



INSPECTION





GCAS, has developed inspection and maintenance programs, which have been accepted globally as good engineering practice. This program has been implemented in factories and plants to prolong the lifetime and inspection interval of pressurized components safely and cost effectively.

The benefits of a risk-based approach to inspection include increase in availability and cost saving, minimum duration of shutdowns, change in inspection strategies and intervals and safety compliance issues.

Benefits of adoption

- Increased safety and equipment reliability
- Fewer planned shutdowns
- Fewer unplanned shutdowns
- Longer inspection intervals

Potential fewer inspection and maintenance costs

- Evaluation of effectiveness of inspection activities
- Increased consistency of inspection planning
- Identification of potential damage mechanisms
- Priorisation of inspection
- Identification of key process parameters affecting degradation rates
- Identification of key process parameters affecting degradation rates
- Identification of key process parameters affecting degradation rates
- Documentation of current plant configuration and materials of construction
- At GCAS we believe in Quality and thats why our customers start believing in our approach.



The services that the company offers to various Indian and Overseas Clients are broadly described hereunder:

1. Pre-shipment/Loading/Discharge supervision services for dry cargo

- Pre-shipment Inspection of cargo including sampling and testing, warehouse management and control of cargo movement
- Supervision of cargo loading/ Discharge including loss minimization
- Supervision of weighing, sampling, moisture determination and quality sample preparation
- Inspection of vessels' cargo compartments w.r.t. their fitness for carriage of intended cargo
- Draught surveys to determine quantity of cargo onboard vessels
- Tally supervision
- Supervision of cargo stowage
- Supervision of damaged cargo reconstitution
- Analytical services for Physical and chemical analysis

The commodities that are generally covered under the services we provide are listed here below under the following group headings:

Agricultural Commodities

Animal Feeds, Grains, Sugar, Dairy Food products, Coffee, tea, Spices, Seeds & Pulses.

Consumer Goods

Textiles, Machinery & Parts, Finished goods, Leather products etc.,

Bulk Raw materials

Ores, Mineral, Ferrous and Non-ferrous metals & scrap, concentrates Coal and Coke, raw Cotton, Rubber, Fibers, Timber, Fertilizers and Pig Iron.

2. Loading/Discharging supervision of Marine bulk oils and chemicals

- Cargo sampling from ship/Shore tanks/Pipelines
- Inspection of ship's tanks and pipelines w.r.t their emptiness and/or suitability /cleanliness to carry intended cargo
- Ullaging of ship's tanks and quantity calculation
- Continuous monitoring of loading/discharging operations
- Inspection of shore installation and relevant tanks/pipelines
- Gauging of shore tanks
- Outturn calculations
- Testing of cargo samples for contractual specifications
- Logistics support to vegetable oil refineries.

The commodities that are generally covered by the inspection services that we provide under this category are:

Crude Oils, Petroleum products, Petrochemicals, Vegetables/Animal Oils and Fats, Acid Oils, Soluble, Molasses, Latex, Styrene Monomer, Alcohol and other bulk liquids.

3. Cargo damage (break bulk/dry bulk/containers/liquids) surveys for ship owners, charterers, underwriters and P&I clubs



The loss/damage survey involves arriving at the cause and extends of damage to the cargo including assessment of loss.

4. P&I condition and follow up survey of vessels

These inspection/ Investigations are carried out on behalf of Foreign P&I (Protection & Indemnity) clubs, most of them based in UK and Scandinavian countries, which cover vessels for claims on account of Third party damages, Casualties, including Damage to Cargo, Personal injury, Oil pollution, etc. The survey comprises of a detailed inspection/investigation of the entire vessel.

5. Pre-purchase/Hull/Machinery inspection of vessels

On behalf of vessel's Owners, Underwriters and P&I clubs. The above inspection involves a thorough inspection of the vessel's Hull. All structural members, Cargo spaces, Accommodation, Fittings onboard, Safety and Fire Fighting Equipment, navigational equipment, Engine Room, Main Propulsion & Auxiliary Machinery; to comment on the vessel's condition and immediate repairs necessary to keep the vessel in service. It also covers scrutiny of all statutory and trading certificates to comment on the proper validity and conformity with the International Rules & regulations. Comment on the life saving appliances available and watertight integrity of the vessel.

Hull & Machinery damage inspection

The above inspection includes a detailed description/investigation of the circumstances leading to the occurrence, cause and extent of damage and comments on the estimated cost of repairs. Also scrutiny of the relevant certificates on board, to establish the general condition of the equipment prior to the accident, and that the equipment has been properly

maintains. Our survey report is used by Underwriters to settle the claims covered under the Hull Policies.

6. Supervision of steel shipment – Import/Export

- To inspect Ship's Cargo compartments w.r.t their suitability and cleanliness, effect of previous cargo residues, recommend preventive measure if adverse effect is suspected.
- Inspect cargo condition assess degree of rust if affected by fresh/sea water.
- Continuous supervision of loading/discharge operations
- In the event of cargo damage, to investigate nature, cause and extend of damage to cargo; assist master in documentation to suitably qualify the mate's receipts/bill of lading to protect the interest of the party represented.
- Comment on loading, stowage and securing of cargo in the vessel's cargo compartments prior proceeding on an ocean passage.
- The above supervision includes physical verification of quality and quantity as per the invoice/ shipping documents.

7. Container Inspection

- Detailed inspector for "On Hire", "Off hire" – change of lease
- Inspection while "in service" to comment on structural integrity, water tightness, and cargo worthiness of the units.
- Identify damages, if any, whether due to normal wear and tear or due to impact during some stage of carriage.
- Assessment of damage and conformity of repairs
- Container stuffing and de-stuffing supervision

All technical inspections related to containers are carried out by our certified inspectors.

The reports that we generate are technically sound, accurate and prompt.



**Contact for more details about
certification program**



GCAS Quality Certifications

e-mail: scheme@gcasquality.com,
info@gcasquality.com