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Significance of Classification Society in the Maritime industry

Ship Classification is a system for controlling or regulating the material state of the ship. The primary function of a classification society is to promote safety of life, property and protection of the marine environment.

The origin of classification societies can be traced back to the 18th century where marine insurers, based at Lloyd's coffee house in London, developed a system for independent inspection of the hull and equipment of ships prior to providing an insurance cover.

During that time, an attempt was made to 'classify' the condition of each ship on an annual basis. The condition of the hull was classified A, E, I, O or U, according to the excellence of its construction and its adjudged continuing soundness (or otherwise). Equipment was classified as G, M, or B: meaning good, middling or bad.

Role of Classification Societies includes

- Promotion of safety of life, property and the protection of marine environment.
- Developing technical standards (rules) for design and construction of ships based on extensive research & development and service experience, subject to constant refinement.
- Approve designs of ships against their developed standards (Rules).
- Act as a Recognised Organisation to carry out statutory surveys & certification as delegated by maritime administrations from whom they are authorised and the ship is flying the flag of the maritime administration.
- Conduct surveys during construction to satisfy the ship is built in accordance with the approved design(standards/rules) and to the requirements of the statutory Rules/ Regulations.
- Conduct in-service inspection and periodic survey during operation towards maintaining classification and statutory certification as per class standards/ rules and statutory regulations.
- Research and development programmes.
- Support international organisations – IMO, IACS, ISO, Flag administrations etc.
- Conduct training/awareness programmes for their own surveyors and stake holders.

Delegated Inspection Authority

Maritime flag administrations worldwide oversee the regulation and compliance of maritime assets against laid down international and national regulations.

Being a global industry requiring authorities to maintain offices worldwide, many maritime flag administrations have opted to delegate work to Classification Societies. They authorise classification societies to operate as a Recognised Organisation (RO) and utilise their experienced surveyors and global network.

Scope of delegated work is outlined in the respective agreement between the Flag State Administration and the Classification Society based on RO code. RO code forms the basis against which Recognised organizations are assessed towards recognition & authorization and for the oversight by flag States.

Indian Register of Shipping

Indian Register of Shipping is amongst the top 10 international ship classification societies and a Member of the International Association of Classification Societies (IACS). It is authorised as a Recognised Organisation by 46 maritime administrations worldwide including European Union.

In the recent years, IRS has achieved strong and sustained business growth with inroads into new markets. The last 12 months has seen fleet addition of over 200 ships with more than 7 million GT – and an increased global geographical presence.

Working towards decarbonisation, IRS is actively playing a role in development of new fuel ecosystems as well as improving energy efficiency.

Decarbonisation continues to remain high on the agenda for the organisation as the industry looks to reduce carbon emissions. Several initiatives have been taken towards the development of alternative fuels ecosystem. IRS has conducted successful trials using biofuels with encouraging results. Rules have been developed for Ammonia and Hydrogen-fuelled vessels, as well as Fixed Offshore Wind Turbine installations.

Classification of the first hybrid battery-powered catamaran, built by Indian shipbuilder Cochin Shipyard, was another highlight. The catamaran ferry, designed for shore charging is propelled by a hybrid-electric propulsion system by means of lithium titanium oxide (LTO) batteries and DG Sets.

Indian Register of Shipping (IRS) is closely working with Cochin Shipyard Ltd towards indigenous development of hydrogen fuel cell vessel. In addition to this, two projects are also underway – to develop technology demonstration of remotely controlled vessel with L&T Defence and autonomous vessel with Mazagon Dock Shipbuilders Ltd.

IRS has also teamed up with a leading industry partner in its digitalisation journey based on global best practices and adoption experience. It will focus on Digital Twin concept, data analytics, knowledge management as well

as life cycle management of assets.

IRS is a preferred partner for Indian Defence forces and has been engaged in several pioneering projects for Indian Navy, including diving support vessels, shallow water ASW corvettes, survey vessels large, floating dock and various auxiliary vessels. IRS is involved in Indian Coast Guard new construction projects like fast patrol vessels, interceptor crafts, pollution control vessels and several others. A series of nine Floating Border Outposts (FBOPs) for the Border Security Force, Ministry of Home Affairs have been classed as well.

Towards improving inland vessel safety, IRS played an integral role in the drafting of the Inland Vessels Act 2021 and based on the IV Act 2021, IRS drafted rules in consultation with Ministry, State Governments and various other stakeholders. The draft Rules and Regulations for Construction and Classification of Inland Waterways Ships are ship-type specific to ensure safety of cargo, assets and the environment.

People are the core assets of any knowledge-based organisation. IRS ensures regular training and upskilling of its resources through structured training and regular mentoring. Training programs are conducted regularly for surveyors and senior staff towards ensuring continuous commitment to quality operations.

Summary

The Classification Societies authorised by a flag administration as Recognised Organisations play a crucial role in the maritime industry to establish and maintain technical standards for construction and operation of marine vessels, to monitor compliance to applicable regulations and to provide guidance and support to its stake holders.

IRS continues to be a dynamic, pioneering and influential force in the maritime spectrum. It has made great strides in the move towards sustainable shipping and remains a trusted partner to a host of maritime stakeholders. Constant shifts in the globally regulatory landscape notwithstanding, IRS' reputation for excellence, quality and maritime safety remains unrivalled.

- MMT



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