

makes a difference



### FIND NEW WAYS.

With KIRA B 50 - our intelligent cleaning robot



# EFFICIENCY HAPPENS OF ITS OWN ACCORD.

Welcome to the world of autonomous cleaning. We have developed a solution for you that allows you to profit fully from the cost-effectiveness and independence of this technology even in relatively small areas.

The human desire to escape from monotonous and stressful activities is as old as mankind itself.

All technology follows this principle – from the washing machine to the automatic lawn-mower. Autonomous floor conveyors are well established in industry. Agricultural robots, drones for various tasks and, last but not least, autonomous driving will very soon permanently change our working world and our lives. This is what our KIRA (Kärcher Intelligent Robotic Application) represents in professional cleaning.

With KIRA we have created a platform for all our professional robotic products. And this is our answer to your increasing challenges in cleaning technology.

We laid the foundation for KIRA early on. In the 1990s we developed the first professional automatic scrubber drier. This model was used daily at Schiphol Airport in Amsterdam until 2008. Our Robot Vac followed in 2003. The rapid further development of the fundamental technology such as sensor systems and navigation, as well as our in-house development work, are now paving the way for the efficient use of robots in the cleaning world.

We developed the KIRA B 50 from scratch. This means you get an autonomous system that combines all our experience in terms of cleaning technology. And which gives you a response to the lag of staff shortages.

# ALL-IN-ONE SOLUTION. EVERYTHING YOU NEED.

We have successfully integrated reliable sensor technology, connectivity, transparency and dynamic cleaning performance in the KIRA B 50.



### Operation

- Automatic and manual
- Intuitive touch display
- Personalised authorisation profiles with KIK
- With or without docking station
- Hygiene zones



### **Compactness**

- Compact design
- Also for cleaning in tight areas



### Roller brushes

- Pre-sweep function also for coarse dirt
- High cleaning performance also on uneven and structured floors

**Our KIRA B 50 is a professional automatic scrubber drier** and marks the start of a complete range of autonomous cleaning machines. So that you benefit from a genuinely autonomous and reliable cleaning machine, we developed the KIRA B 50 as a robot from the outset, and it also has convenient manual operation. Constant cost pressure and the shortage of manpower are good reasons for purchasing a cleaning robot. There are also many other convincing arguments.

The use of KIRA B 50 makes floor cleaning easier, while ensuring consistently good cleaning results, so your cleaning staff will have more time for sensitive and higher level tasks. The integrated safety system avoids damage caused by collisions. The overall lower cleaning costs allow you to make the most of opportunities in a competitive environment. Last but not least, with KIRA you reduce your administration costs, e.g. hiring and training.

		KIRA B 50	KIRA B 80	
		<ul><li>Li-lon powered</li><li>With or without docking station</li><li>Side-broom included</li></ul>		
Technical data				
Working width	mm	550	650	
Fresh / dirt water tank		50	80	
Max. area performance	m²/h	1,200	1,400	
Range per water filling	m²	1,600	2,400	
Brush speed, max.	rpm	1,200	1,200	
Brush type		Roller brush	Roller brush	
Battery type		Li-lon	Li-Ion	
Voltage, battery max.	V / Ah	25.2 / 84	25.2 / 126	
Running time	h	2	3	
Dimensions (L × W × H)	mm	1,000 × 640 × 1,100 mm	1,000 × 730 × 1,100 mm	
Weight (without water)	kg	180	190	





### **Docking station**

- Fill fresh water
- Dispose of dirty water
- Rinse dirty water tank
- Charge batteries



### Multisensor system

- Optical and acoustic sensors
- 100% safety and reliability
- Approved for public traffic
- Detection of glass, small objects and overhangs



### **Fleet**

- Cleaning reports
- Device location and status
- Configure hygiene zones and map
- Adjust cleaning parameters
- Remote diagnostics



### Side brush

- Enables cleaning right up to the wall
- Sweeps dirt into the cleaning path
- Roller brushes wet and clean the side brush

### KIRA has a multisensor system for superior safety and reliability in every situation.

KIRA recognises people and obstacles and reacts reliably by stopping, or bypassing them. Using mobile data transmission, GPS tracking and Kärcher Fleet, KIRA offers full transparency with a seamless connection, detailed analysis data and current notifications sent by text message to your mobile phone. The innovative KIRA docking station represents a milestone in autonomous cleaning. This is where the powerful Li-Ion batteries are charged, fresh water is replenished, dirty water is disposed of and the dirty water tank is rinsed. The entire system has been designed for simplicity and versatility. KIRA can work autonomously or can be guided manually,

meaning there is no need for a traditional scrubber drier. And you benefit from the innovative, user-friendly design and intuitive operation via a touchscreen.

The cleaning performance of KIRA is in no respect different from that of our standard machines. Thanks to the pre-sweep function, side brush for picking up dirt close to the edge and perfect suction performance, KIRA delivers flawless, consistent cleaning results – even in total darkness. The only things to be added for the perfect overall picture are seamless service and support. We have also integrated these important elements for you into KIRA.

### AUTONOMOUS CLEANING AT THE PRICE OF A RIDE-ON MACHINE

You want to and must earn money with your work. KIRA helps you here. With KIRA we provide you with a very price attractive cleaning robot which you can use efficiently even in relatively small areas.

With the KIRA B 50, you can efficiently clean areas from 500 m<sup>2</sup>. The area performance is 1,200 m<sup>2</sup>/h at a cleaning speed of 2,2 km/h. Our KIRA B 80 manages up to 2,400 m<sup>2</sup> with a full tank and then has enough battery reserve for a further 1,200 m<sup>2</sup>.

When the cleaning has been completed or as required, your KIRA automatically drives to the docking station to recharge the batteries, replenish fresh water, clean the tank and drain dirty water. KIRA calculates the energy requirement for the pending cleaning order and charges the batteries accordingly. This minimises the docking times. Typical set-up times become a thing of the past. You only have to manually fill the cleaning agent tank as required.





### You make up for the additional costs for KIRA vis-à-vis a standard machine through the saving on personnel costs after only approximately 500 – 600\* working hours.

Thereafter you benefit from the savings on personnel and service as well as consumables and spare parts with each further operating hour. Depending on the site and contract, you can decide whether you use KIRA with or without a docking station. The combination with a docking station is a smart solution which is economically viable for long-term contracts. Without a docking station you still have the full performance of KIRA and you complete the sideline activities of emptying, filling and charging as with a conventional machine.



<sup>\*</sup> At a presumed hourly wage of € 17. See also the chart on page 10.

### 100% SAFE. GUARANTEED.

Safety takes top priority with autonomous robots. We built KIRA with absolute safety in mind. And in an extremely flexible and demand-oriented manner.



### Safety starts with the infrastructure

We help you choose the best site for the docking station and set up KIRA for its first application. The one-off mapping of the work area takes less than 1 hour, for example for a 900 m² supermarket. Thanks to the user-friendly design, intuitive operation via touch-screen and the familiar, tried-and-tested Kärcher KIK system, you can also easily set up and manage KIRA yourself. You continue to receive our full support and assistance at any time. KIRA works without the need for infrastructural modifications in your building.

### Safety in every situation

While KIRA is in use, the accurate sensor system offers 100% safety for people, the robot and property. Optical signals indicate the behaviour of the robot to the customer. KIRA detects individuals and obstacles with absolute certainty and responds by stopping immediately or accurately bypassing them. The high-precision sensor system creates a virtual bumper around the machine and also makes it possible to traverse narrow corridors and hallways and clean up to 10 cm from the wall. The combination of several safety concepts prevents collisions and crashes. for example on escalators, with absolute certainty. KIRA complies with all relevant local standards and is certified for daytime cleaning in areas frequented by the public.



### Flexibility times four

KIRA works just the way you want it. There are 4 driving modes to choose from. The "Entire map" mode means complete cleaning of the area. In "Zone selection" mode you can select individual hygiene zones from the total area. This allows you to clean hygienesensitive areas, for example in fruit and vegetable departments or wellness areas of hotels, more frequently or more intensively.

### The "Contour mode" is very clever:

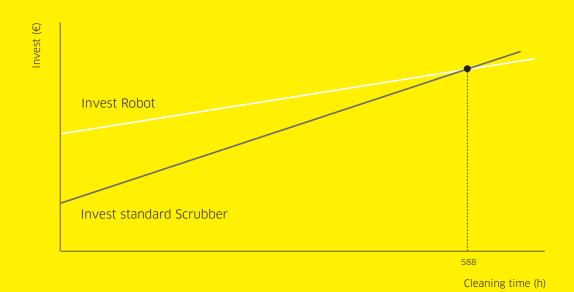
you manually drive around an area with KIRA, and KIRA then cleans the marked area automatically. Finally, the "Individual route" mode offers you classic teach and repeat: you drive the cleaning route completely manually and then save the route. You can save several routes and simply call these up or change them as required.

# ECONOMICAL IS GOOD. KIRA IS EFFICIENT AND SUSTAINABLE.

Bearing costs in mind is common sense. It is intelligent to examine all current and future costs. From the purchase over the entire useful life through to disposal.

With KIRA you get a competitive robot with which you achieve high efficiency even in very small areas. With KIRA you benefit from significant staff savings, but many other factors also contribute to your success with KIRA.

Sustainability is a key issue all over the world and one of the principles behind our entrepreneurial thinking and action. KIRA optimally adapts the cleaning parameters to the area to be cleaned, thus saving energy, water and cleaning agent.













Several factors ensure sustainable working methods: The longlife Li-Ion batteries permit more than 1,500 charge cycles. The automatic lane-keeping assistant is so precise that the cleaning lines only overlap by 5 cm. This saves travel paths, time and energy. KIRA accurately doses water and cleaning agent according to the driving speed, reuses the water in the brush head and thus maximises the area coverage.

Via Fleet, KIRA provides you with important data and information that allow you to optimally manage the machine. You can document the cleaning work performed at any time to your customers. You are always aware of the current machine status, know when a service is due and can plan necessary maintenance work in advance. If you read all the facts about KIRA and its benefits in practical use, you will realise how economical autonomous cleaning can be for you. You will also realise that KIRA is simply amazing!

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