



# Chemical-Free Cargo Hold Cleaning

## Cargo Hold Cleaning made easy

By deploying the CLIIN robot in a cargo hold cleaning configuration, bulk shipping companies will be able to replace a normal four-step cleaning process involving tons of chemicals and water with a one-step pure freshwater cleaning process.

The CHR (Cargo Cleaning Robot) can be permanently installed on board the vessel and is easily operated by the vessel's crew as and when required.

Apart from limiting the environmental impact, the robotic cleaning process is faster, less labor intensive and provides a significantly more effective cleaning process, thus providing shipping companies a value proposition of more laden days, higher cargo intake and lower cost. Depending on operational pattern, shipping companies can expect a return on investment in 6 - 12 months.

Equipped with high-pressure cleaning tools and magnetic tracks for climbing all parts of the cargo hold, the CHR ensures an efficient and thorough cleaning.



**Faster Cleaning -**  
Faster turnaround of vessels



**Can be Operated from the Ground -** Safety of crew



**Environmentally Friendly -** No chemicals needed



**Superior Cleaning Standard -** Enhanced chance of approval



**Less Cleaning Water -** Less sludge



**Easy to Control -** Makes cleaning a two-man job

## Technical Data

- Cleaning ability: 500 - 800 m2/h
- Weight: 89 kg
- Dimensions of the Robot:  
L: 747 mm, W: 562 mm, H: 310 mm
- Powered by 100-240V, 13A+, 50-60 hz
- Robust design of non-corrosive materials
- Completed 5,000 hours of continuous stress testing on internal electronics

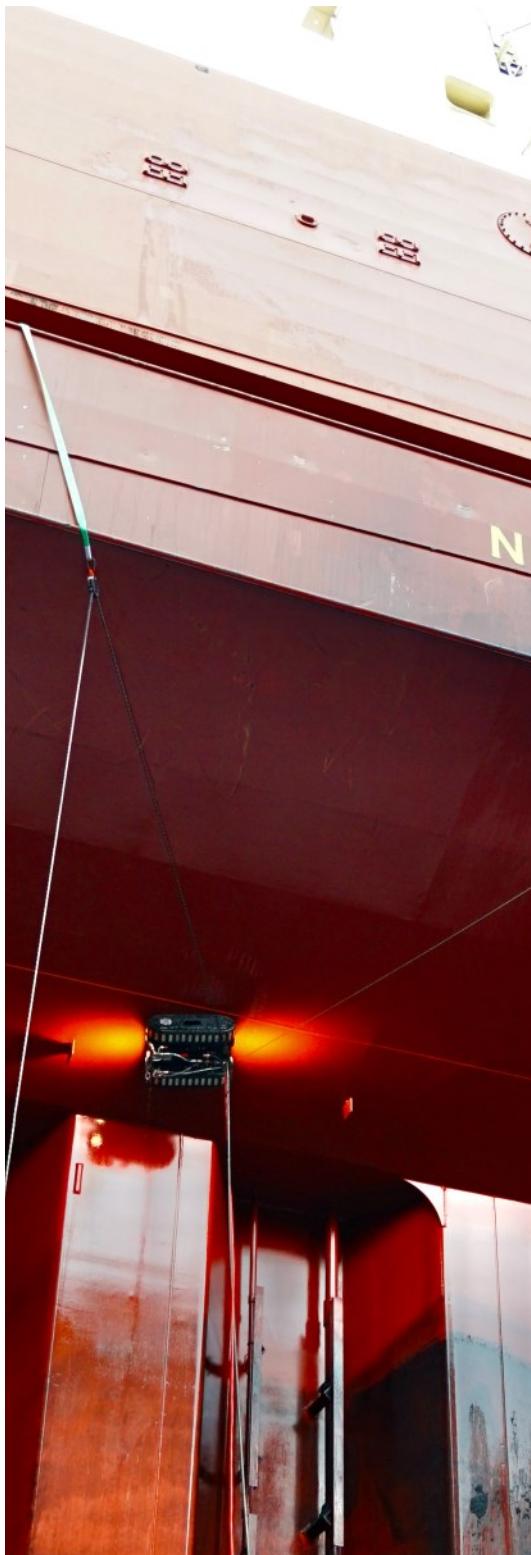


# Robotic Cargo Hold Cleaning

## Key Features Cargo Hold Cleaning

- Equipped with permanent magnetic tracks for maximum adhesion.
- Superior in cleaning frames, topside tank, bulkheads, and pipes.
- Less cleaning water - less sludge.
- Environmentally friendly - enables chemical-free cleaning.
- High-pressure nozzles close to the surface ensure superior cleaning quality.
- 2-3 persons are required for the cleaning operation.
- Much faster cleaning in hard-to-reach areas.
- Easy to operate - improves the safety of the crew.
- Even cement can be cleaned in a two-step operation: First step cleaning with a dry brush tool and afterward high-pressure water.

SIMPLE • SAFE • SUSTAINABLE



Cement Cleaning with CLIIN Robotics' Brush Tool



„The precision of CLIIN Robotics ensures thorough cleaning with minimal waste, promoting efficiency and eco-friendliness.“