



財團法人驗船中心

CR CLASSIFICATION SOCIETY

CR Annual Report 2024

台北總部
HEADQUARTERS

台北市中山區南京東路三段103號8樓
8F., No. 103, Sec. 3, Nanjing E. Rd., Taipei City 104707,
Taiwan (R.O.C.)
Tel: +886-2-25062711 Fax: +886-2-25074722
E-mail: cr.tp@crclass.org



CR 官方臉書粉絲專頁



CR 官方 LINE 帳號

克服挑戰，CR 邁向高峰 您在航運與風能產業的好夥伴

Conquer Challenges, Head to the High CRest.

Your Reliable Partner in the Shipping and Wind Energy Industry.

contents

Annual Report 2024



- 01 CR 簡介**
Brief Introduction of CR
- 01 組織架構**
Organization
- 03 董事長感言**
Chairman's Speech
- 05 董事會**
Board of Directors
- 06 船級委員會**
Classification Committee
- 07 技術委員會**
Technical Committee
- 08 品管委員會**
Quality Management Committee
- 08 風電諮詢委員會**
Wind Energy Advisory Committee
- 09 建造中入級**
Classification of Ships During Construction
- 10 現成船入級**
Classification of Existing Ships
- 11 新入級船舶**
Newly Classed Ships

- 11 在級船舶**
Classed Ships
- 12 政府授權**
Government Authorization
- 12 ISM, ISPS 及 MLC 評鑑**
ISM, ISPS & MLC Verifications
- 13 港口國管制**
Port State Control
- 14 規範發展**
Rules Development
- 15 研究成果**
Research Results
- 17 再生能源服務**
Renewable Energy Services
- 19 技術服務**
Technical Services
- 19 技術研討會**
Technical Seminar
- 20 國際交流**
International Exchange

CR 簡介

鑒於船舶檢驗與航行安全息息相關，世界各航運大國均設立本國驗船機構以執行船舶之嚴格檢驗。我航運業、保險業及造船業各界有識之士，為求航業蓬勃發展，幾經磋商籌劃，始於民國 40 年 2 月 15 日在台北市成立「社團法人中國驗船協會」，復於民國 67 年 7 月 1 日接受民間捐助，改組並更名為「財團法人中國驗船中心」。英文名稱為 CR Classification Society(former name: China Corporation Register of Shipping)，簡稱 CR。

本中心為一民間純技術性，不以營利為目的之服務事業機構，其目標為提供優良之技術、高度之效率與熱忱之服務。組織型態(如下表)及工作內涵，一如世界各大驗船機構，其服務工作據點遍及世界各重要港口，為船東、造船廠及機材製造廠商提供最便捷之服務。



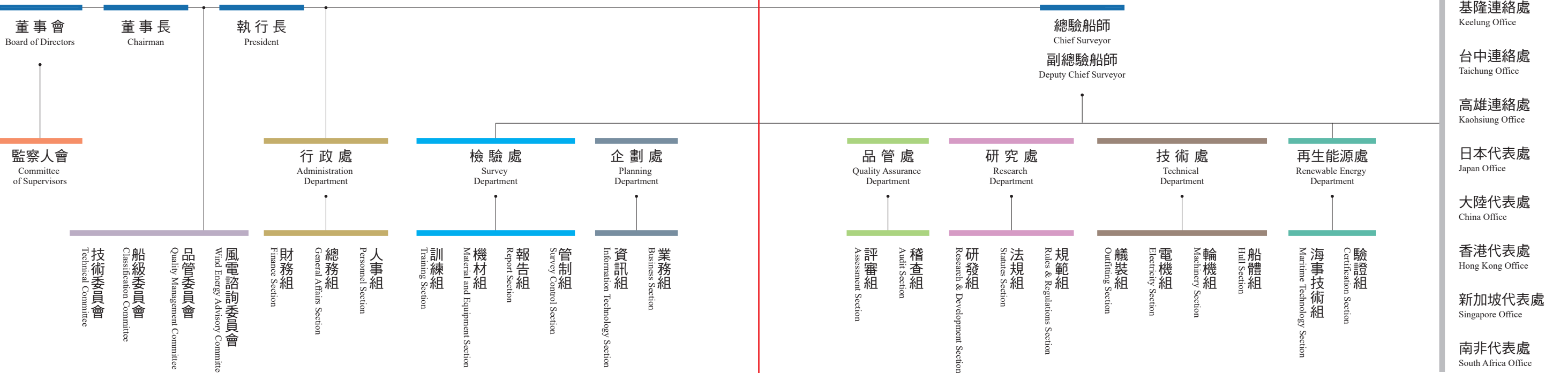
Brief Introduction of CR

As survey of ships and safety of navigation are closely related, countries throughout the world engaged in shipping activities have their own classification societies in order to conduct ship surveys in a strict manner. A good number of people of insight from the shipping industry, insurance industry, and shipbuilding industry in Taiwan share the same views on the importance of establishing this country's own classification society for the prosperity of its shipping industry. After repeated negotiations and adequate preparation, "CR Classification Society" (former name: China Corporation Register of Shipping), also known as CR, was founded on February 15, 1951, in Taipei City. On July 1, 1978, it was restructured after receiving financial contributions from non-governmental sources and hence changed its Chinese name.

CR is a non-governmental and nonprofit organization rendering technical services. The purpose of its work is to provide excellent techniques, high efficiency and cordial services. Its structure (see the following Organization Chart) and scope of work are similar to those of the other leading classification societies in the world , and it has a worldwide network of branch offices in important foreign ports, rendering quick services to shipowners, shipyards, and manufacturers of materials and equipment.



組織架構 Organization



董事長感言



驗船中心 (CR Classification Society, 下列簡稱 CR) 為台灣唯一授權之船舶檢驗技術單位，74 年來默默守護台灣船舶安全以及防止海洋環境污染，去年除我船旗國持續於東京備忘錄 (Tokyo MOU) 名列「白名單」，CR 十餘年來於認可機構評比皆維持「高表現度」，因為有主管機關交通部、航港局的精準指導以及所有船東的積極配合，才有如此亮眼的成績，中心除了表達由衷的感謝，也承諾持續提供最專業、最有溫度的服務與海運業界共同成長。

回顧 2024 年，CR 在本業船舶檢驗議題上積極與各國海事局、船級協會進行交流，包括 4 月拜會澳洲海事局、5 月拜會香港海事處、6 月拜會 Tokyo MOU 秘書處及日本國土交通省海事局加強交流各地 PSC 檢查機制，並積極和義大利船級社 (RINA)、中國船級社 (CCS) 等進行技術交流與合作洽談，更受邀參加亞洲船東聯誼會，提升中心的能見度和知名度。此外，為深耕在地，CR 於 5 月 2 日成立台中連絡處，地址位於台中市清水區臨港路五段 656 號，負責中部地區船舶檢驗與離岸風電產業相關業務，期望能提供客戶更有效率、更專業的服務。

CR 是台灣海運產業的重要技術智庫及工作夥伴，針對國際最新海運議題，CR 除持續提供航港局國際公約諮詢、配合落實公約內國法化作業程序，亦定期發行舉辦研討會並發行技術通報；為協助我國航商第一時間掌握國際趨勢，CR 於國際海事組織 (IMO) 海洋環境保護委員會第 81 屆、第 82 屆會議 (MEPC 81、82) 後，不僅立即於會議隔日發布中文會議結論快報，且分別舉辦產業趨勢研討會，邀請各航運公司高階管理及技術主管，共同針對溫室氣體減排中期措施最新發展及台灣港群因應淨零排放與替代燃料趨勢下的前瞻布局進行探討，CR 期盼藉由研討會活動強化與航運界交流，共同探討因應措施，維護我國航運競爭力。

去年也是 CR 再生能源業務及活動豐收的一年，包含 5 月與 TÜV SÜD 共同主辦南韓離岸風電暨氢能考察行程，除了許多難得安排之現場設施考察，如海纜製造廠、氢能示範城市與船用加氫站等，參與團員單位包含專案開發商、設備製造商與使用端、法人機構等，讓團員從更多面向瞭解南韓正在推動的離岸風電與氢能面貌。南韓各接待單位也相當重視本次台灣參訪團，行程中安排拜會現代重工、現代汽車、曉星重工、大韓電纜等大型集團外，亦有國家新聞台 KBS 與平面媒體採訪報導，後續大韓電纜至 CR 回訪，了解台灣離岸風電各項相關規定與發展，並尋求國內廠商合作機會，交流成果非常豐碩；另外，CR 於台灣離岸風場 MWS 參與市佔率已超過 6 成、辦理國際海事承包商協會 CMID 與 MISW 檢驗服務，佔台灣船東總檢驗艘數 5 成、浮式風電也陸續提供業界服務量能、並與 TÜV SÜD 簽署合作備忘錄，透過雙方分別於陸域與海事領域的專長互補，期望提供更完整技術服務量能給國內外業者。

展望 2025 年持續強化技術與專業是 CR 70 多年以來的使命，CR 將以服務為基礎、以技術本位為品牌導向，深耕船舶檢驗、梳理與宣達國際法規以及拓展再生能源等重要業務，同時也將持續關注並發布即時國際海事組織及歐盟的法規動態與發展供業界參考，期待藉由 CR 優質的技術支援與服務，使我國海運產業榮景永續發展。

驗船中心 董事長

謝謂君

Chairman's Speech

CR Classification Society (CR), Taiwan's sole authorized ship inspection body, has steadfastly safeguarded the safety of Taiwanese vessels and prevented marine pollution for the past 74 years. Thanks to the precise guidance of the Ministry of Transportation and Communications and the Maritime and Port Bureau, as well as the active cooperation of shipowners, Taiwan's flag has maintained its "White List" status under the Tokyo Memorandum of Understanding (Tokyo MOU), and CR has consistently achieved "high-performance" ratings among recognized organizations for over a decade. On behalf of CR, I extend my heartfelt gratitude and reaffirm our commitment to delivering the most professional and empathetic services, fostering growth alongside the maritime industry.

In 2024, CR actively engaged with maritime authorities and classification societies worldwide to enhance ship inspection practices. Notable visits included Australia's Maritime Safety Authority in April, Hong Kong's Marine Department in May, and Tokyo MOU's Secretariat and Japan's Ministry of Land, Infrastructure, Transport and Tourism in June, focusing on strengthening Port State Control (PSC) mechanisms. Additionally, CR conducted technical exchanges and collaboration discussions with leading classification societies such as RINA S.p.A (RINA) and China Classification Society (CCS) and participated in the Asian Shipowners' Association to enhance its visibility and reputation.

To better serve local stakeholders, CR established a Taichung office on May 2, located at No. 656, Sec. 5, Lingang Rd., Qingshui Dist., Taichung City. This office focuses on ship inspections and offshore wind power-related services in central Taiwan, aiming to provide clients with more efficient and professional support.

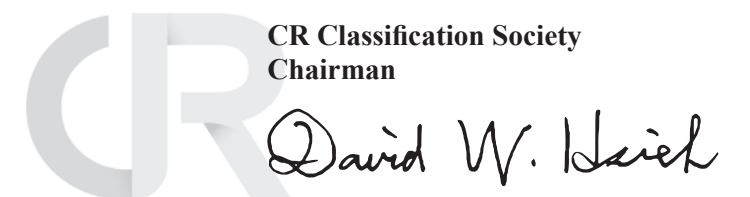
As a vital technical think tank and partner for Taiwan's maritime industry, CR stays at the forefront of international maritime trends. Beyond advising the Maritime and Port Bureau on international conventions and ensuring seamless implementation into domestic regulations, CR regularly organizes seminars and publishes technical circulars. Following the 81st and 82nd sessions of the International Maritime Organization's (IMO) Marine Environment Protection Committee (MEPC), CR

promptly released summary briefs and hosted seminars to discuss developments in mid-term greenhouse gas reduction measures and strategies for achieving net-zero emissions in Taiwanese ports. These initiatives have strengthened dialogue within the shipping sector and upheld Taiwan's maritime competitiveness.

2024 marked another fruitful year for CR's renewable energy initiatives. In May, CR co-hosted a South Korea offshore wind and hydrogen energy study tour with TÜV SÜD, which included rare visits to key facilities such as submarine cable manufacturers, hydrogen demonstration cities, and maritime hydrogen refueling stations. The delegation, comprising project developers, equipment manufacturers, and stakeholders, gained comprehensive insights into South Korea's offshore wind and hydrogen energy advancements. Prominent Korean companies, including Hyundai Heavy Industries and Hyundai Motor Company, warmly received the Taiwanese delegation, with extensive media coverage highlighting the visit's significance. Subsequently, Korean enterprises like Taihan Cable & System visited CR to explore collaboration opportunities in Taiwan's offshore wind sector.

Domestically, CR achieved over a 60% market share in Marine Warranty Survey (MWS) services for Taiwan's offshore wind farms and provided inspection services covering 50% of Taiwanese-flagged vessels. CR also ventured into floating wind power services and signed a Memorandum of Understanding (MOU) with TÜV SÜD to leverage complementary expertise in maritime and onshore technologies, ensuring comprehensive technical support for domestic and international clients.

Looking Ahead to 2025, CR remains dedicated to enhancing its technical expertise and professional standards—a mission upheld for over seven decades. Moving forward, CR will strengthen its ship inspection services, streamline international regulatory dissemination, and expand renewable energy initiatives. Additionally, CR will continue to monitor and report on global regulatory developments from the IMO and the European Union, providing timely insights for the industry. With CR's exceptional technical support and services, we aspire to contribute to the sustainable growth and enduring prosperity of Taiwan's maritime sector.



董事會 Board of Directors

董事會係本中心最高管理階層，共有董事 23 人，監察人 3 人。第 15 屆董事會之董事及監察人如下：

The Board of Directors, consisting of 23 directors and 3 supervisors, is the top management of CR. The name list of directors and supervisors is given below:

董事 Director	現任職務 Position
謝謂君 Wei-Chun Hsieh	驗船中心董事長 Chairman, CR Classification Society
韓振華 Chen-Hua Han	交通部航政司司長 Director of Department of Navigation and Aviation, Ministry of Transportation and Communications R.O.C.
葉協隆 Hsieh-Lung Yeh	交通部航港局局長 Director-General of Maritime and Port Bureau, Ministry of Transportation and Communications R.O.C.
盧公宇 Gong-Yeu Lu	海洋委員會海巡署後勤組副組長 Deputy Chief of Logistics Division, Coast Guard Administration, Ocean Affairs Council
鄭貞茂 Cheng-Mount Cheng	台新證券投資信託股份有限公司董事長 Chairman, Taishin Securities Investment Trust Co., Ltd.
劉文慶 Wen-Ching Liu	台灣航業股份有限公司董事長 Chairman, Taiwan Navigation Co., Ltd.
張秋波 Chiu-Po Chang	中鋼運通股份有限公司董事長 Chairman, China Steel Express Corporation
張衍義 Yen-I Chang	長榮海運股份有限公司董事長 Chairman, Evergreen Marine Corporation
王文潮 Wilfred Wang	台塑海運股份有限公司董事長 Chairman, Formosa Plastics Marine Corporation
陳柏廷 Po-Ting Chen	萬海航運股份有限公司董事長 Chairman, Wan Hai Lines Ltd.
王書吉 C. K. Ong	裕民航運股份有限公司總經理 General Manager, U-Ming Marine Transport Corporation
李健發 Kenneth Lee	世邦海運股份有限公司董事長 Chairman, TVL Marine Co., Ltd.
藍俊昇 James Lan	慧洋海運股份有限公司董事長 Chairman, Wisdom Marine Group
張瑞宗 Ray-Chung Chang	前台灣中油股份有限公司發言人 Former Spokesperson, CPC Corporation, Taiwan
黃健強 Edward Huang	台灣水泥股份有限公司資深副總經理兼達和航運公司董事 Senior Vice President, Taiwan Cement Corporation
周志明 Chih-Ming Chou	台灣國際造船股份有限公司副總經理 Vice President, CSBC Corporation, Taiwan
陳德勝 T. S. Chen	德翔海運股份有限公司董事長 Chairman, T.S. Lines
戴聖堅 James S.C. Tai	中國航運股份有限公司總經理 President, Chinese Maritime Transport Ltd.
許志堅 Chih-Chien Hsu	益利航運股份有限公司董事長 Chairman, Eddie Steamship Co., Ltd.
許金泉 Chin-Chuan Hsu	富邦產物保險股份有限公司董事長 Chairman, Fubon Insurance Co., Ltd.
宋道平 Charles Sung	台灣產物保險股份有限公司副董事長 Vice Chairman, Taiwan Fire & Marine Insurance Co., Ltd.
蕭捷明 Jimmy C. Hsiao	明台輪船股份有限公司董事長 Chairman, MingTai Navigation Co., Ltd.
藍心琪 Irene Lan	四維航業股份有限公司董事長 Chairman, Shih Wei Navigation Co., Ltd.

監察人 Supervisor	現任職務 Position
梁正德 Cheng-Te Liang	兆豐產物保險股份有限公司董事長 Chairman, Chung Kuo Insurance Co., Ltd.
程藍瑩 Lan-Ying Cheng	能源航運股份有限公司副總經理 Vice President, Energy Shipping Co., Ltd.
康江良 Jiang-Liang Kang	交通部統計處副處長 Deputy Director of Department of Statistics, Ministry of Transportation and Communications, R.O.C.

船級委員會 Classification Committee

職別 Title	姓名 Name	現任職務 Position
主任委員 Chairman	梅家禮 Charlie Mei	中國航運股份有限公司執行副總經理 Executive Vice President, Chinese Maritime Transport Ltd.
副主任委員 Vice-Chairman	鄭正雄 James Jeng	陽明海運股份有限公司技術長 Chief Technical Officer, Yang Ming Marine Transport Corporation
委員 Member	王士玫 Shih-Mei Wang	交通部航港局船舶組副組長 Vice Director, Vessel Management Division, Maritime and Port Bureau, MOTC
委員 Member	許健明 Chien-Ming Hsu	前中鋼運通股份有限公司總經理 Former President, China Steel Express Corporation
委員 Member	林正川 J. C. Lin	四維航業股份有限公司經理 Manager, Shih Wei Navigation Co., Ltd.
委員 Member	吳巨聖 James Wu	裕民航運股份有限公司副總經理 Vice President, U-Ming Marine Transport Corporation
委員 Member	呂學修 S. S. Lu	台塑海運股份有限公司副總經理 Vice President, Formosa Plastics Marine Corporation
委員 Member	黃崇榮 Ron Huang	長榮海運股份有限公司船舶本部本部主管 Div. Chief of Ship Division, Evergreen Marine Corporation
委員 Member	樂文斌 Wen-Pin Luan	新興航運股份有限公司副總經理 Vice President, Sincere Navigation Corporation
委員 Member	林郁喆 Joe Lin	明台輪船股份有限公司經理 Manager, MingTai Navigation Co., Ltd.
委員 Member	陳俊杰 Benson Chen	萬海航運股份有限公司工務部協理 Vice President of Engineering Division, Wan Hai Lines Ltd.
委員 Member	范永政 Rice Fan	世邦海運股份有限公司協理 Senior General Manager, TVL Marine Co., Ltd.
委員 Member	袁國龍 Gordon Yuan	台灣國際造船股份有限公司業務處處長 Director of Sale Department, CSBC Corporation, Taiwan
委員 Member	郭志成 C. C. Kuo	光明海運股份有限公司總經理 President, Kuang Ming Shipping Corporation
委員 Member	黃崇智 Eddie C. Huang	協榮航業股份有限公司總經理 President, Glory Navigation Co., Ltd
委員 Member	吳偉國 Wei-Kuo Wu	達和航運股份有限公司船務部協理 Assistant Vice President of Marine Department, Ta-Ho Maritime Corporation
委員 Member	褚世傑 Dino S.J. Chuu	前中國航運股份有限公司海運部協理 Former Assistant Vice President, Shipping Division, Chinese Maritime Transport Ltd.
委員 Member	曹祥超 Hsiang-Chao Tsao	慧洋海運股份有限公司技術長 Chief Technology Officer, Wisdom Marine Lines S.A.
委員 Member	謝敏雄 Alan Shieh	達和航運股份有限公司總經理 President, Ta-Ho Maritime Corporation
委員 Member	黃戊辰 W. C. Wu	台灣中油股份有限公司儲運處副處長 Deputy Director of Storage and Transportation Department, CPC Corporation, Taiwan

技術委員會 Technical Committee

職別 Title	姓名 Name	現任職務 Position
主任委員 Chairman	王偉輝 W. H. Wang	國立臺灣海洋大學名譽教授 Professor Emeritus, National Taiwan Ocean University
副主任委員 Vice-Chairman	鄧運連 Y. L. Teng	前驗船中心顧問 Former Consultant, CR Classification Society
委員 Member	劉詩宗 Shy-Tzong Liou	台灣國際物流暨供應鏈協會理事長 Chairman, Taiwan International Logistics and Supply Chain Association
委員 Member	邵維揚 Wei-Yang Shao	前國防部參事 Former Counselor, Ministry of National Defense R.O.C.
委員 Member	劉嘉洪 C. H. Liu	交通部航港局船舶組組長 Director, Vessel Management Division, Maritime and Port Bureau, MOTC
委員 Member	韓碧祥 P. H. Han	中信造船股份有限公司董事長 Chairman, Jong Shyn Shipbuilding Co., Ltd.
委員 Member	鄭正雄 James Jeng	陽明海運股份有限公司技術長 Chief Technical Officer, Yang Ming Marine Transport Corporation
委員 Member	黃守真 Sheldon Huang	龍德造船工業股份有限公司董事長 Chairman, Lung Teh Shipbuilding Co., Ltd.
委員 Member	鄭添元 T. Y. Cheng	前中國鋼鐵股份有限公司冶金技術處專案副處長 Former Deputy Director of Metallurgical Dept. , China Steel Corporation
委員 Member	黃戊辰 W.C. Huang	台灣中油股份有限公司儲運處副處長 Deputy Director of Storage and Transportation Department, CPC Corporation, Taiwan
委員 Member	江茂雄 Mao-Hsiung Chiang	國立台灣大學工學院院長 Dean of Engineering College, National Taiwan University
委員 Member	戴聖堅 James S. C. Tai	中國航運股份有限公司總經理 President, Chinese Maritime Transport Ltd.
委員 Member	顏春木 C. Y. Yen	台灣國際造船股份有限公司督導 Supervisor, CSBC Corporation, Taiwan
委員 Member	謝曜安 Yao-An Hsieh	財團法人船舶暨海洋產業研發中心副執行長 Vice President, Ship and Ocean Industries R&D Center
委員 Member	吳金河 Chih-Ho Wu	海洋委員會海巡署中部分署副分署長 Deputy Director, Central Branch of Coast Guard Administration, Ocean Affairs Council

品管委員會 Quality Management Committee

職別 Title	姓名 Name	現任職務 Position
主任委員 Chairman	林沛樵 P. C. Lin	全國船聯會秘書長 Secretary General, National Association of Chinese Shipowners
副主任委員 Vice-Chairman	黃志文 Chih-Wen Huang	經濟部標準檢驗局第六組組長 Director of 6th Division, Bureau of Standards, Metrology and Inspection, MOEA
委員 Member	黃姿婷 T. T. Huang	交通部航港局船員組副組長 Deputy Director, Maritime and Port Bureau, MOTC
委員 Member	仇忠林 Jong-Lin Chyu	台灣航業股份有限公司總經理 President, Taiwan Navigation Co., Ltd.
委員 Member	楊弘明 Hong-Ming Yang	長榮海運股份有限公司船舶本部海員部部主管 Head of Seaman Department of Ship Division, Evergreen Marine Co., Ltd.
委員 Member	邱增玉 Tseng-Yu Chiu	陽明海運股份有限公司行政長 Chief Administration Officer, Yang Ming Marine Transport Corporation
委員 Member	劉守麟 Shou-Lin Liu	裕民航運股份有限公司專案經理 Project Manager, U-Ming Marine Transport Corporation
委員 Member	王紹培 Davis Wang	台灣中油股份有限公司儲運處組長 Section Manager, Marine Management Section, CPC Corporation, Taiwan
委員 Member	林暉傑 Wei-Chien Lin	四維航業股份有限公司海務部襄理 Assistant Manager, Shih Wei Navigation Co., Ltd.
委員 Member	俞克維 K. W. Yu	國立高雄科技大學副校長 Vice President, National Kaohsiung University of Science and Technology.
委員 Member	林彬 B. Lin	國立臺灣海洋大學商船學系教授 Professor, Department of Merchant Marine, National Taiwan Ocean University

風電諮詢委員會 Wind Energy Advisory Committee

職別 Title	姓名 Name	現任職務 Position
主任委員 Chairman	謝翰璋 Han-Chang Hsieh	經濟部標準檢驗局副局長 Deputy Director General, Bureau of Standards, Metrology and Inspection, MOEA
副主任委員 Vice-Chairman	沈淑賢 Shu-Hsien Shen	交通部航港局航安組組長 Director, Maritime and Port Bureau, MOTC
委員 Member	吳志偉 Chih-Wei Wu	經濟部能源署副署長 Deputy Director General, Energy Administration, MOEA
委員 Member	江茂雄 Mao-Hsiung Chiang	國立台灣大學工學院院長 Dean of Engineering College, National Taiwan University
委員 Member	黃金城 Chin-Cheng Huang	國家原子能科技研究院機械及系統工程研究所所長 Director, Department of Mechanical and Systems Engineering, National Atomic Research Institute
委員 Member	張勳彬 Keith Zhang	富邦產物保險股份有限公司工程暨海上保險商品部資深經理 Senior manager, engineering & marine insurance product department, Fubon Insurance Co., Ltd.
委員 Member	辛敬業 Ching-Yeh Hsin	中國造船暨輪機工程師學會理事 Director, Taiwan Society of Naval Architects and Marine Engineers
委員 Member	鍾承憲 Cheng-Hsien Chung	財團法人船舶暨海洋產業研發中心海洋產業處處長 Chief, Marine Industrial Department, Ship and Ocean Industries R&D Center
委員 Member	蔡英聖 Ing-Sheng Tsay	台灣電力股份有限公司再生能源處處長 Director, Department of Renewable Energy, Taiwan Power Company
委員 Member	鄭文傑 Wen-Chieh Cheng	中能發電股份有限公司統包工程副總監 Deputy EPC Director, China Steel Power Corporation
委員 Member	楊迅 Augustine M. Yong Hsun	海鼎離岸風電計畫品質經理 Project Quality Manager, Formosa III.

建造中入級 Classification of Ships During Construction

2024 年建造中入級 CR 的船舶共計有 26 艘，分列如下：

There were a total of 26 ships classed by CR during construction in 2024 as listed below:

船東 Owner	造船廠 Shipyard	建造地點 Place	船型 Ship type	艘數 Number
海洋委員會海巡署艦隊分署 Fleet Branch, Coast Guard Administration, Ocean Affairs Council	CSBC Corporation, Taiwan	台灣 Taiwan	4,000 噸級巡防艦 4,000ton Patrol Vessel	1
海洋委員會海巡署艦隊分署 Fleet Branch, Coast Guard Administration, Ocean Affairs Council	Jong Shyn Shipbuilding Co., Ltd.	台灣 Taiwan	35 噸級巡防艇 35ton Patrol Boat	4
海洋委員會海巡署艦隊分署 Fleet Branch, Coast Guard Administration, Ocean Affairs Council	Jong Shyn Shipbuilding Co., Ltd.	台灣 Taiwan	600 噸級巡防艦 600ton Patrol Vessel	2
海洋委員會海巡署艦隊分署 Fleet Branch, Coast Guard Administration, Ocean Affairs Council	Karmin International Co., Ltd.	台灣 Taiwan	沿岸多功能艇 FRP Patrol Boat	7
海洋委員會海巡署艦隊分署 Fleet Branch, Coast Guard Administration, Ocean Affairs Council	CSBC Corporation, Taiwan	台灣 Taiwan	1,000 噸級巡防艦 1,000ton Patrol Vessel	1
海洋委員會海巡署艦隊分署 Fleet Branch, Coast Guard Administration, Ocean Affairs Council	Jong Shyn Shipbuilding Co., Ltd.	台灣 Taiwan	100 噸級巡防艦 100ton Patrol Vessel	2
裕民航運 (香港) 有限公司 U-MING MARINE TRANSPORT(Hong Kong) Limited	Oshima Shipbuilding Co., Ltd.	日本 Japan	99,000DWT 散裝船 99,000DWT Bulk Carrier	1
WAN HAI LINES (SINGAPORE) PTE. LTD.	Japan Marine United Corporation, Ariake Shipyard	日本 Japan	3,013TEU 貨櫃船 3,013TEU Container Carrier	1
農業部水產試驗所 Fisheries Research Institute, MOA	PT. United Sindo Perkasa	印尼 Indonesia	漁業及海洋研究船 Fishery & Oceanographic Research Vessel	2
台灣中油股份有限公司 CPC CORPORATION, TAIWAN	ASL Shipyard Pte Ltd	新加坡 Singapore	5,000DWT 油化船 5,000DWT Chemical And Oil Tanker	1
Splendor Shipping Maritime Limited	Fujian Southeast Shipbuilding Co., Ltd.	中國 China	1,100TEU 貨櫃船 1,100 TEU Container Carrier	1
交通部航港局 Maritime and Port Bureau, Ministry of Transportation and Communications	Jong Shyn Shipbuilding Co., Ltd.	台灣 Taiwan	巡邏艇 Patrol Boat	1
WAN HAI LINES (SINGAPORE) PTE. LTD.	CSBC Corporation, Taiwan	台灣 Taiwan	3,000TEU 貨櫃船 3,000TEU Container Carrier	1
內政部警政署基隆港務警察總隊 Keelung Harbor Police Department, National Police Agency, Ministry of the Interior	Shing Sheng Fa Boat Building Co., Ltd.	台灣 Taiwan	19ton 巡邏警艇 19ton Patrol Boat	1

現成船入級 Classification of Existing Ships

2024 年現成船入級 CR 的船舶共計有 20 艘，分列如下：

There were a total of 20 existing ships classed by CR in 2024 as listed below:

船名 Shipname	船東 Owner	船旗 Flag	總噸位 GT	船型 Ship type
SEAWAY MOXIE	Seaway Moxie AS	曼島 Isle of Man	4,367	Offshore Service Vessel
臺中灣 CABLE BAY	白海豚育樂股份有限公司 BAI HAI TUN CO., LTD.	中華民國 R.O.C.	154.62	Supply Vessel
MP PREVAIL	BBR SHIPPING (L) BERHAD	馬來西亞 Malaysia	2,576	Offshore Service Vessel
石春 WAN HAI 275	萬海航運股份有限公司 WAN HAI LINES LTD.	中華民國 R.O.C.	16,776	Container Carrier
弘源 2 號 HONG YUAN NO.2	弘源海事工程股份有限公司 Hong Yuan Marine Engineering Co., Ltd.	中華民國 R.O.C.	992	Barge
VALLIANZ PRESTIGE	Vallianz Prestige Pte Ltd	吐瓦魯 Tuvalu	2,563	Offshore Service Vessel
FRANCESCO DI GIORGIO	European dredging company S.A.	盧森堡 Luxembourg	4,683	Dredger Ship
EEMS WRANGLER	WRANGLER B.V.	荷蘭 Netherlands	1,383	Offshore Service Vessel
國昌 3 號 NATION PROSPERITY III	國昌海運股份有限公司 GUO CHANG MARITIME CO., LTD.	中華民國 R.O.C.	6,395	General Dry Cargo Ship
SEAPIPER	FAIRSTAR FJELL B.V.	賽普勒斯 Cyprus	22,505	Fall Pipe Vessel
FAIRPLAYER	Fairplayer B.V.	荷蘭 Netherlands	15,027	Heavy Lift Vessel
百春 WAN HAI 271	萬海航運股份有限公司 WAN HAI LINES LTD.	中華民國 R.O.C.	16,776	Container Carrier
基春 WAN HAI 273	萬海航運股份有限公司 WAN HAI LINES LTD.	中華民國 R.O.C.	16,776	Container Carrier
MMA VALOUR	MMA Offshore Malaysia Sdn Bhd	馬來西亞 Malaysia	4,258	Offshore Service Vessel
KOMODO	Boskalis Offshore Shipping B.V.	馬爾他 Malta	2,593	Offshore Service Vessel
風盛 3 號 PROSPEROUS THREE	風盛航運股份有限公司 Prosperous Wind Shipping Limited	中華民國 R.O.C.	256.78	Crew Boat
JUAN SEBASTIAN DE ELCANO	European Dredging Company (EDC) SA	盧森堡 Luxembourg	17,370	Hopper Dredger
SFE HERCULES	SFE HERCULES COMPANY CORPORATION	巴拿馬 Panama	48,524	Floating Crane Vessel
SAGAR MANTHAN	PT VAN OORD INDONESIA	印尼 Indonesia	534	Dredger Ship
亞泥九號 ASIA CEMENT NO.9	裕民航運股份有限公司 U-MING Marine Transport Corporation	中華民國 R.O.C.	5,322	Cement Carrier

新入級船舶 Newly Classed Ships

2024 年經審核後正式入級的船舶有 48 艘共計 367,209 總噸，艘數為在級船舶的 6%，其中新船入級 26 艘，現成船入級 20 艘，重新入級 2 艘。

After careful review, a total of 48 ships with 367,209 gross tonnage were formally classed with CR in 2024. The number of ships accounted for 6% of the number of those already classed with CR. Among these newly classed ships, there were 26 new ships, 20 existing ships, and 2 re-classed ships.



在級船舶 Classed Ships

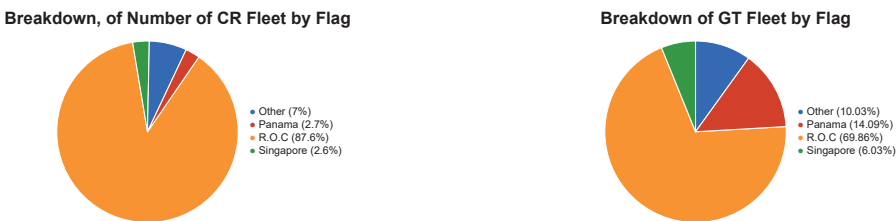
截至 2024 年底，維持 CR 船級之船舶有 660 艘，共計 6,563,536 總噸，平均船齡為 12 年。

Up to the end of 2024 there were 660 ships maintaining CR class with 6,563,536 gross tonnage, and the average age of ships was 12 years.

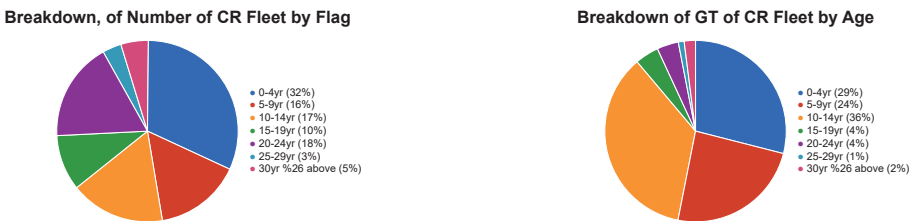
歷年在級船舶艘數及總噸 The number of CR-classed ships over the years and their gross tonnage



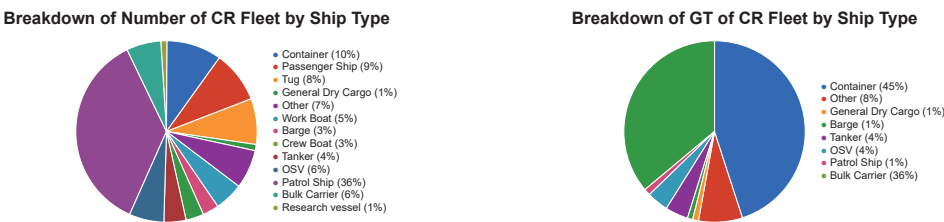
在級船舶之船旗國分析 Analysis of flag states of CR-classed ships



在級船舶之船齡分析 (平均船齡 12 年) Analysis of age of CR-classed ships (the average age of ships: 12 years)



在級船舶之船型分析 Analysis of types of CR-classed ships



政府授權 Government Authorization

CR 接受交通部委託，承辦本國籍船舶之國際公約檢驗。此外，本中心亦符合 IMO 決議案 MSC.349(92) RO Code 之規定，並獲得巴拿馬及其他 6 國政府之授權執行各該國籍船舶之國際公約檢驗。

CR is authorized by the Ministry of Transportation and Communications to carry out statutory surveys of R.O.C. ships. In addition, we have met the requirements of IMO Resolutions MSC. 349 (92) RO Code and obtained authorization from the governments of Panama and other six countries for conducting statutory surveys of ships registered with these governments.

交通部航港局於 8 月 29 日至 30 日辦理本中心認可機構監督稽核，包括前往萬海航運公司現地見證本中心評鑑員的評鑑過程，認可本中心符合認可機構章程 (RO Code) 之規定，繼續授權本中心執行船舶法定檢驗及發證。

The Maritime and Port Bureau (MPB) conducted a supervisory audit of the recognized organization from August 29 to 30, including an on-site witnessing of the audit process performed by the CR auditor at the office of WAN HAI LINES LTD. CR was recognized to comply with requirements of RO Code, and authorized to conduct statutory surveys and certification.

交通部航港局於 12 月 5 日辦理遊艇驗證機構之年度查核，本中心已順利通過查核。

CR has smoothly passed the annual audit on yacht inspection conducted by Maritime and Port Bureau on December 5.

國家通訊傳播委員會 (NCC) 於 12 月 12 日順利完成對本中心授權無線電委辦業務查核之年度稽查工作。

CR has smoothly passed the annual audit on radio inspection conducted by National Communications Commission (NCC) on December 12.

ISM, ISPS 及 MLC 評鑑 ISM, ISPS & MLC Verifications

2024 年 CR 辦理航業公司及其所屬船舶申請國際安全管理章程 (ISM) 及國際船舶與港口設施保安章程 (ISPS) 及海事勞工公約 (MLC) 之驗證 / 檢查及發證工作，共計符合文件 (DOC) 驗證 41 家，船舶管理 (SMC) 驗證 47 艘，國際船舶保安 (ISPS) 驗證共 48 艘及海事勞工公約 (MLC) 檢查共 36 艘。

In 2024, CR conducted ISM, ISPS and MLC verification / inspection and certification work, carrying out DOC verifications for 41 companies, SMC verifications for 47 ships, ISPS verifications for 48 ships, and MLC inspections for 36 ships.



港口國管制 Port State Control

為維持我國國輪在港口國管制 (PSC) 之檢查成績，自 2017 年起，配合主管機關政策向國輪航商宣導強化管制檢查措施，內容如下：

- 一、擬定管制檢查措施，針對高風險船舶，本中心驗船師將會同航務中心檢查員每 2~4 個月登輪執行預防性加強檢驗，以及每 6 個月登輪執行船舶 SMC 額外驗證。
- 二、高風險船舶前往澳洲、香港、新加坡、日本及韓國五處港口前，必須申請預防性加強檢驗，本中心驗船師登輪檢驗後將核發效期最長 2 個月之檢驗報告。
- 三、若國輪遭留置，船舶本身以「高風險船舶」標準及管理公司以「低表現度」標準予以管制至少一年。航商應依航政機關要求之期限內，提交「船隊營運績效改善計畫」予 CR 初審及航政機關複查，並續於每月提交執行情形及佐證資料，直至航政機關核定該航商之船隊營運績效已有效提升。
- 四、若國輪遭開列超過 5 項缺失，CR 驗船師將會同航務中心檢查員登輪確認缺失矯正及執行預防性加強檢驗，並視缺失內容決定是否執行船上 SMC 額外驗證及公司 DOC 額外驗證。

本中心提供「港口國管制檢查表 (到港前使用)」及「船上保養檢查表」，請船東及船員落實使用，由本中心驗船師登輪檢驗時查核使用狀況。

本中心提供 IMO 決議案 A.1185(33) Appendix 2 所列之可留置缺失項目，提醒船東注意。

本中心於社群軟體 LINE 建立「CR PSC 應急群組」，方便船舶遇有港口國管制官員登船檢查時，船上人員可即時加入此群組以取得本中心之協助。

依東京備忘錄 (Tokyo MOU) 發布之年報，本中心十餘年來皆獲得「高表現度」之評比；國輪亦持續維持名列「白名單」，足見強化管制檢查措施顯具成效。後續本中心將持續配合主管機關政策執行國輪強化管制檢查措施，以維持國輪在港口國管制的良好成績。

In order to maintain performance of R.O.C flagged vessels in Port State Control (hereinafter refers to as PSC), CR has implemented enforcement control measures in accordance with government policies as follows:

1. CR has stipulated control measures, which for high-risk vessels, CR surveyors and administration inspectors will conduct preventive surveys onboard every two to four month and board the ship every 6 months to perform additional verification of the ship's SMC.
2. High-risk vessels must apply for additional survey requested by flag State (hereinafter refers to as ASFS) before sailing to the ports of Australian, Hong Kong, Singapore, Japan and Korea. The ASFS report with a validity period of up to two months will be issued after examination by CR surveyors.
3. If the R.O.C. flagged vessel was detained by PSC, the Company and the ship will be identified as “Low performance” and “High-risk vessel”, subject to enforcement control measures for a minimum duration of one year. The Company shall submit a 'Fleet Operation Performance Improvement Plan' to the CR for initial review and to the Maritime and Port Bureau, MOTC for further verification, within the deadline set by the Maritime and Port Bureau, MOTC. Furthermore, the Company must submit a monthly report on the implementation status and related documentation until the approval of the effectiveness of fleet operation performance is granted by the Maritime and Port Bureau, MOTC.
4. If the R.O.C. flagged vessel has more than 5 deficiencies after a PSC inspection, CR surveyor together with the inspectors from the Maritime and Port Bureau, MOTC will board the vessel to verify the correction of deficiencies and carry out the ASFS, and the additional verification of the ship's SMC or the Company's DOC may be required based on the result of the ASFS.

CR has provided “Pre Arrival PSC Checklist” and “Checklist for Onboard Maintenance” for shipowners and crew to use. CR surveyors will check those document when conducting surveys onboard.

CR has drawn shipowners' attention to those detainable deficiencies listed in IMO Resolution A1185(33) Appendix 2.

CR has created a Line group link for PSC inspection. Once there are PSC officers onboard, the crew could join the group immediately to seek CR's assistance.

According to annual reports published by Tokyo MOU, CR has been listed in “High Performance” for more than ten years, and R.O.C. flag continues to maintain its position on “White List”. It is proved that enforcement control measures are effective. In the future, CR will continue to implement enforcement control measures on R.O.C flagged vessels in accordance with government policies in order to maintain good performance of R.O.C. flagged vessels in Port State Control.



CR PSC 應急群組

規範發展 Rules Development

本中心自行開發所有入級規範與認證規範，並因應最新國際法規及技術發展，每年實行規範之修訂與更新並經本中心技術委員會審查通過。目前本中心所編撰之規範有：

All the CR Classification Rules and Certification Rules are self-developed by the Society (CR) and would be revised and updated every year in response to the latest International Conventions and the development of technology. In addition, the amendments to CR Rules are to be validated by the Technical Committee of CR. At the moment, we are compiling the Classification and Certification Rules listed below:

○ 鋼船建造與入級規範

Rules for the Construction and Classification of Steel Ships

○ 高速船建造與入級規範

Rules for the Construction and Classification of High-Speed Craft

○ 海巡艦艇建造與入級規範

Rules for the Construction and Classification of Coast Guard Ships

○ 玻璃纖維強化塑膠船舶建造與入級規範

Rules and Regulations for the Construction and Classification of Ships of Fibreglass Reinforced Plastics

○ 貨櫃建造與發證規範

Rules for the Construction and Certification of Freight Containers

○ 貨物裝卸設備構造與檢驗規範

Rules for the Construction and Survey of Cargo Gear

○ 離岸風場認證規範

Rules for the Certification of Offshore Wind Farms



研究成果 Research Results

IMO 重要決策研析與整合

國際海事組織(International Maritime Organization, IMO) 是聯合國轄下負責海洋及船舶事務的最高機構，於 1959 年成立，成員有 176 個國家、89 個非政府組織 (NGOs)、及 66 個政府間組織 (IGOs)。迄今已通過 50 個相關公約及議定書等。IMO 由大會、理事會和 5 個主要委員會組成，其中海事安全委員會 (MSC) 及海洋環境保護委員會 (MEPC) 每 2 年共召開 6 次會議，以掌管與船舶安全及海洋環境污染有關之重要決策，顯著地影響航運整體未來的發展。因此即時掌握 IMO 的最新規定即可積極地預先規劃行動，以及早因應未來的航運環保法規要求的變化。

為此目的，驗船中心於 IMO 召開之第 108 屆海事安全委員會及第 81 及 82 屆海洋環境保護委員會之隔天，立即發布會議重點快報，其中：

- 「MSC108 會議快報」重點包括將漁船船員訓練將納入規範、與海事自主水面船舶相關的發展、及強化海事網路安全等議題；
- 「MEPC81 會議快報」重點包括為降低溫室氣體排放採納 2024 年海運燃料全生命週期溫室氣體強度準則、批准船舶使用壓載水艙暫時儲存灰水和 / 或處理過的污水之指南、以及採

納船舶在挑戰水質下執行 BWM 公約之臨時指南、另也有關於更新燃料消耗數據 (DCS) 提交格式等議題之討論；

- 「MEPC82 會議快報」著重於溫室氣體減排中期措施之最新進展，IMO 將進一步收斂及啟動對現行溫室氣體減排規定的審查，並依據執行經驗進一步審視碳強度指標 (CII) 要求，以提升其適用性等議題。

此外，驗船中心今年度所發布的各期技術通報內容，詳細說明 MSC 及 MEPC 所發布的決議案與通函之重點內容以及中華民國與巴拿馬的旗國最新規定，提供航商參考，以利未來即時因應。



替代燃料氨及甲醇的成本解析

為配合國際海事組織 (IMO) 達成《巴黎協定》(Paris Agreement) 目標，IMO 積極推動節能減碳措施，並於 2023 年舉行的第 80 屆海洋環境保護委員會 (MEPC 80) 會議上，修訂《2023 船舶溫室氣體減排策略》(2023 Strategy on Reduction of GHG Emissions from Ships)。修訂內容包括加速採用零排放或接近零排放的技術及燃料，並設定於 2050 年前後達成國際航運溫室氣體排放的「淨零排放」目標。

航運界目前正積極尋求替代傳統燃油的方案，其中甲醇和氨作為替代燃料備受期待。針對此趨勢，本中心深入研究了甲醇與氨的特性，分析其減碳關鍵及再生燃料的多種製成方式，並探討海運燃料的全生命週期對成本的影響。是以，驗船中心發布「氨燃料特性、製程與成本趨勢探討」及「甲醇燃料特性、製程與成本趨勢探討」，供航運各界參考與採用。

Analysis and Integration of Key IMO Decisions

The International Maritime Organization (IMO) is the United Nations' top agency responsible for maritime and shipping affairs. Established in 1959, the IMO comprises 176 Member States, 89 non-governmental organizations (NGOs), and 66 intergovernmental organizations (IGOs). To date, it has adopted 50 relevant conventions and protocols. The IMO structure includes the Assembly, the Council, and five main committees. Among these, the Maritime Safety Committee (MSC) and the Marine Environment Protection Committee (MEPC) hold six meetings every two years to address key decisions on ship safety and marine pollution, significantly impacting the future development of the entire marine industry. Keeping abreast of the IMO's latest regulations allows for proactive action planning and prepares for future adjustments to environmental regulations in the marine industry.

For this purpose, CR promptly released a briefing on key points the day following the IMO's 108th session of Maritime Safety Committee meeting and the IMO's 81st and 82nd sessions of Marine Environment Protection Committee meetings, highlighting the main points discussed, including:

- The highlights of the MSC 108 Meeting Brief include the regulation of fishing vessel crew training, the development of Maritime Autonomous Surface Ships (MASS), and the enhancement of maritime cybersecurity.
- The highlights of the MEPC 81 Meeting Brief include the adoption of the 2024 Guidelines on Life Cycle GHG Intensity of Marine Fuels, the approval of guidelines for Temporary Storage of Treated Sewage and/or Grey Water in Ballast Water Tanks, the adoption of interim guidelines for implementing the Ballast Water Management (BWM) Convention under challenging water quality conditions, and updates to the submission format for fuel consumption data (DCS).
- The highlights of the MEPC 82 Meeting Brief include the latest progress on mid-term measures for greenhouse gas reduction, with the IMO set to further converge efforts and initiate a review of existing greenhouse gas reduction regulations. The review will also reassess the Carbon Intensity Indicator (CII) requirements based on implementation experience to enhance their applicability.

In addition, the technical circulars issued by CR this year provide detailed explanations of the key points from the resolutions and circulars released by MSC and MEPC, as well as the latest flag state regulations from the Republic of China and Panama. These bulletins serve as a reference for shipping companies, enabling them to respond promptly to future requirements.

Cost Analysis of Alternative Fuels: Ammonia and Methanol

To support the International Maritime Organization's (IMO) efforts to achieve the goals of the Paris Agreement, the IMO has been actively promoting energy-saving and carbon reduction measures. During the 80th session of the Marine Environment Protection Committee (MEPC 80) in 2023, the IMO revised its 2023 Strategy on Reduction of GHG Emissions from Ships. The revised strategy includes measures to accelerate the adoption of zero-emission or near-zero-emission technologies and fuels, with the goal of achieving net-zero greenhouse gas emissions for global shipping around 2050.

The marine industry is actively seeking alternatives to traditional fossil fuels, with methanol and ammonia emerging as promising options. In response to this trend, CR has conducted an in-depth analysis of the properties of methanol and ammonia, examining their key carbon-reduction characteristics, various production methods of renewable fuels, and the impact of the full life-cycle of marine fuel on costs. Consequently, CR has published the reports "Exploring the Characteristics, Production, and Cost Trends of Ammonia Fuel" and

"Exploring the Characteristics, Production, and Cost Trends of Methanol Fuel" to provide the marine industry with valuable insights for reference and potential adoption.



再生能源服務 Renewable Energy Services

海事保證鑑定 Marine Warranty Survey

CR 擁有豐富的船舶檢驗經驗，與國際知名機構 ABL Group 共同提供臺灣地區離岸風電之海事保證鑑定服務，涵蓋專案開發、建設、運維以及除役階段，已參與工程項目包含水下基座、風力機、外部與陣列電纜運輸安裝等。今年度更獨立與在地重件運輸業者合作，完成大型基樁運輸作業海事保證鑑定工作，是首件完全由在地業者完成之離岸風場重件海事運輸。

With extensive experience in ship inspection, CR collaborates with ABL to jointly provide Marine Warranty Surveys (MWS) in Taiwan. The MWS services we have participated in include the transportation and installation of foundations, wind turbines, and export and inter-array cables for over five offshore wind farms in Taiwan. This year, in collaboration with local heavy transport operators, we successfully conducted an independent MWS for the transport of monopiles. This project represents the first offshore wind heavy transport operation executed entirely by local industry partners.



客戶代表 Client Representative

CR 藉在船舶海事領域超過 70 年的經驗以及離岸風場領域累積超過 10 年的經驗提供擔任客戶代表之服務，協助客戶執行工程現場監督及溝通、環安衛監督，並適時提供技術諮詢，確保工程品質與人員安全以維護客戶最大化利益。服務範圍包含離岸地質鑽探作業、鋼結構製造監督、水下基座、風力機、外部與陣列電纜運輸安裝等現場工作。

With over 70 years of experience in the maritime field and more than 10 years in offshore wind, CR provides services as customer representatives, assisting clients in addressing on-site issues and facilitating timely, effective communication. We maintain frequent contact with customers to monitor and ensure project quality and personnel safety, safeguarding our clients' best interests. Our range of services includes offshore geological drilling operations, steel structure fabrication supervision, underwater foundations, wind turbines, and external and array cable transportation and installation.



專案驗證 Project Certification

CR 為通過 ISO/IEC 17065 認證之離岸風力發電專案驗證單位，係經濟部標準檢驗局離岸風場專案驗證審查成員，亦曾執行台電二期等離岸風場專案驗證。CR 可協助客戶針對國內法規、開發風險等議題進行評估，並憑藉對臺灣本土特殊環境之熟稔，能提供從場址條件評估、設計基礎評估、整合負載分析、風力機/轉子機艙總成與支撐結構設計評估、風力機/轉子機艙總成與支撐結構製造監督、運輸與安裝、試運轉與運轉維護等專案驗證服務，為客戶有效控管專案之風險。

另在標準檢驗局指導下，CR 自 2020 年起主責編撰「離岸風力發電技術運轉及維護技術指引」，此指引考量臺灣特殊場址條件及本土議題，如颱風、腐蝕、地震與地質條件等，並整合國內外法規與標準，成為臺灣離岸風場運維之重要參考依據。

CR is an offshore wind farm project certification body accredited under ISO/IEC 17065, a member of the BSMI (Bureau of Standards, Metrology and Inspection) offshore wind farm project certification review committee, and has conducted project certifications for Taiwan Power Company Phase 2 wind farm. CR provides comprehensive support to clients, including evaluation of domestic regulations and development risks, and, with our in-depth knowledge of Taiwan's unique environment, offers project certification services such as site conditions assessment, design basis evaluation, integrated load analysis, wind turbine/RNA and support structure design evaluation, wind turbine/RNA and support structure manufacturing surveillance, transportation and installation surveillance, commissioning surveillance, operation and maintenance surveillance, helping clients effectively manage project risks.

Additionally, under the guidance of the BSMI, CR has been responsible for drafting the "Technical Guideline for Operation and Maintenance of Offshore Wind Farms" since 2020. This guideline considers Taiwan's unique site conditions and challenges, such as typhoons, corrosion, earthquakes, and specific soil conditions, and integrates both domestic and international regulations and standards, serving as an important reference for offshore wind farm operation and maintenance in Taiwan.

技術盡職調查 Technical Due Diligence

CR 可依客戶需求提供風場與船舶技術盡職調查、技術諮詢等相關服務，範圍包含風場發電量評估、風場設計、專案團隊能力、品質管理系統、工程技術供應能力、許可與法規、環境與社會影響等方面的評估與審查。

透過 CR 專業人員審核與分析，可替客戶揭露專案中各面向潛在技術風險，以協助客戶在專案執行過程中做出正確決策。此外，CR 可提供持續性的專案風險監控服務，精準掌握專案實務風險。

CR can provide wind farm and ship technology due diligence, technical consulting and related services according to customer needs, covering wind farm power generation evaluation, wind farm design, project team capabilities, quality management systems, engineering technology supply capabilities, permits and regulations, and environment and social impact evaluation.

Through CR's review and analysis, potential technical risk in various aspects of the project can be disclosed, helping clients make informed decisions during project execution. CR also provides continuous project risk monitoring throughout all phases, accurately identifying and reporting risks to clients.

近三年實績 Track record over the past three years

風場或專案 Windfarm/Project	工作內容 Work scope	工作類別 Work Type
大彰化風場 Greater Changhua	外部、陣列電纜安裝現場監督案 Export, Inter array cable Installation	海事保證鑑定 Marine Warranty Survey
海能風場 Formosa 2	水下基座裝卸與安裝現場監督案 Jacket Load-in/out, Installation	海事保證鑑定 Marine Warranty Survey
彰芳西島風場 Changfang & Xidao	拋石安裝現場監督案 Rock bag Installation	海事保證鑑定 Marine Warranty Survey
彰芳西島風場 Changfang & Xidao	輸出電纜安裝現場監督案 Export Cable Installation	海事保證鑑定 Marine Warranty Survey
彰芳西島風場 Changfang & Xidao	風力機安裝現場監督案 WTG Installation	海事保證鑑定 Marine Warranty Survey
中能風場 ZhongNeng	風力機艙卸貨現場監督案 Nacelle Load-in	海事保證鑑定 Marine Warranty Survey
中能風場 ZhongNeng	輸出電纜安裝現場監督案 Export Cable Installation	海事保證鑑定 Marine Warranty Survey
中能風場 ZhongNeng	水下基座裝載現場監督案 Jacket Load-out	海事保證鑑定 Marine Warranty Survey
雲林風場 YunLin	水下單樁裝卸與運輸現場監督案 Mono pile Load-in/out & Transportation	海事保證鑑定 Marine Warranty Survey
雲林風場 YunLin	拖船出航與拖帶現場監督案 Wet tow of barge	海事保證鑑定 Marine Warranty Survey
LNG 儲槽 LNG tank	鋼材卸貨現場監督案 Load-in of Nickel Steel Plate	海事保證鑑定 Marine Warranty Survey
中能風場 ZhongNeng 雲林風場 YunLin 彰芳西島風場 Changfang & Xidao 海龍風場 HaiLong	吊掛設備檢測案 Examination of lifting appliances(LOLER)	船舶，設備與索具檢驗 Vessel, Equipment and Rigging Inspection
楓妙風場 Fengmiao	銀行技術顧問 Bank's Technical Consultant	技術盡職調查 Technical Due Diligence
機密 Confidential	海洋地質調查客戶代表案 Geotechnical survey Client Rep	客戶代表 Client Representative
中能風場 ZhongNeng	海陸纜轉接段水平鑽掘工程客戶代表案 Horizontal Directional Drilling site Client Rep	客戶代表 Client Representative
機密 Confidential	浮式平台專案驗證評估 Floating Platform Project Verification and Assessment	專案驗證 Project Certification
台電二期風場 Taipower 2	ISO/IEC 17065 風場專案驗證 ISO/IEC 17065 Wind Farm Project Certification	專案驗證 Project Certification
台電二期風場 Taipower 2 中能風場 ZhongNeng 海能風場 Formosa 2 雲林風場 YunLin 大彰化風場 Greater Changhua 彰芳西島風場 Changfang & Xidao 海龍風場 Hailong	標檢局專案驗證審查 BSMI project certification review for offshore wind farm	專案驗證 Project Certification

技術服務 Technical Services

ETAS 緊急技術評估服務 Emergency Technical Assessment Service (ETAS)

本中心提供各航運公司船舶之緊急技術評估服務 (ETAS)，截至 2024 年服務中船舶共計有 34 艘次。

CR provides Emergency Technical Assessment Service (ETAS) to shipping companies. Up to the end of 2024, 34 ships have applied to CR for this service.

工廠認可及型式認可 Works Approval and Type Approval

2024 年 CR 執行船舶用品工廠認可及產品型式認可共計 79 家 143 型，並執行危險品容器之檢驗業務，共計廠商 24 家，小型容器 127 型及中型容器 1 型。

In 2024, CR conducted works approval of 79 companies and type approval of 143 products for use on vessels, and also carried out certification of packagings for dangerous goods for 24 companies and 127 small types and 1 medium type.

CRPA 電子審圖 CR Plan Approval (CRPA)

為加強新造船設計圖審核效率，並減少紙張印刷之資源浪費，本中心自行開發電子審圖系統（CRPA），其功能包括由船廠傳送設計圖電子檔、本中心審核意見退審、現場驗船師查詢審圖意見、船廠處理退審意見、船東查詢送圖及審圖進度等。

In order to enhance the efficiency of plan approval for newbuildings and to reduce paper consumption in the office, we have developed CR Plan Approval (CRPA). Its functions include submission of design drawings in electronic form by the shipyard, approval of drawings by CR with comments and return of drawings, review of approval comments by the field surveyors, handling of comments on returned drawings, and inquiries from the shipowner about submission of drawings and progress of drawing approval.



技術研討會 Technical Seminar

本年度對外共舉辦 4 次研討會，深獲與會人士好評。

We held 4 technical seminars during 2024, which received favorable responses from participants.

日期 Date	研討會內容 Topic
2024.3.29	<ul style="list-style-type: none">MEPC 81 焦點：IMO 溫室氣體減排中期措施最新發展 MEPC 81 Highlight：Latest developments in IMO's mid-term measures海運綠色轉型：甲醇、氨及船舶碳捕捉技術最新發展 Green transformation of shipping: The latest developments in methanol, ammonia and ship carbon capture technology
2024.8.19	<ul style="list-style-type: none">2024 重點檢查活動 MLC Concentrated Inspection Campaign (CIC) 2024 on MLCIMO 法規最新動態與未來趨勢 Latest Developments and Future Trends of IMO Regulations生物污垢準則簡介 Introduction to Biofouling Guidelines
2024.10.18	<ul style="list-style-type: none">MEPC 82：IMO 溫室氣體減排中期措施最新發展，聚焦經濟性措施 MEPC 82：The latest development of IMO's mid-term measures, focusing on economic measures新能源發展趨勢下臺灣港群之機會與應用 Opportunities and applications of Taiwan's port under the development trend of new energy
2024.11.19	<ul style="list-style-type: none">Port State Control in Australia本國籍船舶國際公約電子證書試行計畫之說明 Explanation of the Pilot Program for Electronic Certificates of ROC-Flagged Vessels under International ConventionsMEPC 82：IMO 溫室氣體減排措施最新發展 MEPC 82：Latest developments in IMO regulations for cutting GHG emissions from shipsPSC 實務檢驗與案例缺失探討 PSC Practical Inspection and Case Study of Deficiency

國際交流 International Exchange

澳洲海事局 (Australian Maritime Safety Authority, AMSA)

本中心於 2024 年 4 月 11 日拜會澳洲海事局 (AMSA) Mr. Mick Kinley, President、Mr. Michael Drake, Executive Director 及 Mr. Bruce Whitby, Head of Inspections 等重要高層官員，雙方針對 PSC 運作機制、人員訓練及相關技術議題進行討論，並隔日 (12 日) 於墨爾本港口與 PSC 檢查員一同登輪觀摩、參與 PSC 查驗過程，深化雙方交流。

最後亦於 4 月 15 日拜訪 Fremantle 辦公室，本次除拜訪 AMSA 總部亦拜訪兩處地區辦公室，過程圓滿順利。

On April 11, 2024, CR visited the Australian Maritime Safety Authority (AMSA) to meet with key officials, including Mr. Mick Kinley, President; Mr. Michael Drake, Executive Director; and Mr. Bruce Whitby, Head of Inspections. Both parties engaged in in-depth discussions on Port State Control (PSC) mechanisms, personnel training, and related technical issues. The following day (April 12), CR joined PSC inspectors at the Port of Melbourne to observe and participate in PSC inspections, further deepening mutual exchanges.

On April 15, CR also visited the Fremantle office. The successful visits to AMSA headquarters and two regional offices showcased CR's commitment to international collaboration.



主辦南韓離岸風電暨氫能考察 (Holding South Korea Offshore Wind and Hydrogen Energy Study Tour)

本中心於 2024 年 5 月 19 日至 25 日與南德驗證機構 (TÜV SÜD) 於經濟部標準檢驗局指導下，共同主辦南韓離岸風電暨氫能考察行程。

除拜會首爾的曉星與現代集團、參訪大韓電纜廠外，亦考察以蔚山市政府主導的氫能發展園區與產業鏈，台灣團員包含港務公司、東方風能、商船三井等多家業者，此次考察成果豐碩獲得產業界高度肯定。

From May 19 to 25, 2024, under the guidance of Taiwan's Bureau of Standards, Metrology, and Inspection, CR jointly organized the South Korea Offshore Wind and Hydrogen Energy Study Tour with TÜV SÜD.

The delegation visited key industry leaders in Seoul, including Hyosung and the Hyundai Group, and toured Taihan Cable & Solution's facilities. Additionally, the group explored Ulsan's government-led hydrogen development zone and its associated industrial chain.



香港海事處 (Hong Kong Marine Department)

本中心於 2024 年 5 月 27 日至 29 日赴香港，拜訪香港海事處、義大利船級社 (RINA) 香港分公司及中國船級社 (CCS) 香港分社等單位，並受邀參加亞洲船東聯誼會，交流成果豐碩，期能透過定期互訪加強交流合作，並拓展中心視野及能見度。

From May 27 to 29, 2024, CR visited the Hong Kong Marine Department, as well as the Hong Kong offices of the RINA S.p.A (RINA) and China Classification Society (CCS).

CR was also invited to participate in the Asian Shipowners' Association. These visits resulted in productive exchanges, strengthening collaboration through regular interactions, while broadening CR's perspective and enhancing its visibility.

東京備忘錄 (Tokyo MOU)

本中心於 2024 年 6 月 26 日拜會東京備忘錄 (Tokyo MOU) 久保田秀夫理事長、石原彰專務理事及寧正企劃課長進行單位交流。同日下午拜會日本國土交通省海事局的丸田晉一室長、吉田忠史專門官及千原光輝課長補佐，雙方針對遴選受檢船舶以及利用 AI 技術協助 PSC 檢查等議題相互交流。

此次拜訪 Tokyo MOU 及國土交通省海事局圓滿順利，期許雙方在海事議題上能深度合作。

On June 26, 2024, CR visited the Tokyo MOU Secretariat for institutional exchanges. Later that afternoon, CR visited Japan's Ministry of Land, Infrastructure, Transport, and Tourism (MLIT). Discussions centered on vessel selection for PSC inspections and the application of AI technology to enhance PSC procedures.

The visits to Tokyo MOU and MLIT were highly successful, fostering opportunities for deeper collaboration on maritime issues.





財團法人驗船中心
CR CLASSIFICATION SOCIETY

www.crclass.org

台北總部 HEADQUARTERS

台北市中山區南京東路三段103號8樓

8F., No. 103, Sec. 3, Nanjing E. Rd., Taipei City 104707, Taiwan (R.O.C.)

Tel:+886-2-25062711 Fax:+886-2-25074722 E-mail:cr.tp@crclass.org

台中連絡處 TAICHUNG OFFICE

436 台中市清水區臨港路五段656號

No. 656, Sec. 5, Lingang Rd., Qingshui Dist., Taichung City 436040, Taiwan (R.O.C.)

Tel:+886-4-26575617 Fax:+886-4-26575616 E-mail:cr.tc@crclass.org

高雄連絡處 KAOHSIUNG OFFICE

高雄市苓雅區海邊路31號26樓之3

26F.-3, No. 31, Haibian Rd., Lingya Dist., Kaohsiung City 802609, Taiwan (R.O.C.)

Tel:+886-7-3305617 Fax:+886-7-3306295 E-mail:cr.kh@crclass.org

基隆連絡處 KEELUNG OFFICE

基隆市中正區義一路43號9樓之3

9F.-3, No. 43, Yi 1st Rd., Zhongzheng Dist., Keelung City 202001, Taiwan (R.O.C.)

Tel:+886-2-24282797 Fax:+886-2-24282297 E-mail:cr.kl@crclass.org

日本代表處 JAPAN OFFICE

〒650-0031 日本神戸市中央區東町116-1シティライフ三宮ビル9階

9F., No. 116-1, Higashimachi, Chuo-ku, Kobe 〒650-0031, Japan

Tel:+81-78-333-8515 Fax:+81-78-333-8506 E-mail:crskobe@silver.ocn.ne.jp

大陸代表處 CHINA OFFICE

Mobile:+86-134-162-52949

E-mail:cr.cn@crclass.org

香港代表處 HONG KONG OFFICE

E-mail:cr.hk@crclass.org

新加坡代表處 SINGAPORE OFFICE

E-mail:cr.sg@crclass.org

南非代表處 SOUTH AFRICA OFFICE

P. O. Box 298, Plumstead 7801, Cape Town, South Africa 23, Manson Close. Bergvliet Cape Town, South Africa

Tel:+27-21-7125382 Fax:+27-862736840 Mobile:+27-82-8813690

E-mail:frank7yang@hotmail.com

Since 1951

