



ADLATUS CR700

Autonomous cleaning robot system



DESIGNED TO SERVE...

MISSION

Designed to serve ...

is the mission of ADLATUS Robotics GmbH.

The digitization and globalization push the change in the service sector of the facility management and demand new products and solutions from the companies. ADLATUS Robotics GmbH supports this change and develops autonomous professional Service Robots.

Adlatus is Latin and means helper. And that's the philosophy of the ADLATUS Robotics GmbH. We want to support the companies with a helper on their side, which is able to handle tasks by itself. Our helpers should ease your life and work and support you like a colleague. The Professional Service Robots are designed to fit in their domain and are able to handle different tasks if needed.

ADLATUS Robotics GmbH develops, manufactures and distributes Service Robots and offers customers complete solutions including consulting, commissioning, training and service.

INNOVATION, EXPERTISE & QUALITY

...these are our potencies in the development and implementation of autonomous Service Robots.

To ensure easy handling with our Service Robots we provide our customers a competent team aside from planning to commissioning.

Our employees, with over 20 years of experience in robotics technology, know the customers' requirements to autonomous robots. Therefore we are able to successfully develop and implement innovative solutions with the latest technologies.

The final assembly of our Service Robots takes place in Ulm / Baden-Wuerttemberg. Thereby, much importance is placed on the use of a high quality components and the use of qualified professional personnel.

Winner of the
DB Automated
Cleaning Challenge

CYBER ONE
DER HIGHTECH AWARD BADEN-WÜRTTEMBERG
WINNER 2018



PURUS

INNOVATION AWARD
CMS BERLIN
GEWINNER 2017

DESIGNED TO SERVE...

CUSTOMER BENEFITS

Cost savings, work facilitation, quality improvement or sustainability are examples of factors that motivate our customers to use our products.



Economics

The reduction of personnel expenses through the independence of night and holiday surcharges and the independence of skilled personnel can significantly improve the efficiency of the cleaning.



Sustainability

Think in the long term - act responsibly in a spirit of partnership. Autonomous Service Robots are health-promoting, relieve the burden on physically demanding work and increase safety in the working environment.

Resources are used responsibly - for example, the water consumption of the cleaning robot can be individually adapted to the degree of dirtiness.



Transparency

Fully automated logging after each use of the Service Robots facilitates the documentation and proof of services for billing purposes, performance checks or audits. For example, the ADLATUS CR 700 cleaning robot creates a detailed protocol on the areas and intensity of cleaning. Graphical representations explicitly show the cleaned and uncleaned area's in detail



Safety

There is no chance that the Service Robot can collide with people. The CR 700 waits or evades colleagues / people who are in the working environment in time. A collision is also excluded in manual operation. The use of our autonomous Service Robots can reduce the risk of security issues and even terrorist attacks by minimizing the possible need for frequently changing and possible unchecked external staff.



Simplicity

The CR 700's utility is simple and intuitive. You can save programs for the cleaning staff, which simply need to be started. After a short briefing, everybody is able to do that. The start is also possible via smartphones and tablets.



Industry 4.0

In automated production facilities, the Service Robots can be integrated into processes and communicate with other automated systems.



Marketing & Identity

Beside all above mentioned advantages, our autonomous Service Robots could also distinguish your building(s) and even your corporate identity in a positive way, by increasing your image as a trend setting innovative leader in your industry.

ADLATUS CR700

FULLY AUTOMATED CLEANING ROBOT

With the ADLATUS CR 700 we managed to develop a cleaning machine which operates without tying up cleaning staff permanently. The concept is based on the expertise of a professional cleaning machine associated with the cleaning performance of a robot, connected with the aim to achieve a higher cost-efficiency at optimum cleaning results.

Through the simple and user-friendly interface of the CR 700 it can easily be set up in three steps. After that, the desired cleaning areas can be stored on the robot.

The user interface of the CR 700 is designed intuitively so that the robot can be started by the cleaning staff easily. Daily repetitive cleaning tasks as well as the individual instructions of the cleaning robot are possible. For a spontaneous cleaning, the robot can also operate in manual mode easily.



Foto: Pablo Castagnola



THE TECHNICAL ADVANTAGES AT A GLANCE



Dual Use

Typically, the ADLATUS CR 700 cleans completely autonomously. A manual operation mode can additionally be selected.

If a spot requires sudden cleaning, the robot can be requested via tablet or smartphone and be given an automatic local spot cleaning job or you can just clean the spot in manual operation. We call it Dual Use!

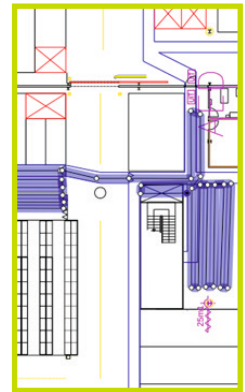


Navigation

The advanced navigation system of ADLATUS CR 700 provides reliable movement in complex environments.

Its powerful sensors and intelligent processing of sensor data allows to confidently capture objects which are very difficult to be detected, such as people or hanging materials: Depending on the environment / building structure, various approaches of navigation can be selected.

One location methodology is used in objects with many fixed obstacles, such as walls and shelves, without the use of artificial landmarks. The other localization methodology is used in environments with strongly varying obstacles and with few static structures. For this purpose, artificial landmarks are installed in the object.



User Interface

With an easy and friendly user interface, the ADLATUS CR 700 can be started by the cleaning staff without complications. Either with the touch display directly on the robot or remotely from a mobile devices such as a tablet or smartphone.



Service Station

If the battery charge is exhausted, the waste water tank full or the clean water tank empty, the ADLATUS CR 700 will autonomously seek for its Service Station and refill its supplies. This allows a fully autonomous operation over longer periods of time.



Connectivity and documentation

The ADLATUS CR 700 offers a multitude of options to communicate with its user, the infrastructure and in the age of the Internet of Things, with other objects in its surrounding.

Thus the Adlatus can communicate with its users even if they are out of reach and send them automatically created cleaning reports.

The robot can also be requested by the user via tablet or smartphone to clean a local spot without having the user search the building for the robot and without having to navigate manually to the target area.



Robust construction and industrial suitability

Our service robots are characterized by a robust construction, which is designed for a permanent handling. High-quality components are used, such as stainless steel elements or maintenance-free brushless motors.

ADLATUS CR700

CLEANING ROBOT CR 700

TECHNICAL INFORMATION

DIMENSIONS OF THE CR700

weight	max. 230 kg
width	805 mm
length	1000 mm
height	980 mm

robotcontrol	automated systematic operation
navigations-sensors	laser, 3D vision, acceleration sensors, safety sensors
user interface	ergonomic access via on-board touch and smartphone or tablet
Service Station (optional)	fully automatic for battery charging, clean water supply and drainage of the waste water
Connectivity	over WLAN, you access operator information, control, report and fully automatic documentation
scrubbing width / squeegee width	700 mm / 750 mm
brush rotation velocity	app. 200 rpm
brush type	Standard adapter for all common brushes and pads
brush diameter	2 x 355 mm
clean water capacity	120 l with fully automatic dosing during cleaning, fully automated refills at the Service Station
waste water capacity	68 l with fully automatic draining at Service Station
cleanser capacity	2 l with fully automatic dosing during cleaning

PERFORMANCE

cleaning time	3-5 h per battery charge depending on battery options and cleaning intensity
charging time	3-8 h depending on battery and charging unit option
cleaning speed	0,3-max. 0,8 m/s, continuously variable
cleaning area	0,75-1,5 km ² per hour / 0,5-1 miles per hour depending on surroundings and cleaning intensity
Application example	With an average operation of 4 hours, the CR 700 can clean approximately 4.000-5.000 m ² per battery charge. Per day, including recharge of the battery, 8.000-10.000 m ² are possible.



FULLY AUTOMATED SERVICE STATION S700

i STATUS

⚡ LOADING
3-8 hours

⬆️ CLEAN WATER
> 20 minutes

🗑️ WASTE WATER
> 5 minutes



DIMENSIONS OF S700

weight	app. 75 kg
width	950 mm
depht	370 mm
height	850 mm

TECHNICAL INFORMATION

Water connection

The connection is secured with an aquastop over which the service station control can block the water inlet.

Power connection

230 Volt socket

Fully automated service operation

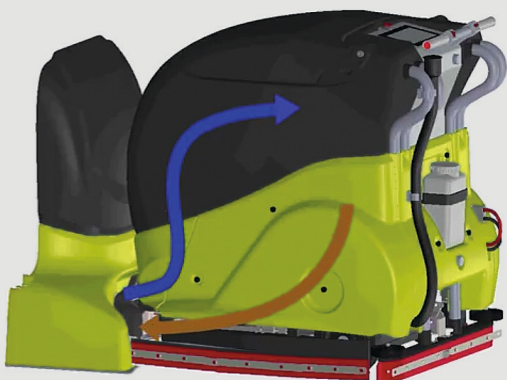
With the service station there is no need for manually filling the clean water tank or emptying the waste water into a drain. In addition without splashes or spill accidents, saving time and annoyance.

Status - Signal line

The signal line of the service station controles and checks if the battery power is loading, the clean water filling and waste water emptying are completed and if the robot is ready for the next shift.

More information

YouTube Channel ADLATUS Robotics GmbH
<https://youtu.be/oZfWjQMxMw>



Loading



Clean Water



Dirty Water





ADLATUS Robotics GmbH

Nicolaus-Otto-Str. 4
D-89079 Ulm

Tel: +49 731 / 964 278-0

info@adlatus-robotics.com
www.adlatus-robotics.com

International sales and service network

