

Condition Assessment Program (CAP)

Raising Safety, Opportunity and Values



IRCLASS
Indian Register of Shipping



Most of the ship Charterers requires an independent assessment and appraisal of the ships prior to charter their Vessels which meets the recognised standards of quality that should minimize the possibility of casualty, Oil Spill, Mechanical failure, General Average Claim and demonstrate optimum performance.

Indian Register of Shipping (IRS) is internationally recognized, independent ship classification society and a member of the 13 member International Association of Classification Societies (IACS). IRS has developed and established a condition assessment Program IR-CAP to meet the requirements of charterer, ship owners and other interested parties. IR-CAP certification process provides independent and value added evaluation of the ship based on physical and operational conditions irrespective of ship age and in line with requirements of international oil major's Charterers.

Benefits of IR-CAP Certificate

Safety

IR-CAP ensures protection of life, property and the environment with safe and cost effective transportation of the cargo

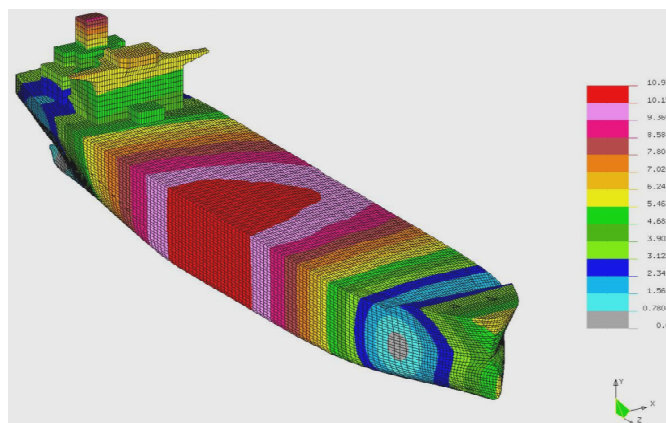
Reliability

IR-CAP had built confidence of oil majors for more than 15 years towards chartering of oil tankers and enhanced tanker owner's business opportunities.

IR-CAP certification identify areas of deficiency, provides opportunity for targeted maintenance resulting long term effective charting operations beneficial to charterer and ship owner.

Asset value enhancement

The CAP ratings certificate and extensive condition assessment report issued to ship enhances asset/capital value of the ship which is added information for transfer of ownership and financial institutions.



IR - CAP survey

- Hull Structure Assessment
- Machinery and Cargo System Assessment

IR-CAP Surveys are carried out without interruption to the ship and charterer schedule through advance planning and conducting IR-CAP survey, Intermediate survey and Special Surveys simultaneously.

IR-CAP hull survey consists of structural & coating condition assessment, thickness measurement, Longitudinal strength calculation and identification of specific critical areas or locations required for **Fatigue Life Assessment**.

IR-CAP machinery and cargo system surveys are conducted during the Single Operational Voyage with the Cargo Discharge Operation. The survey consist of inspection of onboard machineries (electrical and mechanical) during actual operations, recording and evaluation of operating parameters, Vibration Analysis of rotating machinery, thermography of various systems, lubrication oil analysis and physical condition examination.

After Completion of respective survey, ratings are computed for each of the system and sub groups of hull structure individually followed by cumulative ratings for Hull, Machinery and Cargo System.



chartering and requirement of periodic maintenance for ship owners.

IR CAP certificate and report are valuable documents for a ship-owners, can be produced to third parties as evidence of the ship's condition.

We have extensive experience and knowledgeable back-office support to undertaking CAP surveys and, as a result, the Indian Register Condition Assessment Programme IR-CAP is preferred by many major charterers.

Other services

- Techno-Commercial Assessment
- Noise & Vibration measurement, evaluation and control
- Condition Monitoring of the ship machinery
- Prediction of Noise and Vibration onboard
- Thermographic Analysis
- Fatigue life calculation of ship
- Strain gauge measurement
- Service provider approval and Product type approval
- Port Safety Audit / Port Navigation Risk Assessment
- Risk Management Audit and Ship Energy Audit.
- Training
- Projects Management / Consultancy
- Preparation of Plans & Procedure

IR CAP Hull Structure	IR CAP Machinery & Cargo System
Longitudinal Strength Analysis	Visual Surveys
Fatigue Life Assessment	Functional Testing Of Machineries
Thickness Gauging	Vibration Measurement & Analysis
Visual Surveys	PMS Verification
Tank Tightness Testing	Lube Oil Analysis
Hull Fittings	IR Test
Optimum Repairs to upgrade rating	Infrared Thermography
Cumulative Diminution Graphs	Optimum Repairs to upgrade rating
Photographic Report & Certificate	Photographic Report & Certificate

IR-CAP Rating

CAP – 1 represents Very Good condition, CAP – 2 as Good Condition, CAP – 3 as Acceptable Condition and CAP – 4 as Poor Condition.

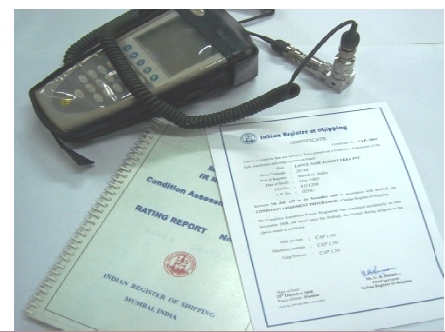
After completion of each module a set of separate comprehensive reports and associated certificates for each module are issued to the shipowner. This provides the potential for an uninterrupted trading pattern and maximises the revenue from the ship.

IR - CAP report demonstrates features of your ship, and establishes a sound basis for charterers for decisions on



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IR –CAP Advantages



- Experience and Knowledge
- Prompt Services Response
- Quality and excellence
- Overall Cost Reduction
- More time for Chartering
- Reduced risk of pollution
- Critical Fatigue Strength Assessment
- Optimum structural renewal towards rating up gradation
- High Resale Value
- Reduced Insurance premium
- Cut Back on Machinery Breakdowns
- Up gradation in Machinery condition
- CAP Certificate from IACS Member

Head Office 52A, Adi Shankaracharya Marg, Opp. Powai Lake, Powai, Mumbai – 400 072. India, Tel: +91 22 30519400, Fax: +91 22 25703611, Website: www.irclass.org, Email: ho@irclass.org, mas@irclass.org	America Houston +001 281 3608900 houston@irclass.org	Europe London 44 20 3402 6095 rk.kalra@irclass.org Greece 30 210 4535357 Piraeus@irclass.org	Bangkok +66 2 2333698 bangkok@irclass.org China +86 532 85761404 qingdao@irclass.org Korea 82 7044724800/1/2/3 korea@irclass.org	Asia Colombo +94 11 5444700 colombo@irclass.org Dubai 9714 4541538/37/39 dubai@irclass.org Singapore +65 6423 4861 irsingapore@singnet.com.sg
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