

Henderson International (L.L.C.) هندرسون انترنا شیونال (ش.ذ.م.م)



Marine Survey, Naval Architecture, Design, Shipping, Marine and Yacht Consultancy Services



STATEMENT OF CAPABILITY

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1. INTRODUCTION

HENDERSON INTERNATIONAL GROUP is a world leader in Marine Surveying, Naval Architecture, Engineering Design, Project Management, Yacht and Marine Consultancy Services to the offshore and shipping industries. With over 20 years of extensive worldwide operations, the **GROUP** maintains its position at the forefront of the Marine, Yacht, Consultancy, Offshore, Survey and Naval Architecture industries. The **GROUP** operates with our Head Office in Dubai and Associates strategic offices located worldwide. With an effective network of over 25 operating units working in twelve countries, each unit can also call on the resources of the **GROUP** to immediately respond to any of its Clients' specific needs.

Henderson International carries out all forms of Marine Survey work, Vessel Design, Site Supervision and Project Management and has extensive Technical Consultancy experience, Design, Project Management and Consultancy capability for New Builds as well as Conversions, Upgrades, Repair and Maintenance from small vessels up to Super Yacht standard.

The following list provides examples of the many varied services on offer from Henderson International.

- ♦ Naval Architecture for New Build Design/Refit
- Structural Engineering/Analysis
- ♦ Mechanical/Piping Engineering
- Electrical Engineering
- Safety and Reliability Engineering
- Marine & Offshore Engineering
- Civil Engineering
- ♦ Multi-discipline Detailed Design
- ♦ Vessel Audit Surveys
- ♦ P&I Surveys (All Types of Risks)
- Superintendency, Damage and Repair Surveys
- ♦ General Loss Adjusting Claim Handling
- Supplementary Services
- ◆ Dry & Liquid Cargo Quantity & Quality Surveys
- Yacht Engineering/Design
- ♦ Yacht Operation Management

- ♦ Yacht Built Project Management
- ♦ P&I/H&M Condition Surveys
- ♦ Pre Purchase Condition Surveys
- Valuation Surveys
- ♦ Damage Surveys
- ♦ Cargo Damage Surveys
- ♦ Bunker, Warranty and Tow Approval Surveys
- Flag State Inspections
- ♦ Oil Pollution
- ◆ Court and Lawyer Appointed Experts
- ♦ Risk Evaluation/ Management
- Project Management
- Quality Assurance and Control
- ♦ Consents and Approvals
- ♦ Compass Adjustment
- All forms of Marine Consultancy services

2. WORLDWIDE LOCATIONS



Henderson International Group Leaders in Cost Effective Professional Solutions For the Marine Industry

- ♦ Head Office Dubai
- ♦ U.A.E. Abu Dhabi
- ♦ Bangladesh
- Oman
- ♦ Qatar
- ♦ Iran
- ♦ Philippines
- ♦ Pakistan
- Sri Lanka
- ♦ India
- ♦ Iraq
- North AmericaBulgaria
- ◆ UK⁻

3. QUALITY



HENDERSON International's Quality Philosophy is based around Client requirements. We provide our Client with services of the highest quality, at a competitive cost, through a highly motivated, knowledgeable and experienced work force. The GROUP has expert personnel in all locations. Individual performance and written procedures are regularly reviewed in order so "Quality" can be controlled to meet and exceed international standards thus improving the services delivered to our Clients. In October 1999, HENDERSON INTERNATIONAL was awarded the ISO 9001 Quality Management System Certificate by ABS Quality Evaluations Inc.





4. MARINE SURVEY

As a completely independent company, **HENDERSON INTERNATIONAL** provides a full range of Marine Survey Services as indicated below. Our extensive ranges of Survey Services are undertaken by an experienced and professionally qualified team of Master Mariners, Marine Engineers and Insurance Professionals.

The scope of our services includes (but are not limited) to the following:

- Pre-Purchase Condition Survey
- ◆ P & I Surveys (All Types of Risks)
- H & M Surveys
- ♦ Towage Survey
- Voyage Approval Survey
- ♦ Vessel Audit Surveys
- Cargo Damage Surveys
- ♦ Collision Surveys

- ♦ Pollution Surveys
- ♦ Fire Investigations
- Physical Inspection and Valuation of Vessels
- Superintendency, Damage and Repair Surveys
- ♦ Risk Evaluation/Management
- ♦ Third Party Certification
- Documentary Valuation of Vessels
- ♦ Grounding/Break-up/Pollution



Stranding/Container Loss

Hull and Machinery Surveys

On behalf of lead Underwriters from the Local market and from International Centres such as London, Scandinavia, United States, Europe, Far East, Japan and Russia, our representative offices are an integral element of the day to day operations of the Group, worldwide.

Protection and Indemnity Surveys

On behalf of Liability Underwriters, Mutual P&I Clubs, Fixed Premium Clubs and Courts, instructions are accepted and carried out on a variety of casualties from pollution, collision, contact, death, cargo damages, bulk and liquid cargo shortages and others, for the individual interests involved in that aspect of marine transportation.

Court Expert and Arbitration

In matters of marine related claims concerning charter party disputes, short landing, demurrage, claim amount disputes where local knowledge combined with technical expertise is required to meet the requirements of courts. The emerging 3rd World has an increasing number of such court related disputes arising and the availability of technically qualified staff from Henderson International Group are ideally positioned to provide 1st class input to the Courts on marine related matters.

Risk Evaluation

To meet requirements of ISPS Security Code that is carried out in preparation for the IMO introduction from the 4th July 2004. Also Audits carried out to assess the Risk to Underwriters before cover is bound for both floating and land facilities, be they vessels, ports, repair facilities or workshops.

Vessel Audit

For ISM compliance on vessels in conjunction with pre-purchase inspections carried out by the Henderson International Group worldwide on varying types and sizes of vessels from very large tankers to leisure boat/yacht/dinghy, depending on the requirements of the Client.

Oil Survey for Volume & Quality

Are carried out to the highest standards of International Oil Trading Standards and are fully independent, based on the accepted measurement criteria as set out by the various institutions involved in this type of trading. All programs are computer linked for easy data transfer in accepted International formats used in the trading of Oil and Liquid Cargoes.





5. ENGINEERING DESIGN AND NAVAL ARCHITECTURE (EDNA)

The EDNA Division of Henderson International was established in 1990 to service the requirements of clients in the Arabian Gulf and has expanded to be a leading Design Consultancy with worldwide coverage and expertise across the full range of engineering disciplines, and as such have been the name behind the project on several builds, both local and international. Our facilities include:

- **Naval Architecture**
- Structural Engineering
- Mechanical/Piping Engineering
- Electrical engineering

- ♦ Safety & Reliability
- **Quality Assurance and Control**
- Consents and Approvals





NEW BUILD DESIGN

Over the years, standard "Off-the-Shelf" designs for most ship Classes have been generated. Working examples of these designs can be found all over Middle East. We benefit from:

- Highly Trained and Experienced Team of Naval Architects
- Multi-Discipline Engineering Expertise
- Latest Naval Architecture and Design Software
- Standard Designs for Vessels from 16m to over 100m
- Working Relationship with all Major Gulf & Selected Asian Shipyards
- ISO Accreditation

OFFSHORE ENGINEERING – AREAS OF EXPERTISE

- Offshore Jackets and Topsides
- **Piled Foundations**
- **Accommodation Modules**
- Jack-Up Rigs
- Self-Propelled Construction Support and Hook-up

 Safety/Reliability Engineers
- Marine Structures Jetties, Mooring Dolphins, Berthing Platforms etc.
- Fabrication and Installation Supervision
- TPA/Class Society Rules & Regulations

MULTI-DISCIPLINE ENGINEERING AND CONSULTANCY EXPERTISE

- New Build Ship Designs
- **Vessel Conversions And Modifications**
- Offshore Rigs/Installations

- Marine Installations Design & Modification
- Turnkey Project Management

MODIFICATIONS AND CONVERSIONS

The EDNA Division can undertake large Modification/Conversion projects of existing Marine vessels on Turnkey basis, including:

- Technical feasibility studies
- Commercial viability
- Design Calculations and Class drawings
- **Detailed Engineering drawings**
- Project Management, Site Supervision
- Preparation of test/trial procedures

RECENT PROJECTS SUCCESSFULLY EXECUTED INCLUDE:

- Upgrading Cable Ship for sub-sea ploughing capability
- Upgrading 50m Diving Support Vessel to DPS-1 capability with extension of length
- Conversion of 100m Deck Loading Pontoon Barge to a Floating Dry-dock of 3400 tons lifting capacity
- Accommodation upgrading in VLCCs
- Upgrading Offshore Supply Vessel for buoy handling
- Installation Supervision and Superintendency for various projects
- Various Design/Sizes for Offshore Marine DSV, Well Stimulation, AHTS, MOD, etc. to full class requirements





6. YACHTS

INTRODUCTION

Henderson International has over twenty five years of experience satisfying clients in all areas of the yachting industry. We have an established reputation as Project Managers and Owner Representative with a wide variety of achievements and offer a full complement of services from delivery and maintenance packages to the full-scale design and built management of the industry's most modern super yachts through to ongoing crew supply, yacht management, preventative maintenance, financing and insurance. By building strong working relationships with shipyards in Europe, the Middle East and North America, the Henderson Group ensures excellent workmanship and value in a location suited to your requirements and with the clients and owners directly.

- Hull Design and Construction
- Aluminium, Steel, Wood and Fiberglas (RGP)
- ♦ Detail Design
- Construction Supervision
- ◆ Sea Trials and Commissioning
- Pre Purchase Surveys
- NTA Registration
- ♦ NTA Re-registration

- Contract Negotiation and Review
- ♦ Plan Approval Owner Representative
- ♦ Purchase Agent
- Safety and MCA Code Advice
- Delivery
- Sales and Marketing
- ♦ Change of Ownership
- Ongoing Yacht Management

CAPABILITIES

- ♦ The Yacht Division is based on a Marine Engineering foundation and extensive Yacht building, Refit experience and Ship Management. The Division draws on Naval Architecture, Marine Engineering, Project Management, and traditional Boatbuilding skills.
- ♦ Whilst accepting that no two Projects are exactly the same, provision of services employs general common characteristics of known Project types, and considers aspects of each Project which make them unique.
- Management and Technical skills are applied by drawing on Group based specialists in the Area of Naval Architecture, Engineering Design, Survey and Yacht Management.
- Yacht Specific skills are applied from within the Division, as a function of existing Management, Technical, and Supervisory Personnel.
- Compliance with the Requirements of Class and MCA are integral capabilities.
- Project experience exists in GRP, aluminium, wood and steel construction on all forms of Yachts.
- An intimate knowledge of Yacht Interior Fit out and Exterior trade Management exists along with the coordination requirements for all disciplines required.



50M Trinity



46M Leopard

SUMMARY OF KEY EXPERIENCE

Examples of Projects delivered are given below, and provide reference to the range of Yacht specific skills employed between 1990 and the Present:

Completed Works

- ♦ 1990 36m Foil Supported High Speed GRP Catamaran Yacht to Lloyds SSC Rules
- ♦ 1991 3 off 22m GRP High Speed Foil Supported Catamaran Patrol Boats
- ♦ 2001 Modification Project 45m Baglietto M/Y al Fahedi U.A.E.
- ♦ 2002 Refit 45m M/Y Ocean Star U.A.E.
- ♦ 2002 Yacht Design and Built 120' Wooden Yacht U.A.E
- 2003 Interior Refurbishment 52m Wooden Yacht U.A.E.
- ♦ 2004 New Built Project Management 170' Wooden Yacht
- 2007 Design Build shadow Boat 170' Wooden Yacht U.A.E.
- ♦ 2008 43m Mulder Aluminum Yacht New Build as Owner's Consultants
- ♦ 2008 55m Wooden Support Vessel New Build as Naval Architects and Owner's Consultants.

Ongoing Works

- ◆ 36m Wooden Yacht New Build as Project Managers
- ◆ 55m Duretti Yacht Quality Control Managers
- ♦ 50m Trinity aluminum Super Yacht USA Owner Representative
- ♦ 46m Mangusta GRP Super Yacht Italy Owner Representative





7. PROJECT MANAGEMENT and SITE SUPERVISION

Project Management/Site Supervision

The building of a new Vessel requires professional Project Management, Site Supervision and Management Control to ensure quality build according to the Technical Design agreed with the Client and according to the detailed requirements of senior Client Management. Henderson International LLC has extensive experience in providing such services and suitable liaison with the Client to ensure the overall objectives are met in all respects.

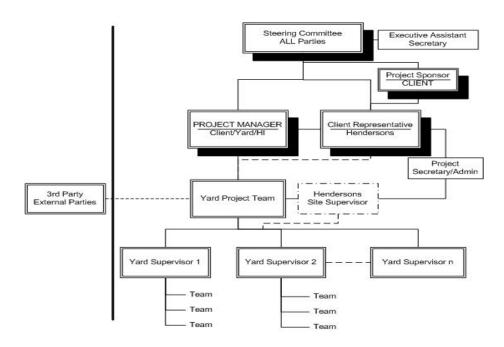
Key services provided during the above are as follows:

Project Management

- **Initial set-up**: Review work required for vessel build and associated plans; Review the Completion Plan to be developed by the Builder; Forward any recommendations for any amendments required or execution.
- <u>Planning and Scheduling Review</u>: Detailed schedule; Equipment requirement, Shipyard's planning/scheduling procedures; Monitor Build progress; Analyse variances, potential impact on overall schedule; Monitor/review progress reports from Shipyard; recommend any actions/re-planning required.
- **Builder Drawing Approvals/Review:** Review Builder's detailed drawings to be executed; During approval stage drawings to be checked/shall include: Sufficient detail; adequate scale; to agreed specification; systems are practical and workable; comply with general good practice; supplier's equipment comply in general with agreed specifications.

Site Supervision

- Maintain contact with Project Manager/Client; Update on progress of vessel Build on weekly/monthly basis to Client; Record all delays and advise; Maintain photographic record of production work.
- Check on and report: Progress on accommodation outfitting; Machinery, equipment installation, testing and satisfactory operation.
- Liaise and confer with Classification Society and Regulatory Bodies.
- Inspection/suitable storage/verification/report: Machinery/equipment/materials on arrival; Shipyard supplied spare parts and equipment inventory.
- Verify/Witness Shipyard test procedures for: Machinery, outfit items, electrical, piping, navigation, all other
 equipment; Record all non-conformances/defects; Record all work carried out by Shipyard to rectify defects
 and non-conformances.
- Jointly conduct agreed schedule of sea trails with Shipyard. Record results.
- Co-ordinate/list/monitor rectification of: defects/non-compliance; present to Shipyard/Client.
- Maintain a record of all additional work and rebate costs.







8. MARINE CONSULTANCY

Henderson International undertakes selected Key Assignments for major Organizations, Ship Yards, Financial Institutions, Interested Investors, and Key Marine Operations around the world. Such assignments fit into Henderson International's overall Marine Business Areas and Operational and Professional Expertise. These areas are extensive and a sample of these includes:

- Official Consultants for RAK Free Zone in the Evaluation and Project Build Management for a new Dry Dock and New Build facility in Ras Al Khaimah.
- Appointed Consultants for a major Financial Investment Capital Company in the UAE for various Yard Acquisitions, Yard Expansion, New Yacht Build Yard Acquisition, etc.
- Appointed Marine Consultants for a major Financial Capital Company in Europe for investments involving the Marine Industry, including the Management of such Operations after set-up and/or acquisition.
- Initial feasibility outline for certain Major Dubai Civil/Marine Projects in Dubai.
- New Dubai Marina evaluation/Joint Venture evaluation with key Abu Dhabi Client.
- Various specialised Marine Joint Ventures both in the UAE and further afield in Europe, Far East and Asia.
- Various consultancy assignments for: Bunkering Facilities; Docking Requirements; Floating Pontoons;
 Marine Feasibility and New Builds; Lub Oil Carrier Operations; Tug and Barge Chartering and Operations.

As with all other Henderson International Divisions the Consultancy Area of Henderson International is a major force in the local market place with many satisfied clients to date. Specific Project samples can be provided if of further interest.

9. KEY NEW BUILT VESSELS

Ref	CLIENT	SHIPYARD	YEAR	VESSEL	CLASS & NOTATION
1	QGPC/Qatar	Al Bwardy, Dubai	1998/9	16 m Mooring/Work Boat, 2 Nos.	LR ★ 100 A1 SSC WORK BOAT MONO G3 ★ LMC
2	MBM & Sons/A-D	Al Bwardy, Dubai	2000	27 m Work/Luxury Boat	LR № 100 A1 SSC WORK BOAT MONO G3 № LMC
3	Local Client	Local Yard/ATOS	2002	170 Feet Luxury Wooden Dhow with Aluminium Superstructure	
4	UAE Govt.	Dubai Shipbuilding	2003/2005	64 m Landing Craft, 2 Nos.	BV I № 3/3 (E) Cargo Ship
5	DMS Qatar	Kouan Shipyard China	2003	60 m Offshore Support/Top Side Maintenance Vessel	ABS ★ A1 E OFFSHORE SUPPORT VESSEL ★AMS DPS-2 SPS
6	AMPS UAE	ABG Shipyard India	2003	50m Well Test Vessel	ABS № A1 (E) OSV №AMS (WELL TESTING)
7	AMPS UAE	ABG Shipyard India	2003	56 m Well Test Vessel	ABS № A1 (E) OSV №AMS (WELL TESTING) DPS 2
8	KOTC Kuwait	ASRY Bahrain	2006	35 m Service Boat	LR № 100 A1 SSC WORK BOAT MONO G3 № LMC
9	Halul Offshore Qatar	Ital Thai Marine Thailand	2008	70 m Platform Support Vessel, 2 Nos	LRS № 100 A1 OSV FiFi-1 IWS DP(AM) ES(+1) № LMC
10	Delma Co-Op UAE	ADYARD Abu Dhabi	2008	48m Landing Craft Passenger Carrier	BV I * HULL * MACH SPECIAL SERVICE LANDING CRAFT PASSENGER CARRIER COASTAL SERVICE
11	OPIELOK Germany	Ital Thai Marine Thailand	2009	72 m Platform Support Vessel, 4 Nos	DNV №1A1 SF E0 DK(+) HL(2.5) DYNPOS AUTR FIFI-1 COMF V(3) C(2)
12	UK	ADYARD Abu Dhabi	2009	50 m Multi Support Vessel, 2 Nos	LR № 100 A1 TUG № LMC UMS,IWS,DP(CM)
13	UAE Govt.	Dubai Shipbuilding	2009	64 m Anchor Handling Tug Supply Vessel	LRS ¥100A1 ¥LMC FIFI-1 OFFSHORE TUG / SUPPLY VESSEL SPS





10. SIGNIFICANT COMPLETED ENGINEERING PROJECTS

Year	CLIENT	BRIEF DESCRIPTION
1997	Etisalat, UAE	Upgrade Cable Laying Vessel for Sub-sea Ploughing/Installation of A-frame, tow winch for ROV, umbilical winch, modification of Chute/Inclining experiment/Intact and Damage stability calculations
	SGCC, UAE	Engineering design for conversion of 44m Barge → dredger
	CCC Underwater Engg	Upgrade design: Aft hull extension/bow thruster installation
	Dynacom Tankers, Greece	Genset installation and Davit modification
	Delta Marine Services	Jack-up Barge: Engineering modifications/Site supervision
1998	Various: Kotc/Nitc/Bergesan etc.	Safe Access to Bow, Aft and Ford Emergency towing arrangement
1999	Langton Shipping Inc.	Work Over Jack-up Barge: PM/SS; Structural Fire protection plan/helideck marking
	Al Bwardy	Supply Vessel - New Cement Tank Installation details
	Local Client	48m Luxury Yacht Conversion - structural drawings
	Vela International	Life boat and davit installation details
	Qatar Subsea Services	New Diving winch Installation and routing of wires details
	Doha Marine Services	Fire and Safety plan for the supply vessels
	NICO, UAE	Conversion Design of barge to floating dock
2000	Etisalat, UAE	Upgrade Repeater stacks/new Gantry installation; Investigation of Speed/solutions for improvement
	Sea Port International	Installation drawings: cement tanks/external fire fighting pumps/rescue boat/fire monitors/sea chests
	BP Amoco Shipping	Design of pipe hangers for feed water pipes
	SAQR port authority	Strengthening for sea towing of severely damaged vessel
	National Tanker Company	Tank modifications to meet new MARPOL regulations
	V Ships	Modification to existing container stowage facilities
	Valentine Marine	Design for increasing the breadth of the barge
2001	Al Mansoori	Well test vessel: design/installation details of flare boom
	Brovig RDS Ltd	Flare tower structural design
	Adam Ship repairs	10t Derrick boom design
	Tabuk Shipping	Study latest regulations/prepare structural/arrangement/safety design drawings
	DMS, Qatar	Design, drawings, Project Management/Site Supervision.
	Al Mansoori, UAE	Design, drawings, Project Management/Site Supervision.
2002	M B M Sons	Study for speed improvement/installation details for new engines
	Local Client	Lines Plan and stability check
2003	Zakher Marine	Crane Installation design and inclining experiment
	DMS, Qatar	Aluminium helideck and installation design drawings
	Zakher Marine	Upgrade design: Aft extension/crane installation/accommodation modification/inclining experiment
	Grandweld	Mud tank, cement tank, fire pump and STP installation design drawings
	DMS Qatar	Feasibility study
	Zakher Marine	Crane Installation design and inclining experiment
2004	Port and Customs	Upgrade design
	Zakher Marine	Structural drawings for vessel conversion
	Humaid Badr Shipping	Modification design drawings
2005	Doha Marine Services	Deck extension design drawings
	Tide Water Marine	Upgrade design drawings
	Jade-Dienst GMBH	Deck strengthening in way of A-frame and umbilical winch
	CCC underwater Engg	Feasibility Study for DP2 conversion
	Maridrive Offshore	Design drawings for 4-point mooring system, crane installation and other upgrade
	UASCO	Container cell guide modification
	21.300	





Year	CLIENT	BRIEF DESCRIPTION
2006	Zawawi trading	Design drawings for propulsion system installation
	Valentine Maritime	Re - Classification of Vessel
	котс	Cargo tank modification/piping system modification drawings
	Zakher Marine	Design drawings for major upgrade
	Sharlu	Consultancy for installation of base oil tanks 3 x 2000 m3
	Goltens	Cement tank system pipe routing drawings
	KOTC	Verification of compliance with MARPOL Annexe VI
	Adnan Mansoor	Design for conversion of barge to a Pipe Lay vessel
	ADAMAC, Nigeria	Concept design for Derrick/Pipe lay barge
2007	International Shenger - DXB	Design drawings: Conversion 70m deck loading barge → Tuna processing/refrigerated cargo holds
	GOLTENS	Pipeline modification
	Kingdon Group, Bahrain	Installation of new engine for the Gen Set
	Reed Smith Richards Buttler	SPM Mooring Arrangement & Design
	Gulf Energy Marine PSC	Stability Analysis
	Empire Terminals Ltd	
	Leighton India	Stability Check
95/08	Nico Middle East	Modification/Upgrade/Stability Checks of Fleets
	NITC, Tehran	Survey/Feasibility Study/Upgrade as per Client requirements
	KOTC, Kuwait	Survey/Feasibility Study/Upgrade as per Client requirements
	Vela International	Survey/Feasibility Study/Upgrade as per Client requirements
	Al-Mojil Group, Dammam	Upgrade Design/Stability Check etc. as per Clients requirements
	Zakher Marine, Abu Dhabi	Upgrade Design/Stability Check etc. as per Clients requirements
	DMS, Qatar	Survey/Feasibility Study/Upgrade as per Client requirements, New Build Design, Project Management & Site Supervision of New Builds etc.
	Al Mansoori, UAE	New Build Design/PM/SS for New Builds, Upgrade Design for existing vessels
	Mari Dive Offshore/Valentine Marine	Survey/Feasibility Study/Upgrade as per Client requirements
	United Arab Shipping Co.	Upgrade of Container Stowage Arrangements and various other modifications of the Vessels
	Tide Water Marine	Upgrade Design/Stability Check etc. as per Client s requirements
	EWPSC	Upgrade Design/Stability Check/New Build Design/PM/SS