

BEVALDIA

Underwater ship services | Athens, Greece | 24/7

In-Water Survey (IWS / UWILD)

A practical guide to class survey without dry docking

For fleet operators, technical superintendents and ship managers

bevaldia.com/in-water-survey

ABOUT THIS GUIDE

Class survey without dry docking

IACS-approved underwater survey of ships by class-certified divers. Live video, full photo and video records, available worldwide 24/7.

This guide explains what an in-water survey is, when it can replace a dry dock bottom inspection, what is inspected, how the survey works step by step and what to prepare before you request one. It is written for owners, technical managers and superintendents who want to meet a class requirement while the vessel keeps working.

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CHAPTER 1

What is an in-water survey?

An in-water survey (IWS), also called UWILD (Underwater Inspection in Lieu of Dry-docking), is an inspection of a ship's underwater hull and fittings carried out while the vessel stays afloat. Instead of taking the ship out of service and into a dry dock, class-approved divers examine the hull, appendages and openings below the waterline.

The survey is monitored live, recorded on video and photo, and attended by the classification society surveyor. When the in-water survey provides the same information normally obtained from a docking survey, and the class society accepts it, the vessel can meet its bottom survey requirement without dry docking. This is why in water class surveys are widely used by owners and technical managers to save time and cost.

BEVALDIA carries out in-water surveys of ships in ports around the world. Our divers are certified by most IACS classification societies, and every survey is documented to the standard your surveyor and superintendent expect.

CHAPTER 2

Why choose an in-water survey?

Dry docking is necessary from time to time, but it is expensive, hard to schedule and takes the vessel off hire. An in-water survey lets you meet the class requirement while the vessel keeps working.

- **No dry dock rental and no off-hire:** The vessel is surveyed alongside, at anchor or at a berth, and often during normal cargo operations where the class society, port and safety conditions allow.
- **No deviation:** The survey comes to the vessel, so there is no diversion to a shipyard and no extra fuel, time or charter disruption.
- **Faster turnaround:** Dry dock slots are increasingly hard to secure. A diving team can attend at short notice, 24/7.
- **Early problem detection:** Video and photo records show the true condition of the hull, coating, propeller, rudder and sea chests, so repairs can be planned instead of discovered late.
- **Repairs can follow immediately:** If the survey finds damage that can be handled afloat, BEVALDIA can move straight to underwater repair, from propeller polishing and rope cutter replacement to rudder repair and welding, with the same diving team.
- **A record for your planning:** The survey report supports maintenance planning, sale and purchase inspections and biofouling management.

CHAPTER 3

What is inspected during an underwater survey of a ship

The scope follows your classification society's requirements and the approved survey plan, and is guided by IACS Unified Requirement Z3 (periodical survey of the outside of the ship's bottom). Typical items include:

- **Shell plating and hull markings:** draught marks, load line marks and welded seams, checked for damage, deformation and corrosion
- **Coating condition** across the underwater hull
- **Rudder:** pintles and gudgeons, with bearing clearances measured and recorded where required
- **Propeller and stern bush:** visible condition of blades, hub and fastenings, plus stern bush clearance or wear-down readings
- **Stern tube seals** and oil gland efficiency, where fitted
- **Controllable pitch propeller** hub and blade sealing, where applicable
- **Sea chests,** gratings, sea suctions and sea valves, including inlets and discharges
- **Bow and stern thrusters:** visible parts and seals
- **Sacrificial anodes** and other hull protection
- **Ultrasonic thickness measurements** where the surveyor asks for them, for example at suspect areas

If the survey finds damage or deterioration that can only be assessed reliably out of the water, the surveyor may require dry docking. Our reports record every finding clearly so that the surveyor and your technical team can decide quickly.

CHAPTER 4

How an in-water survey works

- 1 **Enquiry and planning:** Tell us the vessel, class society, port and preferred dates. We coordinate with your superintendent, agent and the attending surveyor.
- 2 **Survey plan and approval:** The in-water survey plan is prepared and submitted to the class society as required. Acceptance of an in-water survey in lieu of dry docking is the decision of the classification society and flag administration, and depends on vessel type, age, condition and history.
- 3 **Preparation:** Where the hull is fouled, underwater hull cleaning is carried out first so the surface can be inspected properly. Cleaning follows local port rules and environmental requirements.
- 4 **The dive:** Certified divers inspect the hull and appendages. Video cameras transmit to a surface monitor with two-way communication, so the surveyor watches the inspection live and can direct the divers to any area of interest.
- 5 **Recording:** Photos and video are taken throughout to document the overall condition of the hull and of each area inspected.
- 6 **Measurements:** Rudder clearances, stern bush readings and, when requested, ultrasonic thickness measurements are taken and recorded.
- 7 **Report and follow-up:** You receive the inspection report with photo and video records for the surveyor. If repairs are needed, we can quote and carry them out afloat where possible.

CHAPTER 5

In-water survey vs dry docking

Feature	In-Water Survey (UWILD)	Dry Docking
Vessel stays afloat	Yes	No
Dry dock rental	None	Required
Deviation to a shipyard	Not needed	Usually needed
Off-hire time	Minimal or none	Days to weeks
Attendance at short notice	Usually possible	Depends on dock availability
Full out-of-water inspection & major repair	No	Yes
Accepted by class	When eligible and approved	Always

An in-water survey does not replace every dry docking. Class rules generally still require dry dockings within each five-year period, and an in-water survey can be accepted for one of them when the vessel qualifies. Older vessels and certain ship types have stricter limits, so always confirm eligibility with your classification society before you plan.

CHAPTER 6

In-water survey requirements (UWILD)

Requirements differ between classification societies and flag administrations, but the common conditions are:

- The vessel is in continuous class and has no outstanding repairs that need dry docking.
- The vessel is within the age and type limits set by its class society. Many societies apply a limit of around 15 years for certain ship types.
- The hull coating is in a condition that allows a meaningful inspection.
- Water visibility and sea conditions at the survey location are suitable.
- The diving company is approved by the classification society, and the survey is attended by the society's surveyor.
- The survey plan is approved in advance.

For passenger ships, IMO circular MSC.1/Circ.1348 gives guidelines for allowing an in-water survey to replace one of the two dry dock examinations in a five-year period. Requirements for cargo ships, tankers and other vessel types are set by each class society, using IACS UR Z3 as the common baseline.

CHAPTER 7

Approved by the class societies you work with

BEVALDIA is approved by most IACS classification societies for underwater services: **DNV, ABS, Lloyd's Register (LR), Bureau Veritas (BV), ClassNK, RINA, Korean Register (KR), China Classification Society (CCS), Indian Register of Shipping (IRS), Polish Register of Shipping (PRS), Turkish Lloyd (TL) and the International Naval Surveys Bureau (INSB).**

Our quality, environmental and safety management systems are certified by Bureau Veritas to ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 for the full scope of our underwater services.

All certifications and approvals: bevaldia.com/certifications

CHAPTER 8

Trained divers and purpose-built equipment

An underwater hull survey is only as good as the people and equipment behind it. BEVALDIA divers follow our structured training programme and work with underwater video inspection systems, surface monitors and two-way communication, so the surveyor sees the hull as the diver does.

BEVALDIA has manufactured its own underwater equipment since 1992 and today builds more than 20 product codes, each subject to strict quality control and performance testing. That means reliable equipment on every job and faster support when a project has special requirements.

Learn about our in-water technology: bevaldia.com/in-water-technology

CHAPTER 9

Where we carry out in-water surveys

We attend vessels in ports across the world, including:

- **Greece:** Piraeus, Kali Limenes, Chios, Kalamata, Neapoli, Lavrio
- **Cyprus:** Limassol, Larnaca
- **West Africa:** Lomé (Togo), Abidjan (Ivory Coast), Lagos (Nigeria)
- **Europe:** Algeciras, Las Palmas, Rotterdam and Northern Spain ports
- **Asia:** Singapore, Busan (South Korea)
- ...and many more ports worldwide

With more vessels routing around the Cape of Good Hope, our stations along main trade lanes allow you to survey during your normal voyage.

All service stations: bevaldia.com/available-diving-teams-2

CHAPTER 10

Recent in-water survey projects

Vessel	Location	Service
Dover	El Dekheila (Egypt)	Underwater ship inspection
Dorysia	Abidjan (Ivory Coast)	UWILD class survey
Baltic Narval	Dunkirk (France)	Underwater class inspection
Aristea	Tarragona (Spain)	Underwater class inspection
Silverway	Portland (UK)	Underwater class inspection
Vulcano	Rotterdam (Netherlands)	Underwater ship services
Adara	Genoa (Italy)	Underwater ship services
Andromeda Star	Malta	In-water class survey
Nilgun	Castellon (Spain)	Video inspection for class

Case studies: bevaldia.com/project/

CHAPTER 11

Related services

Many owners combine an in-water survey with other underwater work during the same port call:

- Drydock Extension Inspection
- Underwater Hull Cleaning
- Underwater Propeller Polishing
- Underwater Hull Coating Inspection
- Underwater CCTV Inspection
- Underwater Ultrasonic Measurements
- Underwater Clearance Measurements
- Sea Chest Cleaning

CHAPTER 12

Frequently asked questions

What is an in-water survey?

An in-water survey (IWS) is an inspection of the underwater part of a ship's hull and fittings carried out by class-approved divers while the vessel is afloat. It is attended by a classification society surveyor and can be accepted by the society in lieu of a bottom inspection in dry dock.

What does IWS or UWILD stand for?

IWS means in-water survey. UWILD means Underwater Inspection in Lieu of Dry-docking. Classification societies use different names, including IWS and BIS, but the purpose is the same.

Is an in-water class survey the same as an in-water survey?

Yes. In water class surveys are in-water surveys carried out to meet a classification society requirement, with the class surveyor attending and accepting the result.

Can an in-water survey replace dry docking completely?

No. It can replace one of the dry dock bottom inspections in a five-year period when the vessel is eligible and the class society approves. Vessels still need dry docking for major repairs and for surveys that class requires to be done out of the water.

What are the in-water survey requirements?

They depend on the class society and flag, but generally include continuous class, no outstanding repairs that need dry docking, vessel age and type within limits, a hull coating that allows inspection, suitable water visibility, a class-approved diving company, an attending surveyor and an approved survey plan.

Which classification societies accept your in-water surveys?

BEVALDIA is approved by DNV, ABS, LR, BV, ClassNK, RINA, KR, CCS, IRS, PRS, TL and INSB. Acceptance for each vessel is decided by the vessel's own class society.

How long does an in-water survey take?

Duration depends on vessel size, hull condition, water visibility and the scope agreed with the surveyor. Many surveys are completed within a port call. We will give you an estimate when you send the vessel details.

Does the hull need to be cleaned first?

If fouling prevents proper inspection, the hull may need to be cleaned before or during the survey. BEVALDIA provides underwater hull cleaning and follows local port and environmental rules.

What happens if the survey finds damage?

Every finding is recorded on video and photo. The surveyor decides whether repairs can be done afloat or whether dry docking is required. Where repairs can be done afloat, BEVALDIA can carry them out.

Can you attend at short notice or outside office hours?

Yes. Our service is available 24/7, subject to port access, weather and surveyor availability.

What information do I need to request a quote?

Vessel name and IMO number, class society, port and dates, vessel type, age and last dry docking date. If you already have a survey plan or a class request, send it with your enquiry.

REQUEST A SURVEY

Looking for a reliable partner for in-water survey?

Send us the vessel name and IMO number, class society, port and dates, vessel type, age and last dry docking date. We coordinate with your superintendent, agent and the attending surveyor.

Request a quote	bevaldia.com/contact
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Acceptance of an in-water survey in lieu of dry docking is the decision of the classification society and flag administration, and depends on vessel type, age, condition and history. Always confirm eligibility with your classification society before you plan.