

CHASING

Leading Underwater Drone
Manufacturer

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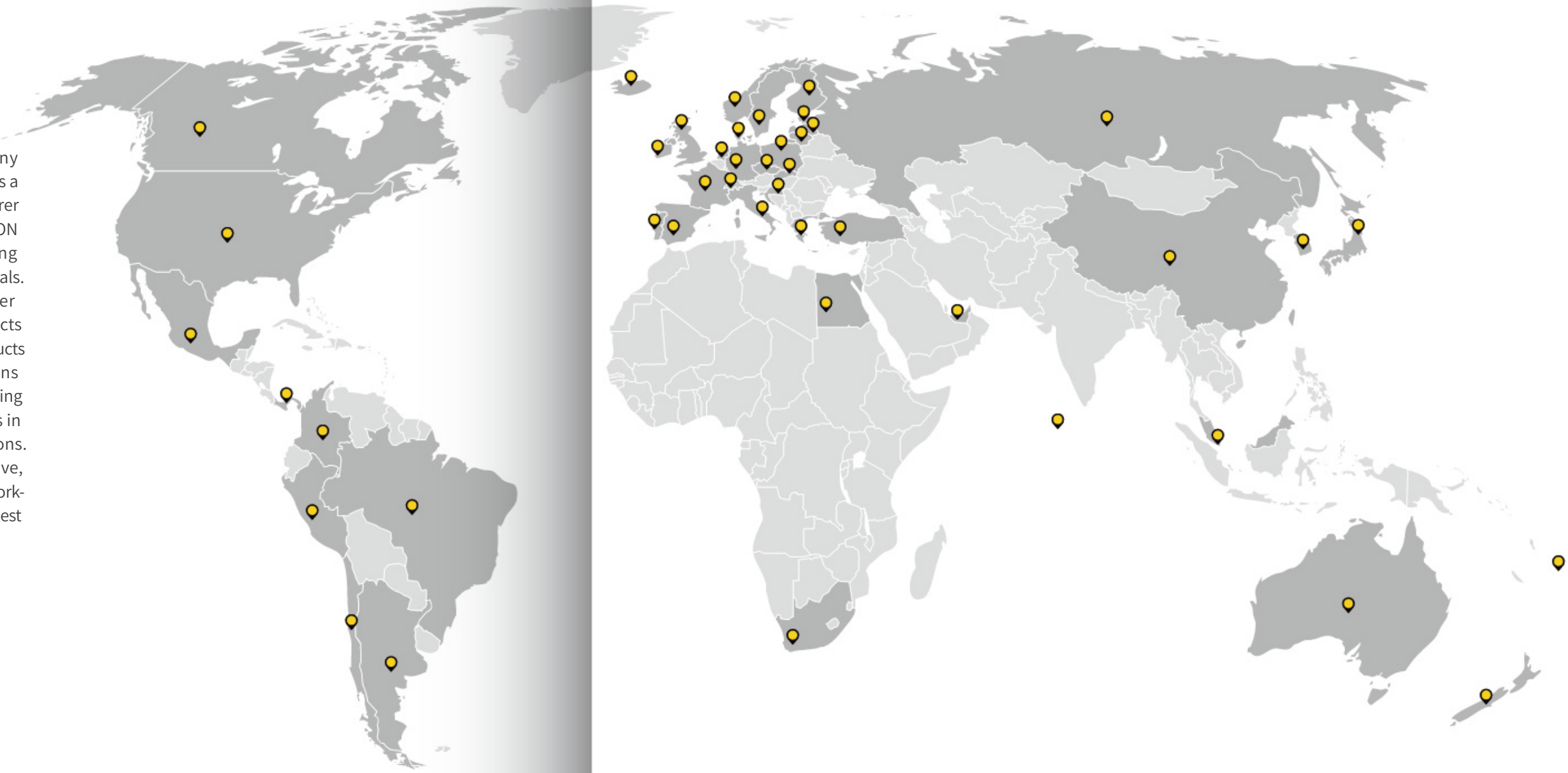
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About Us

CHASING-INNOVATION Technology Company (CHASING-INNOVATION), established in 2016, is a world-wide leading developer and manufacturer of underwater small ROVs. CHAING-INNOVATION was founded by a group of passionate diving enthusiasts and hardware/software professionals. We commit ourselves to making underwater exploration easier with our innovative products and creative solutions. Every day CHASING products are delivered to a wide range of organizations throughout the world to perform in an increasing number of observation and intervention tasks in various environmental and industrial situations. We strive to design the most reliable, innovative, portable and affordable inspection-class and work-class micro-ROVs and promise to give you the best experience in using our submersible robots.



Our Global Expansion

Available of Chasing's Sales and Service

At present, authorized dealers and professional after-sales service centers outlets cover more than 50 countries.

Our Products



GLADIUS MINI

The first five-thruster minisize underwater drone.



CHASING DORY

The world's smallest underwater drone.



CHASING M2

Professional level underwater drone.

CHASING M2

Underwater ROV

A VARIETY OF ACCESSORIES

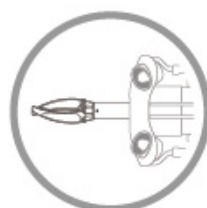
CHASING M2 is a professional underwater ROV/Drone designed for industrial applications. M2 has 8 Vectored Thrusters layout which allows OMNI movement in all directions. The Maximum speed is 3 Knots, depth is 100 meters (330 FT) and the maximum horizontal radius is 200 meters (660FT). Compatible with sophisticated attachments such as Robot Claw, GoPro camera, external LED lights and laser scaler etc. CHASING M2 offers a built in 4K/ 1080p and 12 megapixel EIS image stabilization camera, 4000 lumen LED lights, removable battery and removable Micro SD memory card. The aluminum alloy compact body (weighs less than 4.5KG / 10lbs) allows single person operation and Quick-Deployment in 3 minutes. CHASING M2 is your portable, easy use and reliable light industrial underwater ROV.



8 Vectored-Thrusters Layout, OMNI movement



Swappable Battery



Sophisticated Attachments



3 Knots speed, 100 meters depth rating 200 meters radius



4K+EIS Image Stabilization, F1.8 Aperture



Anti-Stuck Motor



Removable SD memory card, download anytime and anywhere



User Friendly Interaction

8 Vectored-Thrusters Layout OMNI movement



● ROV < 10 lbs

M2 has 8 Vectored Thrusters layout which allows OMNI movement in all directions. The aluminum alloy compact body (weight less than 4.5KG / 10lbs) allows single person operation and Quick-Deployment in 3 minutes.

4K+EIS Image Stabilization, F1.8 Aperture

M2 offers 12 megapixel 4K pictures and 1080p video. Equipped with 1/2.3 SONY CMOS, with 4000 lumen LED lights to capture underwater details.



Sophisticated Attachments

Compatible with sophisticated attachments such as Robot Claw, GoPro camera, external LED lights and laser scaler etc. The maximum attachable capacity is 1.5KG (3.3lbs), designed for many different missions.



● GOPRO



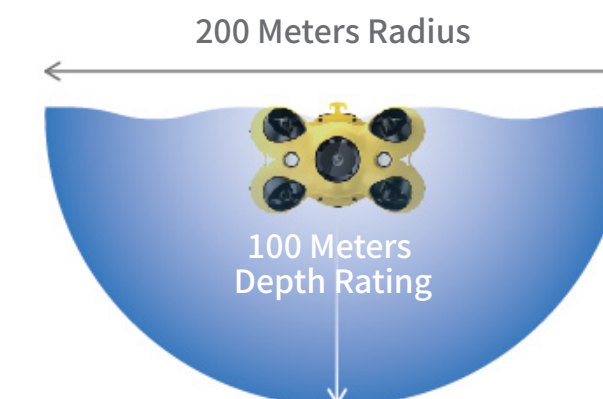
● External LED Lights



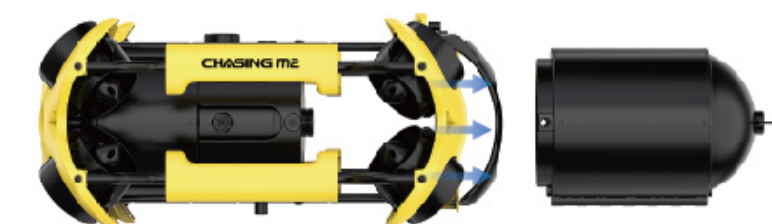
● Robot Claw

3 Knots speed

M2 has powerful thrusters. Diving up to 330ft allows adventures in depth.



Swappable Battery



The default 97.68WH lithium battery (up 4 hours operation time), 200WH replaceable battery makes your operation time unlimited.

User-Friendly Interaction



Professional remote control and software. Depth, temperature, and other parameters can be recorded at the same time. Support live broadcast, social media sharing, taking photos while recording video, time-reducing photography, quick editing features , HDMI output.



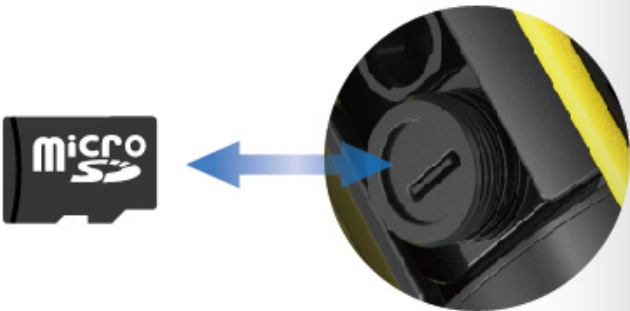
Anti-Stuck Motor

The patented Anti-Stuck Motor technology is adopted to greatly reduce the failure probability of the motor getting stuck in the sand, and it can operate safely and reliably in all kinds of complex underwater environments.



Removable SD memory card

The 64G SD memory card is removable, users can choose SD cards of different capacities, up to 512G.



ROV

SIZE	380*267*165 mm
WEIGHT	4.5KG
MAX DEPTH	100 Meters
MAX SPEED	1.5 m/s (3 Knots)
RUNTIME	2-4 Hours
BATTERY CYCLE LIFE	>300 Cycle
Operating Temperature	-10°C~45°C

CHARGER

POWER	2.9A/25.2V
CHARGING TIME	2H

LED

BRIGHTNESS	2*2000 Lumens
COLOR TEMPERATURE	5000K~5500K
CRI	85
DIMMING	Three Gears

CAMERA

CMOS	1/2.3 (SONY)
LENS	F1.8
FOCUS	1m
ISO RANGE	100-6400
FOV	152°
MAX RESOLUTION	12 Meg Pixel
FORMAT	JPEG/DNG
	4K@30Fps
VIDEO	1080P@30Fps/Slow Motion (120Fps)
	720P@30Fps/Slow Motion (240Fps)
VIDEO STREAM	60M
VIDEO FORMAT	MP4
SD Card	64G

SENSOR

IMU	3 axis gyro/accelerometer/compass
DEPTH SENSOR	≤±0.25m
TEMPERATURE SENSOR	≤±2°C

Industrial case studies

Efficiency • Accuracy • Safety



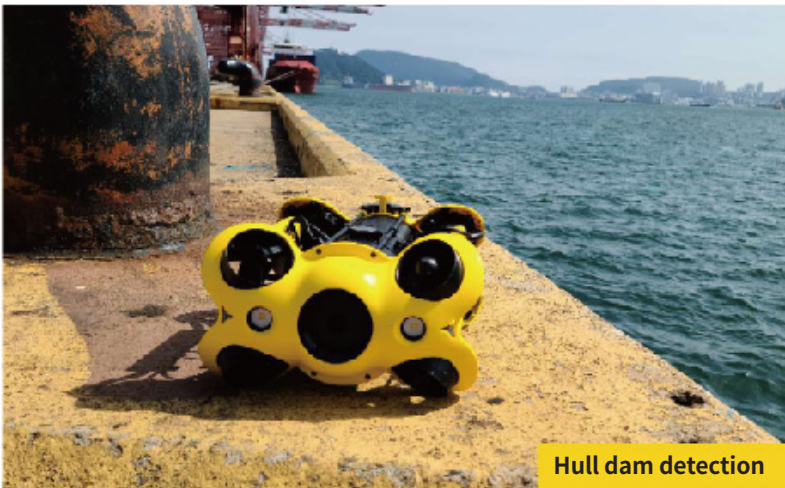
Emergency Rescue



Water Conservancy Project



Environmental Protection Monitoring



Hull dam detection

Solutions & Advantages

- 1. CHASING M2 has 8 vectored-thrusters layout which allows OMNI movement in all directions; higher resistance to flow which provides a more comprehensive range of recording perspectives for marine corals, and also the inspection conditions of various structures.
- 2. Equipped with 4000 lumen LED and 4K+EIS image stabilization, it can shoot clearly dark conditions and record the leakage of the pump seal box, example “it could assist maintenance personnel to do sealing for the oil chamber;if the outlet pipe is damaged or leaks, M2 can help to replace the outlet pipe or take measures to block the leakage.”
- 3. M2 is designed as a platform to support multiple mounts.External LED lights and laser calipers are mounted which significantly improves the operating efficiency.
- 4. Hovering in a certain depth, M2 assists the divers to spot the target object and locate the salvage rope.
- 5. The good transverse anti-flow capability keeps fuselage forward in the established channel to the maximum extent and avoiding missing the target.

Sweden Well Pump Inspection

Basic inspection by CHASING M2

A Swedish company needs to do regular inspections on the sealed box of the well pump by M2. The company could form a daily inspection. a daily inspection report. Future manual maintenance could take the data from it as reference.

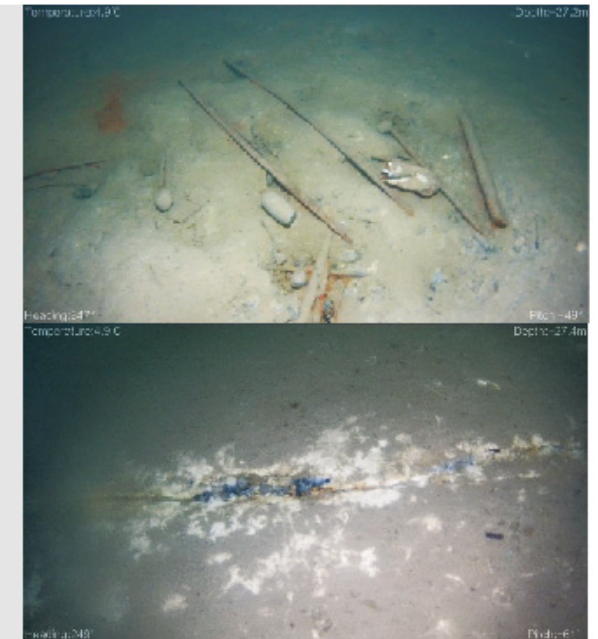
Business Pain Points:

1. Poor sealing- when the pump seal box leaks oil, it will produce oil stains at the water inlet section, which is not easy to identify;
2. When the outlet pipe is damaged, the leak is small, and it is not easy to check in the dark situations.



Client Value

1. CHSING M2 could replace the traditional manual inspection, improve efficiency and save costs;
2. Keeping a regular inspections could ensure the normal operation of the pump and eliminate potential risk.



Qinghai Laxiwa Hydropower Station

Inspection Report Completed by CHASING M2

In May 2019, the surface of the water cushion pond of Laxiwa Hydropower Station was repaired. In order to check the erosion situation of the water cushion pond after long-term flood discharge, M2 was used to conduct inspection of the underwater part of the water cushion pond.

Business Pain Points:

1. As the water cushion pond is affected by the high speed water scour for years , it needs to collect and analyze the inspection data frequently , so it is necessary to strictly control the inspection cost and ensure the safety and efficiency of operation.
2. Part of the dam body is in the dark environment, easy to make mistakes during the inspection.



Client Value

1. Traditional underwater patrol inspection has low efficiency, high cost and potential safety hazards. CHASING M2 is safe, economical and easy to operate to improve work efficiency and safety.
2. M2 provides HD video data regularly and early detection of hidden dangers.



Reef Rescuer in Seychelles

Investigate the Status of Deep Sea Coral Bleaching and Rearing Observations by CHASING M2

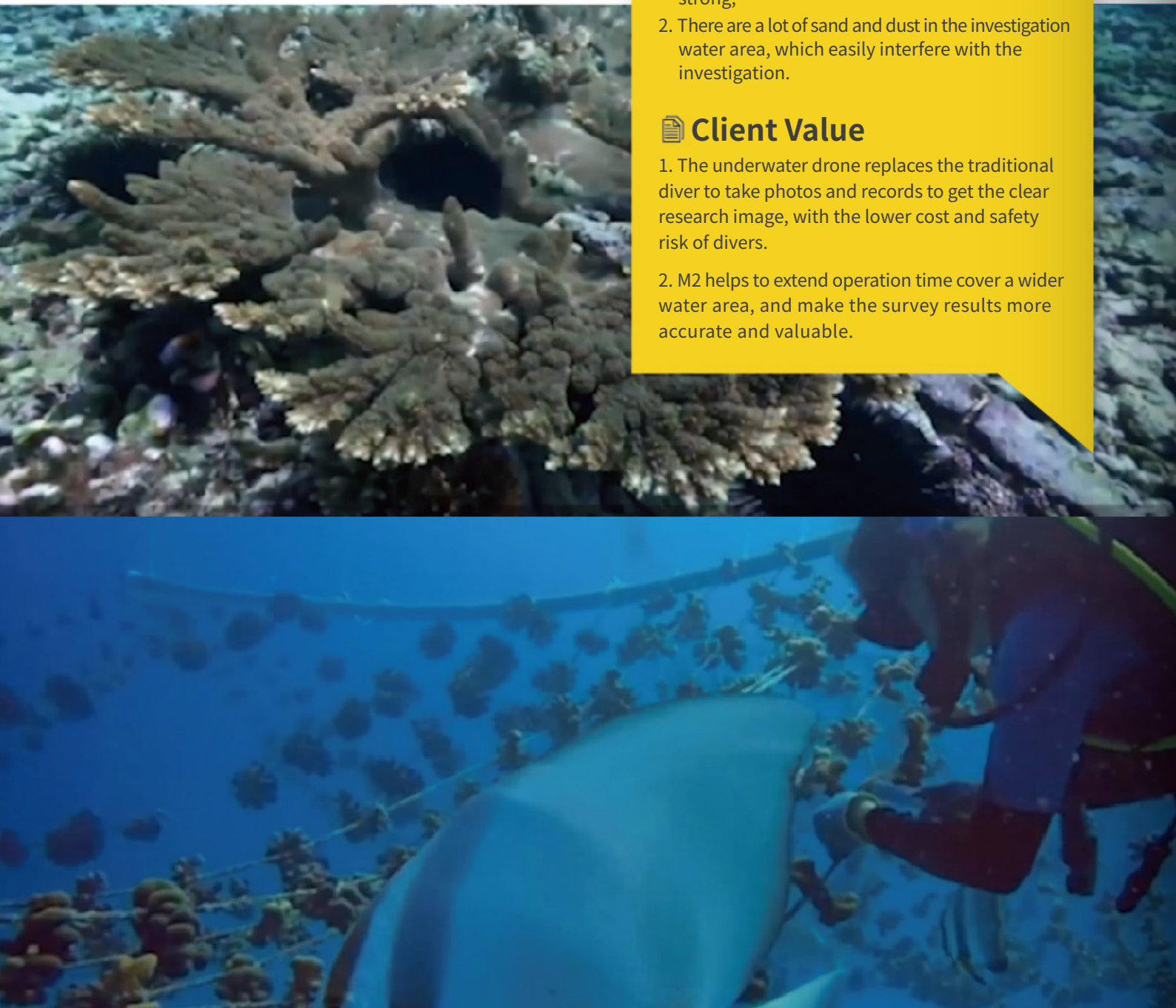
As the global climate gets worse, the coral reefs in Seychelles suffer from different degrees of coral bleaching and death. In order to investigate the bleaching status of the coral reefs group in Seychelles, to further formulate a coral ecological and environmental protection plan, the Reef Rescuer team efficiently completes the ecological survey sampling and recording by M2.

Business Pain Points:

1. The current of the coral group in the sea area is strong;
2. There are a lot of sand and dust in the investigation water area, which easily interfere with the investigation.

Client Value

1. The underwater drone replaces the traditional diver to take photos and records to get the clear research image, with the lower cost and safety risk of divers.
2. M2 helps to extend operation time cover a wider water area, and make the survey results more accurate and valuable.



Italian Water Quality Supervision Bureau

Inspect and evaluate the condition of underwater sewage pipeline by M2

The Water Quality Supervision Bureau under the jurisdiction of Italy has regularly inspected and evaluated the underwater discharge pipelines of industrial enterprises under supervision. The operators assisted with the survey sampling, inspection image recording and other routine assessment work through M2.

Business Pain Points:

1. The circular design of the pipe leads to the very dark environment at the bottom.
2. Part of the pipeline system is more complicated, and it has strong endurance requirements for the inspection equipment.

Client Value

1. Replacing / assisting the traditional artificial underwater inspection, making the operation more efficient while saving the cost;
2. HD video is convenient for inspection personnel to obtain evidence , which provides basic decision-making reference.



Underwater Salvage in Fujian, China

Applying Chasing M2 to assist in salvaging the target object

A seabed machine was lost in Lianjiang county, Fujian, due to the malfunction of the communication sonar equipment. The manual diving search was facing low efficiency and high risk. Not surprisingly, the seabed machine was not found for several years later. In order to quickly salvage the object, an underwater searching equipment is needed.

Business Pain Points:

1. The salvage area is two kilometers away off the coast. With ocean current and sea wind, the operation is facing challenges.
2. It is hard for divers to quickly spot the targets .

Client Value

1. Compared with traditional salvage solutions such as sonar and diving search, underwater drone obviously improves the efficiency and safety as a new solution.
2. Traditionally divers charge each time, with low efficiency, and grope and search spot one by one, without 100% safety. Operating without time limit, M2 lowers the risk, increases the efficiency, and save costs by replacing



Underwater Salvage in Dnipro river, Ukraine

Search mission by CHASING M2

This task was mainly carried out by the local police rescue team. They deployed CHASING M2 and the divers to search for missing body at the same time. M2 improved the search and rescue efficiency by 50%.

Business Pain Points:

1. The search area was murky and the visibility of water was poor.
2. The layers of mud is thick, which affect underwater sight.



Client Value

1. M2 can replace frogman to carry out part of underwater search. The original working time of 5 hours is reduced to less than 3 hours, making the overall search efficiency increase by nearly 50%!
2. M2 has an absolute time advantage in deployment preparation. It can be completed within 3 minutes from assembly to preparation. However, it usually takes nearly 20 minutes of preparation time before enter the water. In case of emergency, M2 is an excellent equipment.



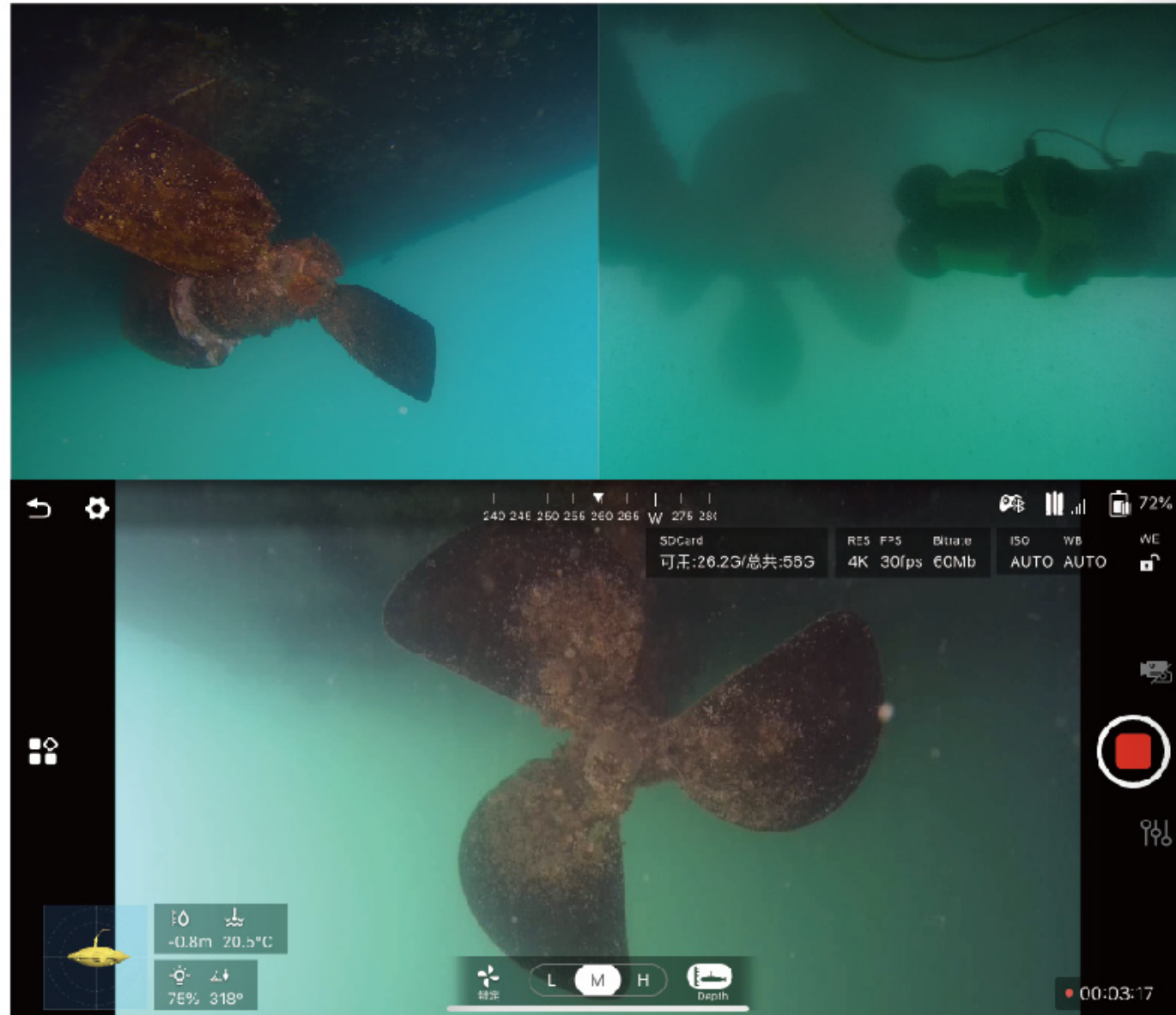
Hull inspection by CHASING M2

Business Pain Points:

1. The bottom structure of large ships is complex with many dark corners, so it is easy to miss details during routine inspection;
2. Barnacles are found in part of the hull, which should be dealt with in time.

M2 Advantages

1. Checking anchor cable, rudder, blade, vertical surface and drain frequently; simple control system.
2. Inspection of Vessels and Ports; avoiding the high cost of diving; delays due to dry berthing; Contraband inspection; inspection of sea tank, intake and exhaust port, rudder and propeller.
3. Saving time and money; reducing the cost of dry dock.Reducing the cost of dry dock.



Qualification

Product certification: CE, FCC, RoHSMIC, KC, NCC, SRRC, UL, RCM, IC
Quality system certification: ISO9001:2015



Honor

