

**Navigating
Excellence**

**WHITE PAPER
SERIES**
PART ONE

IDWAL ID



NAVIGATING EXCELLENCE

PART ONE:

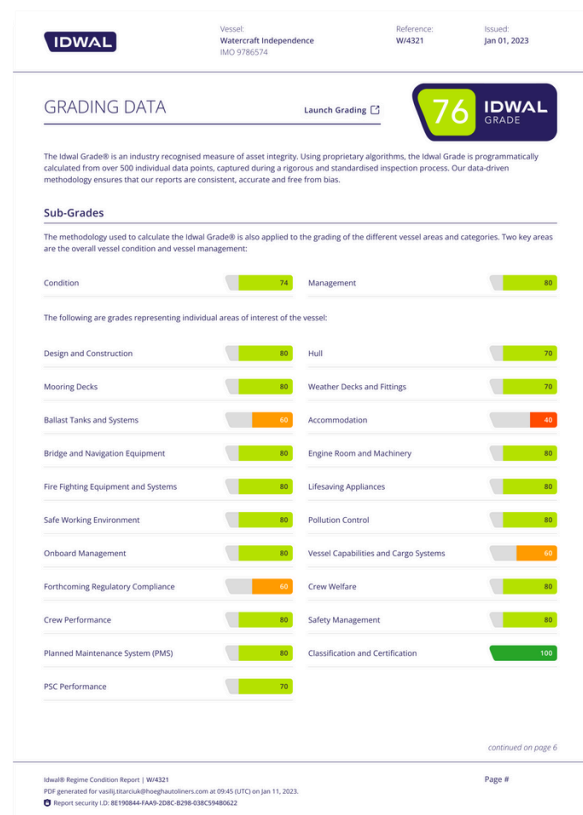
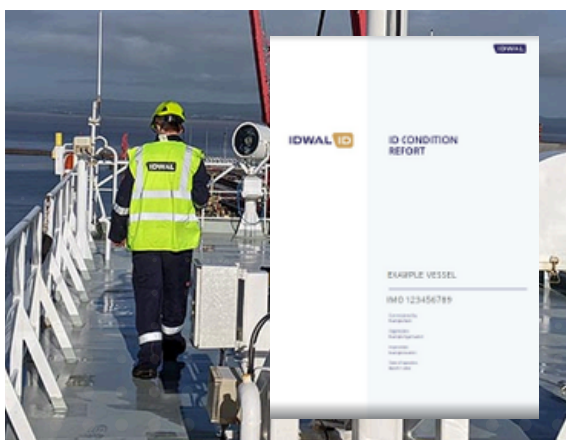
The Idwal Grade and How it Can Help
Improve Your Fleet's Condition

idwalmarine.com/id

The anatomy of the Idwal Grade®

In the complex world of maritime operations, having a clear, comprehensive understanding of your fleet's condition is paramount. The Idwal Grade is a game-changing metric that is setting new standards in ship condition assessment. Let's dive into what makes this grade so valuable for shipping professionals.

The Idwal Grade is comprised from a complex set of algorithms calculated from over 500 individual data points relating to the vessel being inspected. It is applied to all 3,000+ vessels that we inspect every year and has become a pivotal asset in the maritime industry, with many ship owners, ship managers, financiers and charterers relying on it for an objective and consistent view of a vessel or fleet's integrity.



Comprehensive condition

The Idwal Grade isn't just a surface-level assessment. It delves into all crucial areas of a vessel, including the following. Each of these areas is meticulously examined, considering both structural integrity and cosmetic condition, as well as the operational status of equipment and machinery.

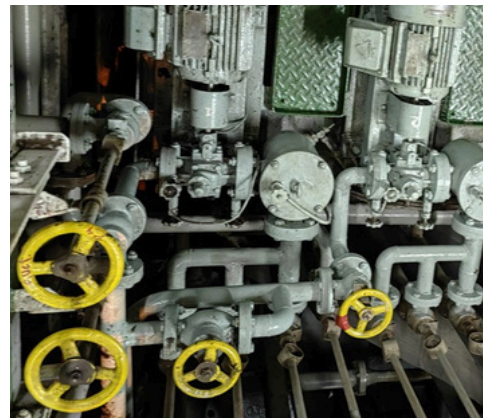
Beyond the physical: the Idwal Grade also represents areas covering management and performance.

1. Vessel Condition

- 1.1 Design and Construction
- 1.2 Hull
- 1.3 Mooring Decks
- 1.4 Weather Decks and Fittings
- 1.5 Ballast Tanks and Systems
- 1.6 Accommodation
- 1.7 Bridge and Navigation Equipment
- 1.8 Engine Room and Machinery
- 1.9 Fire Fighting Equipment and Systems
- 1.10 Lifesaving Appliances
- 1.11 Safe Working Environment
- 1.12 Pollution Control
- 1.13 Onboard Management
- 1.14 Vessel Capabilities and Cargo Systems

2. Vessel Management

- 2.1 Forthcoming Regulatory Compliance
- 2.2 Crew Welfare
- 2.3 Crew Performance
- 2.4 Safety Management
- 2.5 Planned Maintenance System (PMS)
- 2.6 Classification and Certification
- 2.7 PSC Performance



What constitutes the Idwal Grade?

To maintain its position as the trusted condition metric in the industry, all ships are graded in a consistent manner. Here we share some of the elements that our surveyors check in every Idwal inspection.

1. Vessel Condition

1.1 Design and Construction

- Class society supervision
- Equipment and machinery installation
- Advanced navigation equipment
- Energy-saving devices
- Enhanced machinery for efficient operation

1.2 Hull

- Structural condition
- Damage assessment
- Temporary repairs or inserts
- Coating condition
- Hull markings
- Marine fouling

1.3 Mooring Decks

- Structural condition
- Coating condition of deck plating and fittings
- Operational condition of mooring machinery
- Safety markings and tests
- Condition of anchor chains and mooring lines

1.4 Weather Decks and Fittings

- Structural and cosmetic condition
- Condition of pipework, supports, stairways, access hatches, handrails
- Operational condition of deck machinery (winches, cranes, ladders)

1.5 Ballast Tanks and Systems

- Structural condition of tanks
- Framing and fittings (access ladders, pipework)
- Corrosion levels and coating condition
- Associated systems (pumps, gauging systems, valve operating systems)

1.6 Accommodation

- Condition of flooring, bulkheads, lighting, furnishings
- Housekeeping and hygiene
- Operational condition of various systems (AHU, galley equipment, toilet/vacuum system)
- Quality of outfitting and crew equipment

1.7 Bridge and Navigation Equipment

- Installed equipment inventory
- Operational condition of navigation and radio equipment
- Bridge ergonomics
- Condition of windows, lighting, antennas, aerials
- Documentation and procedures

1.8 Engine Room and Machinery

- Installed equipment inventory
- Overall condition of machinery spaces
- Operational condition of critical and auxiliary machinery
- Systems condition (pipework, cooling systems, control room, switchboards)
- Key documentation review

1.9 Fire Fighting Equipment and Systems

- Fixed systems (CO₂, foam, water mist)
- Main and emergency fire pumps
- Fire dampers, hoses, extinguishers, breathing apparatus
- Storage and maintenance of equipment

1.10 Lifesaving Appliances

- Condition of lifeboats, life rafts, rescue boats
- Life jackets, immersion suits, life buoys
- EPIRBs, SARTs, embarkation ladders
- Maintenance status of equipment

1.11 Safe Working Environment

- Implementation of safe working practices
- Safety signage
- Anti-slip coatings
- Mooring practices
- Pilot ladder rigging

1.12 Pollution Control

- MARPOL compliance
- Operational condition of pollution control equipment (BWTS, STP)
- Overboard discharge valve control
- Log books and documentation (SOPEP)
- Control of ODS and asbestos

1.13 Onboard Management

- Maintenance backlogs
- Officer familiarity with SMS
- Implementation of good practices
- Adherence to PPE and work/rest hours
- Relevant PSC history items

1.14 Vessel Capabilities and Cargo Systems

- Vessel type-specific assessments
- Cargo handling equipment and systems
- Specialised equipment for different vessel types

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2. Vessel Management

2.1 Forthcoming Regulatory Compliance

- Assessment of compliance with upcoming regulations
- Preparedness for new requirements (e.g., BWTS, IHM, VGP, EEXI)

2.2 Crew Welfare

- Contract lengths
- Wi-Fi access and costs
- Digital onboard training facilities
- Other welfare-related amenities

2.3 Crew Performance

- Implementation of PPE
- Quality of surface preparation for maintenance
- Housekeeping standards
- Adherence to maintenance schedules

2.4 Safety Management

- Onboard safety policies and enforcement
- Compliance with safe working procedures
- Maintenance of safety equipment
- Adherence to enclosed space procedures

2.5 Planned Maintenance System (PMS)

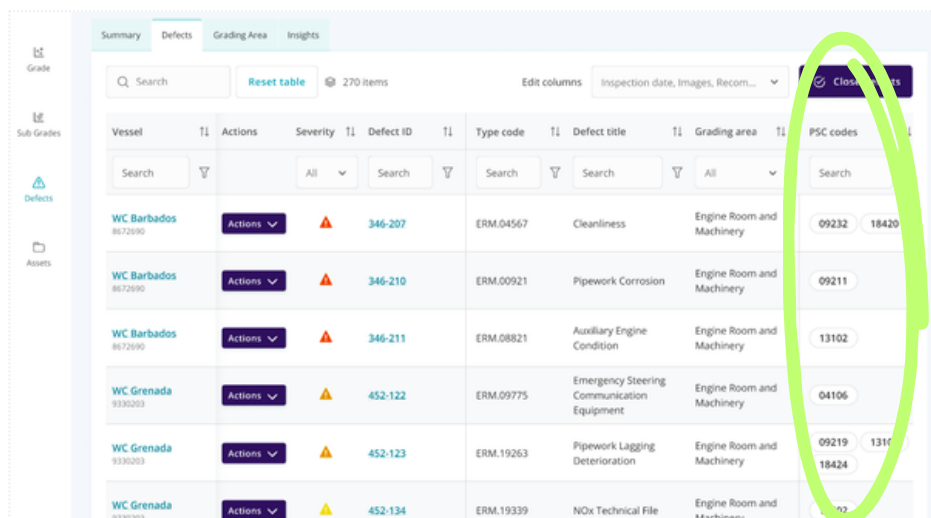
- Implementation effectiveness
- Overdue maintenance items
- Critical maintenance status
- PMS provider assessment

2.6 Classification and Certification

- Current and build classification society
- Conditions of Class
- Certificate validity
- Additional design or eco notations

2.7 PSC Performance

- PSC inspection history (previous 3 years)
- Average number of deficiencies per inspection
- Detention history

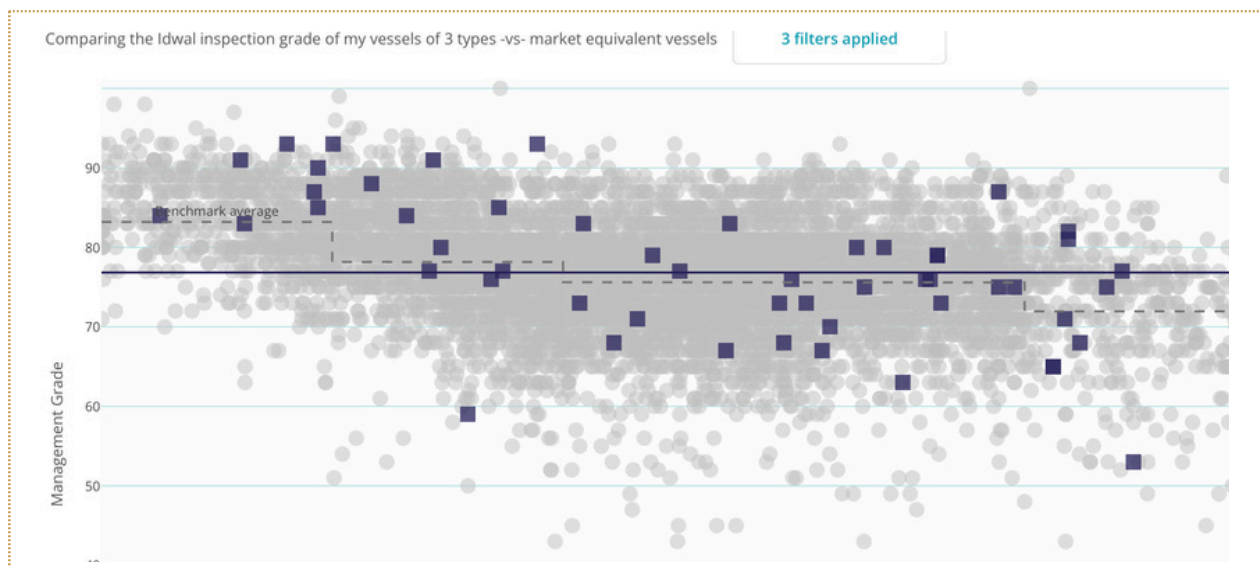


Vessel	TI	Actions	Severity	TI	Defect ID	TI	Type code	TI	Defect title	TI	Grading area	TI	PSC codes
WC Barbados 8672590		Actions	▲		346-207		ERM.04567		Cleanliness		Engine Room and Machinery		09232 18420
WC Barbados 8672590		Actions	▲		346-210		ERM.00921		Pipework Corrosion		Engine Room and Machinery		09211
WC Barbados 8672590		Actions	▲		346-211		ERM.08821		Auxiliary Engine Condition		Engine Room and Machinery		13102
WC Grenada 9330203		Actions	▲		452-122		ERM.09775		Emergency Steering Communication Equipment		Engine Room and Machinery		04106
WC Grenada 9330203		Actions	▲		452-123		ERM.19263		Pipework Lagging Deterioration		Engine Room and Machinery		09219 1310 18424
WC Grenada 9330203		Actions	▲		452-134		ERM.19339		NOx Technical File		Engine Room and Machinery		18424

Our inspection checklist is now mapped to the major MOUs and vetting programmes so that any observations which could have an implication on PSC or Vetting will be automatically flagged and searchable on the Idwal ID platform. This enables you to quickly understand severity of defects, and to trend and benchmark deficiency and/or vetting observation areas.

Data-driven insights

Drawing from a vast database of over 12,000 vessel inspections – and growing all the time –, and more than 10 million data points, this grade offers unparalleled benchmarking capabilities. It allows you to see how your vessels stack up not just against your own fleet, but against the industry at large.



On the Idwal ID platform, your own vessels show as the blue squares and the rest of the Idwal graded vessels are shown as anonymised grey dots. The black line is the average Idwal Grade for your fleet. This enables you to see how your vessels compare to others outside of your fleet and can be filtered using several criteria.

Future proofing your fleet

Shipping is constantly evolving, and the Idwal Grade evolves with it. It doesn't just assess current conditions; it looks ahead, considering:

- Compliance with upcoming regulations
- Installation of advanced navigation equipment
- Presence of energy-saving devices
- Enhanced machinery for improved efficiency

This approach helps you prepare your fleet for the challenges of tomorrow, and ensures that you're not just maintaining ships, but fostering a culture of excellence across your entire operation.

The power of Idwal ID

While the Idwal Grade provides a powerful snapshot of vessel condition, Idwal ID takes it to the next level, providing:

- Aggregated defect management across your fleet
- Trend analysis to identify systemic issues
- Benchmarking capabilities to compare your performance against global standards
- A centralised platform for all your inspection data and documents

Commercial implications

The Idwal Grade and Idwal ID offer compelling advantages:

- Optimise charter rates by demonstrating superior vessel condition
- Enhance investor relations through transparent, data-backed reporting
- Streamline S&P transactions with standardised, trusted condition assessments
- Improve relationships with charterers through consistent, high-quality vessel performance

The Idwal Grade is more than just a number it's a comprehensive tool for excellence in condition management. By providing detailed, objective, and forward-looking assessments, it empowers you to make informed decisions, optimise operations, and stay competitive in an ever-evolving industry. Whether you're focused on technical operations or commercial strategy, the Idwal Grade offers the insights you need to navigate towards success.

idwalmarine.com/id



**CONTACT US FOR
FURTHER ENQUIRIES**

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