ORCAUBOAT

SMART WATER BODIES MAINTENANCE

ONE-STOP SOLUTIONS

Better Self-driving. Better Water Bodies.

Unicorn in Unmanned Surface Vehicles

COMPANY PROFILE

With the vision of “Better self-driving. Better water bodies”, ORCAUBOAT specializes in the research and development of unmanned surface driving technology and the innovation and application of surface service robots.

As a leading tech company, we hold several records, including the highest mileage record in the industry, the world's first multi-sensor dataset for the unmanned surface vehicle, and the world's first dataset for floating waste detection.

Dedicated to one-stop solutions for smart water bodies maintenance, ORCAUBOAT leads the charge in technology for cleaner, smarter, and more sustainable water ecosystems.

MAIN ACHIEVEMENTS

140 National Patents

111 Invention Patents

4 Software Copyrights

39 Trademarks Across 30+ Countries

Member of the United Nations Global Partnership on Marine Litter (GPML)
United Nations Young Champion of the Earth

AIM Congress 2024 China Division	Champion
China Regional Final for Global Social Venture Competition 2019	Champion
James Dyson Award 2018 China Division	Champion
HICOOL Global Entrepreneurship Competition 2023	First Prize
Create@Alibaba Cloud Global Challenge 2022	Innovation Application Award

MAIN ADVANTAGES

- Autonomous Driving (L4)
- Record-breaking Mileage (650,000+ km)
- Rich Cases (500+)
- High-quality Services (1,000,000+ hours)

PAIN POINTS IN THE INDUSTRY

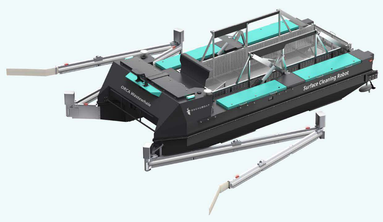
ONE-STOP SOLUTIONS
FOR SMART WATER BODIES MAINTENANCE

"High-Tech Products + Data Services" to Facilitate Industrywide Digital Transformation

ORCAUBOAT has developed a range of surface cleaning robots, including SMURF, WASTEWHALE, and MOSHARK for water surface garbage collection, water quality monitoring, security patrol, aquatic plant removal, etc. ORCAUBOAT is committed to smart solutions for the maintenance of rivers, lakes, reservoirs, wharfs, and so on.

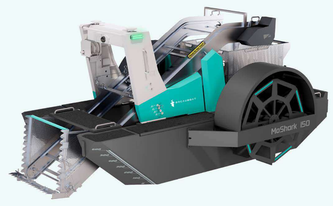
SMURF

Surface Cleaning Robot
Size: 2921*1763*1080 mm
Load Capacity: 50 kg
Maintenance Area: 30,000-65,000 ㎡



WASTEWHALE

Surface Cleaning Robot
Size: 4950*2360*1600 mm
Load Capacity: 500-700 kg
Maintenance Area: 300,000 ㎡



MOSHARK

Surface Mowing Robot
Size: 4700*2500*1930 mm
Load Capacity: 150 kg
Maintenance Area: 130,000-200,000 ㎡

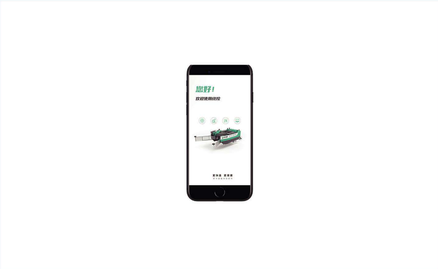
APPLICATIONS

- Smart Sanitation
- Smart Environmental Protection
- Smart Water Ecology
- Smart Water Conservancy

SCENARIOS

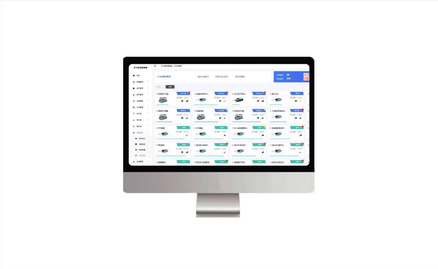
- Lakes
- Rivers
- Reservoirs
- Ponds
- Wharfs
- Coastlines

SYSTEMS



Smartphone App
for Cleaning Team Members

Tablet App
for Cleaning Team Leaders



Management System
for FAE

Management System
for Customers

STANDARD FUNCTIONS

- Garbage Collection
- Aquatic Plant Mowing
- Water Quality Monitoring
- Routine Patrol

OPTIONAL FUNCTIONS

- Water Quality Tests
- Water Sampling
- Reagent Delivery
- Underwater Exploration
- Surface Cleaning with Multiple Unmanned Devices

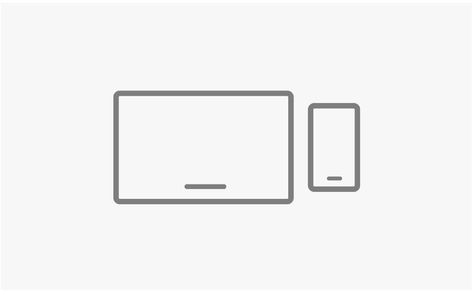
CHARGING EQUIPMENT

Cable-Connected Charging Pile

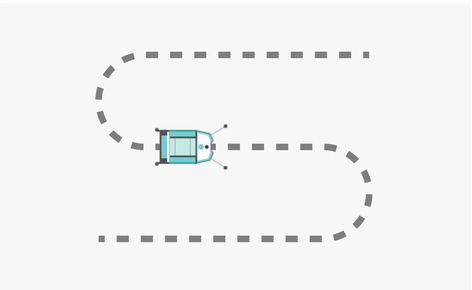
Intelligent Charging Dock

WORKFLOW

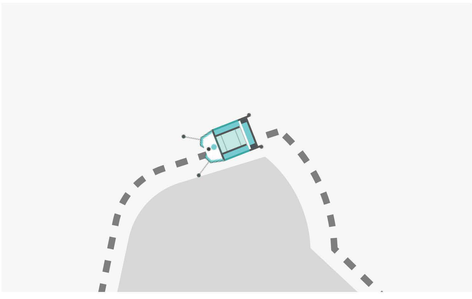
One Click for Worry-Free Services



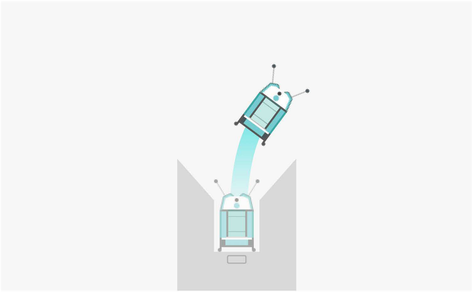
Remote Control/ Scheduling via Smartphone/Tablet



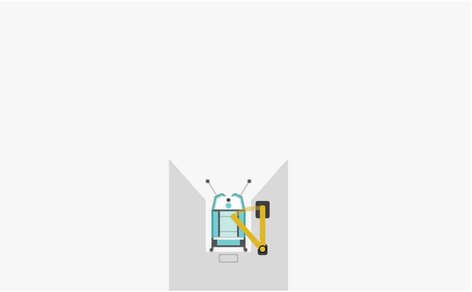
Autonomous Tracking, Independent Cleaning



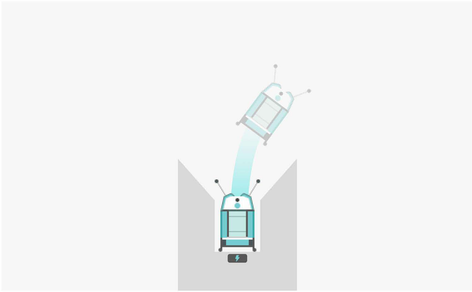
Along the Edge Sweeping, No Spots Missed



Automatic Switch to Work Mode When Fully Charged



Intelligent Garbage Baskets Lifting



Automatic Homing and Charging

HIGHLIGHTS

L4 Autonomous Driving

Self-developed Algorithms with Optimal Features

One-Stop Solutions

Multifunctional, Adaptable to Various Scenarios

Safety Guarantee

Hazard Prevention and Control

Great Convenience

One Click for Worry-free Services

Eco-friendly

Electricity-powered, **0** Carbon Emission, **0** Noise

Intelligent Management

Data Collection and Visualization

Costeffectiveness

Higher Overall Efficiency and Lower Cost

The Number of Vessels Each Worker Can Manage

Traditional Boat: 1

Surface Cleaning Robot: 5

Vessels Required for the Water Area of 15 Acres

Traditional Boat: 3

Surface Cleaning Robot: 1

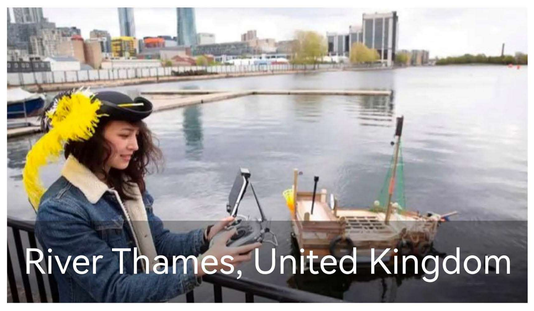
The overall efficiency is increased by 300% and the overall cost is reduced by 60%.

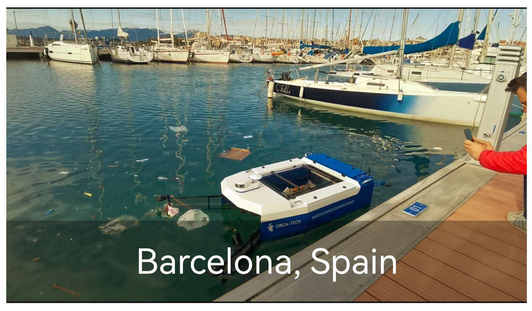
Notes:

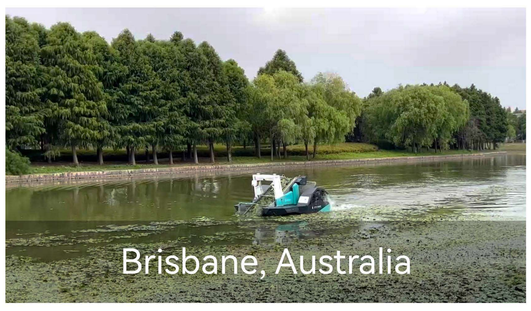
1. The above data of the traditional boat come from the inland river offices of many cities in Jiangsu and Zhejiang. The surface cleaning robot data come from actual project calculations in Wuhan, Suzhou, Ningbo, and Chengdu.
2. Managing a water area of 15 acres means that the surface cleaning robot can work for 6-8 hours when fully charged, and can traverse 15 acres within a single day at a speed of 1.2-1.5m/s.

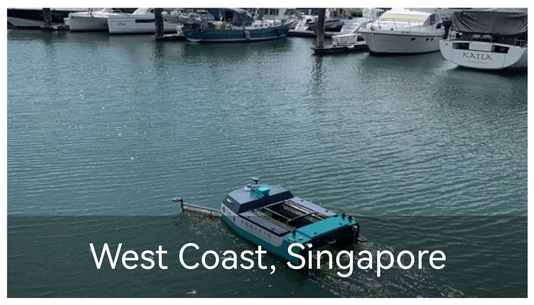
CASES

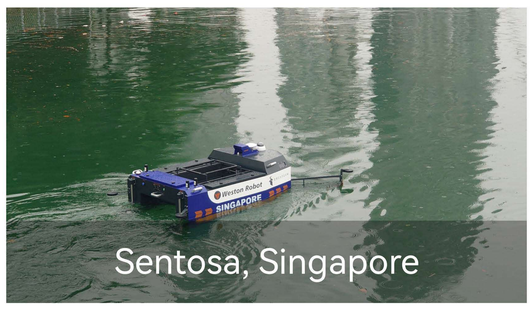
In 10 countries, 50+ cities, 100+ water bodies, 650,000+ kilometers

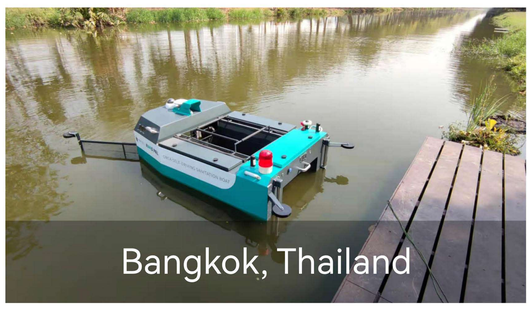

River Thames, United Kingdom


Barcelona, Spain


Brisbane, Australia


West Coast, Singapore


Sentosa, Singapore


Bangkok, Thailand

PT.IWIP, Indonesia

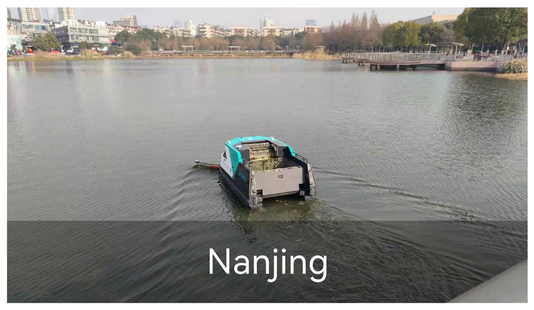
Khabur River, Iraq

Hong Kong

Hong Kong

Beijing

Shanghai


Nanjing

Hangzhou

Wuhan

PARTNERS

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KAUST
IKEA
Alibaba.com
NEOM نيوم
IBM
BYD
dyson
HIKVISION
Université de Montréal
IWIP
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

BUSINESS MODEL

Local Distribution Network:
We cooperate with local distributors to carry out smart water maintenance projects, which feature the combination of "surface cleaning robots + services".

CONTACT US

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