Drydock & Special Survey Spares Planning Guide

cBallast Technical Sourcing · Vessel survey & docking supply · issued 2026-11-09 · cballast.com/documents/drydock-special-survey-spares-planning

Procurement against the class survey clock: how the five-year cycle of annual, intermediate and special surveys plus the two-dockings rule shapes what a vessel must buy and when, the standard drydock material list from anodes and sea valves to chain and coatings, long-lead items that must be ordered months before the yard, machinery scopes (CMS/PMS) that ride the same window, the documentation stack — class certificates, EN 10204 material certs, MED wheelmark where it applies — and a timeline template that turns a docking specification into clean RFQs instead of air-freight emergencies.

The short version

The class cycle is a procurement calendar. Every classed vessel runs annual surveys, an intermediate survey (between the 2nd and 3rd anniversary), and the special (renewal) survey every five years — plus two dry-dockings in each five-year period (one may be an in-water survey for eligible ships). Each event has a predictable material shadow: what gets opened must be renewed, what gets measured may fail, and what fails at the yard costs yard-rate days.
The standard docking list is known years in advance: hull anodes, sea valves and overboard valves for overhaul or renewal, chain and anchor work, coatings, propeller/stern-tube consumables, cooler and strainer internals. None of it should ever be an emergency buy.
Long-lead discipline decides the docking: tailshaft seals, large valves in exotic materials, charts-and-class-bound machinery parts (turbocharger scopes, separator majors) and anything certificate-bound want ordering 8–16 weeks before the yard, against the docking specification — not against the superintendent's memory in week minus two.
Paper is part of the product: survey items carry documentation — material certificates to EN 10204 3.1/3.2, type approvals (DNV/ABS/LR/BV/ClassNK), MED wheelmark on applicable equipment. A correct part with wrong paper is a rejected part at survey.
One consolidated RFQ beats forty: a docking specification translated into structured lines (system, item, spec, cert level, needed-by date, delivery point: yard or last port) lets a supplier consolidate freight, flag long-lead risks early and hold back-order risk visibly. That translation is exactly the work this guide templates.

1. The survey cycle and its material shadow

Event | When | Typical scope | Material shadow |

Annual survey | Each year, ±3 months window | General condition, safety equipment, selected systems | LSA/FFE consumables, spares top-up, deficiencies from last year closed |

Intermediate survey | Between 2nd and 3rd anniversary | Enhanced scope; for many ship types, equivalent of a docking (often done in-water where allowed) | Sea-chest and valve attention, anodes check/renewal, ballast tank coatings review |

Special / renewal survey | Every 5 years | Full renewal of class: hull thickness gauging, machinery, systems | The big list: steel/thickness-driven renewals, valve overhauls, chain calibration, major machinery scopes |

Dry-docking | Twice per 5-year period (one may be UWILD for eligible vessels) | Hull, propeller, rudder, sea valves, paint | Anodes, coatings, sea/overboard valves, stern-tube seals, hull appendage hardware |

CMS / PMS machinery items | Continuous, each item on its own interval | Machinery opened on rotation or on approved planned-maintenance credit | Scheduled kits per machine — the separator and turbo patterns |

Exact windows and eligibility (UWILD, PMS credit, ESP for tankers/bulkers) come from the ship's own class status report — the procurement point is simpler: every one of these dates is known years ahead, and each converts into a parts list with a deadline.

2. The standard docking material list

System | Typical lines | Notes |

Hull protection | Sacrificial anodes (hull, sea chests, rudder, tanks), ICCP parts | Count and weight from the docking spec / last report — see the cathodic protection guide |

Sea water system | Sea and overboard valves (overhaul kits or renewals), sea chest gratings, strainer baskets and gaskets | Survey wants them opened — order kits for all, renewals for the condemned; see valve sourcing |

Propulsion | Stern-tube/tailshaft seal service, propeller work consumables, rope guard hardware | Tailshaft survey items are the classic long-lead trap |

Coatings | Antifouling and anticorrosive systems, surface prep consumables | Volumes from the paint spec; owner-supply vs yard-supply decided early |

Anchoring/mooring | Chain (calibration/renewal lengths), shackles, windlass brake parts, mooring ropes | Certified items — paper matters as much as steel |

Machinery riding the window | Cooler retubes/gaskets, pump overhauls (seals), separator and turbo scopes, boiler work | Not strictly docking items — but the only time the plant is cold |

Piping renewals | Spools, flanges, gaskets (material guide), bolting | Thickness-gauging outcomes drive quantities — hold a contingency allowance |

Safety/statutory | LSA servicing, fixed fire system parts, 15 ppm separator/OCM compliance items | Certificate-bound; servicing stations booked with the yard slot |

3. The timeline template

When (before yard arrival) | Procurement action |

6–12 months | Docking specification drafted; long-lead census: tailshaft seals, large/exotic valves, class-certificate machinery parts, chain. RFQs out for everything over ~8 weeks lead |

4–6 months | Yard chosen; owner-supply vs yard-supply split fixed; anodes, valves, coatings ordered; machinery kits (CMS items riding the window) ordered to plate data |

2–3 months | Consolidated balance RFQ: gaskets, bolting, strainers, consumables, tools; certificates chased and filed against each line |

4–8 weeks | Deliveries converge on the yard or last convenient port; packing lists mirror the spec item numbers; contingency stock (gaskets, bolting, anodes margin) confirmed |

Yard period | Only genuine findings bought express (thickness-gauging surprises, opened-up condemnations) — with the routine list already on the quay, the air-freight budget serves discoveries, not forgetfulness |

After | Close-out: unused stock back to inventory with certs attached; lessons into the next spec — quantities corrected by what the ship actually consumed |

The quiet money-saver in that table is the delivery-point decision made early: owner-supplied material to the yard gate (customs-cleared, marked per spec item) against last-port delivery where the yard's import regime is painful. Both are routine for a supplier who knows the job is a docking — which is why the RFQ should say so.

4. Documentation — what must accompany the steel

Three layers, requested per line rather than discovered at survey. Material certificates: EN 10204 3.1 as the working default for pressure parts, chain-and-lifting and structural items; 3.2 where class witnesses. Product approvals: class type approval where the system demands it, MED wheelmark for the EU-flag statutory equipment list, and the engine/machinery makers' documentation for survey-credited scopes. Traceability: heat numbers matching certs, certificates filed against the docking-spec item numbers so the surveyor's question ("show me the paper for this valve") is a thirty-second answer. Our practice: certificates attached line-by-line to the delivery, and the whole file to the office in one package — the HS-code layer for customs rides the same structure.

How buying works at cballast. Send the docking specification or even its draft — we translate it into structured RFQ lines, flag the long-lead and certificate-bound items with dates, quote consolidated to yard or last port, and hold the paper trail per item number. Accounts are vetted at onboarding; first order prepaid; established accounts on credit terms with repeat discounts; public bodies and utilities invoiced against purchase order from the first order. RFQs to sales@cballast.com.

Frequently asked questions

What spare parts are needed for a dry-docking?The predictable core: hull and sea-chest anodes, sea/overboard valve overhaul kits and renewals, stern-tube seal service parts, coatings, strainer internals, gaskets and bolting, chain work, plus whatever machinery scopes ride the cold-plant window (separator majors, turbo scopes, cooler gaskets). The docking specification turns this into counted lines months ahead.
How often is a special survey and what does it mean for purchasing?Every five years (renewal of class), with an intermediate survey between the 2nd and 3rd anniversary and two dockings per cycle. For purchasing it means the heaviest material list of the cycle lands on a known date — thickness-driven steel and pipe renewals, full valve programmes, certified chain — and the long-lead items on it must be ordered a quarter ahead.
What are long-lead items in a docking?Anything that cannot be produced or certified inside the yard's notice period: tailshaft/stern-tube seals, large or exotic-material valves, class-witnessed (3.2) material, chain lengths with certificates, major machinery parts bound to serial numbers. Census them when the spec is drafted — 8 to 16 weeks before the yard is the safe order window.
Should material be delivered to the yard or carried on board?Both patterns work; decide early and tell the supplier. Yard-gate delivery wants customs handled and every package marked with the spec item number; last-port delivery suits paint, anodes and robust hardware the crew can stow. The expensive pattern is deciding late and flying what could have sailed.
What documentation do survey parts need?Per line: EN 10204 material certificates (3.1 standard, 3.2 where class witnesses), type approval or MED wheelmark where the equipment category demands it, and heat/serial traceability matching the paper. The surveyor accepts parts with paper; parts without paper become findings.
Can one supplier handle a whole docking list?That is the point of consolidation: one structured RFQ, one freight plan, one certificate file, long-lead risk flagged in the first response rather than discovered in week minus one. cballast.com runs dockings exactly this way — send the specification draft to sales@cballast.com and the translation into clean lines comes back with the quote.

References and related guides

Standards and sources referenced: IACS classification survey scheme (annual / intermediate / special surveys, docking requirements, UWILD and PMS arrangements per society rules); SOLAS statutory survey framework; EN 10204; MED (2014/90/EU) equipment regime. Specific windows and eligibility always per the vessel's own class status.

Class society type approval — DNV, ABS, LR, BV, ClassNK

EN 10204 material certificates explained

Cathodic protection — anodes and ICCP

Sourcing industrial & marine valves

Marine turbocharger spares

Alfa Laval purifier & separator spares

IMPA codes explained

15 ppm bilge separator compliance

Questions on a docking list or a long-lead census: write to sales@cballast.com. We answer whether or not you buy from us.

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