke GmbH  
Hamburger Straße 209-239  
D-23843 Bad Oldesloe  
Phone ++49 4531 806-0  
Fax ++49 4531 806 338  
E-mail: [info@hako.com](mailto:info@hako.com)  
Internet: [www.-hako.com](http://www.-hako.com)



The Hako sales offices and service depots are always close at hand!

# **Hako**

**Clean ahead**

**Superior technology  
for industrial cleaning**

## **Vacuum sweeper and scrubber-drier Hakomatic B 1100**



**Dust-free sweeping, wet scrubbing and dry vacuuming  
in one operation.**

**Hako –  
perfect from  
product  
to service.**

# Hakomatic B 1100. Two possibilities in one machine. For perfect cleanliness up to 7.000 m<sup>2</sup>/hour.

## You want better performance

### The Hakomatic B 1100 can offer:

- A choice of equipment to meet your requirements: Wet scrubbing and dry vacuuming in one operation (working width 102 cm) and in addition a pre-sweep option (working width 138 cm).
- Long running times thanks to the 310 l tank volume. Optional dirty water recycling system for multiple use of the cleaning solution.
- A strong industrial heavy-duty fork lift truck drive with power reserves for gradients of up to 20%.
- 2 separate drive motors for the scrubbing brushes with high degree of stability even when carrying out thorough basic cleaning.
- Working close to the edge and increased working width up to 118 cm when wet scrubbing as a result of the suspended side scrubbing unit (option).

## You want increased comfort

### The Hakomatic B 1100 can offer:

- The "Hakomatic button". All working functions such as wet scrubbing, supply of water, dry vacuuming, all at the push of a single button.
- The „Hako control system". The machine is programmed by our engineers according to your specific requirements (eg. brushes and water supply stop when machine comes to a standstill).
- Quiet battery drive, free from exhaust fumes and quick exchange of batteries in approx. 2 minutes.
- An ergonomic workplace with fully sprung driver's seat which can be adjusted to the driver's weight. All operating controls are in direct reach of the operator. Easy steering, simple to operate.
- Optimum view of the area to be cleaned and of the operating panel thanks to the seating position at the centre of the machine. Handy: operator can mount the machine from both sides.

## You want greater economy

### The Hakomatic B 1100 can offer:

- Up to 50% saving of water and cleaning agents as a result of the Hako-Aqua-Stop-System. Checked and approved. The saving over the lifetime of the machine practically corresponds to the initial purchase price.
- Further saving (by half) of the remaining costs of cleaning agents as a result of the cleaning agent dosage system (option).
- Short set-up times thanks to the automatic water filling system (7-8 minutes). Tanks are easy to clean.
- Cost savings in the service area as a result of direct access to all important components and an intelligent diagnostic system with display of malfunction codes etc.
- Possibility to connect the Hako diagnostic unit which can be purchased separately. This makes maintenance work even easier.

# "Hako" stands for: advantages which make your decision more than simple.

## Perfect vacuum sweeping



Full power thanks to 2 side brushes with separate drive. Up-take of large debris and fine dirt particles in front of the scrubbing unit. Powerful vacuum blower with dust filter (category U).

## Powerful scrubbing brushes



Excellent cleaning performance thanks to 2 directly driven plate brushes. Can be changed without additional tools. Up to 50% less water and cleaning agents used as a result of the Hako-Aqua-Stop-System.

## Comfortable cockpit



Optimum driver's seat, optimum view. Clear operating panel, visual information regarding all working functions/conditions. All working functions can be started at the press of the green "Hakomatic button".

## Performance at a glance



Direct access to all important parts and systems thanks to covers which can be opened for service and maintenance purposes. Pictured above for eg. cleaning agent dosage system and dirty water recycling system.

## And there are further highlights:



No problem: the dirt hopper can be emptied in a flash without the use of additional tools.



Suspended, floating side scrubbing unit (option) for working close to the edge, near walls, pallets and under shelves.



Environmentally-friendly battery drive. Quick exchange of battery trays in approx. 2 minutes with fork lift truck or lifting equipment.



Connection for the Hako diagnostic unit fitted as standard. For even easier maintenance and analysis of all data over machine lifetime.

# "Hako" stands for: two systems combined in one machine. With more equipment and greater economy.

The machine concept of the Hakomatic B1100 offers you much more. Tailor-made your meet to your requirements:

1. as a compact high performance scrubber-drier for wet scrubbing and dry vacuuming in one operation.
2. as a combined machine with additional sweeping system with dust vacuum.

In addition there is a choice of optional accessories eg. side scrubbing unit, overhead guard with rear-view mirror, warning beacon, working lights as well as dirty water recycling system, cleaning agent dosage system and much, much more...



# "Hako" stands for: a well thought-out concept combining important functions.

## Powerful combination



### Vacuum sweeping

- The sweeping system picks up fine dust and coarse debris in the dry zone in front of the scrubbing unit.

### Wet scrubbing

- The rotating plate brushes cleanly loosen even the most stubborn dirt.

### Dry vacuuming

- The floating, suspended squeegee, which is parabolically formed, leaves the floor dry enough to walk or drive on.

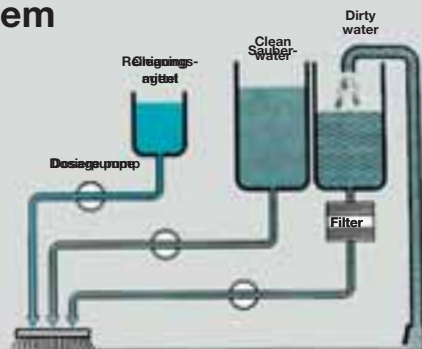
### Large tank capacity

- The flexible wall between the clean and dirty water tanks ensures long working periods and short set-up times.

### Long running times

- With drive battery 36 V / 640 Ah (PzS) – up to one shift depending upon the application in question.
- For multiple shift work the battery can be exchanged quickly and easily using a fork lift truck or hoists.

## Environmentally-friendly system



### Cleaning agent dosage system

- During operation constant dosage of cleaning agent to adapt to different degrees and types of dirt. Dosage directly at the scrubbing brushes.
- Considerable cost savings as a result of less cleaning agent being used.

### DWR System

- Dirty Water Recycling system enables multiple use of the cleaning water.
- Used in conjunction with the cleaning agent dosage system a constant cleaning result/quality can be achieved.
- Considerable reduction in set-up times and water consumption.
- Optional use of clean water or recycled dirty water. The clean water tank always remains clean.