

Course code	OSC316
Course name	Cargo Handling and Moving with Wire Rope Inspection
Duration	5 days
Target group	Cargo lifting operators, deck assistants and signalman involved in cargo operations.
Prerequisites	Occupational Health Certificate (ASO) or certificate of good physical and mental health conditions.
Objective	To train and capacitate cargo handling professionals directly involved in cable inspection, planning and performing cargo handling operations, in accordance with procedures and required regulatory norms.
Contents	<ol style="list-style-type: none"> <li>1. Basic Concepts: basic assessment of cranes, characteristics of cargo handling;</li> <li>2. General Considerations (slinging, rigging accessories, steel cable);</li> <li>3. Weight capacity table and slinging angles: weight, dimensions and gravity center of cargo, handling with traction equipment, pulleys, lifting in angle and load tension, deviation angle, special risk situations, maximum capacity utilization (CMU/SWL);</li> <li>4. Operation (dangerous goods, small items, pipes, shapes, plates and shafts): lifting of characteristic cargo, recognition and identification of defects and practices less advisable in the equipment itself;</li> <li>5. Communication and Signalization while handling loads: signs, manual signs, use of 2 signalmen; guidance of the operator in special circumstance; responsibilities, practice of conventional signals;</li> <li>6. Safety in cargo handling: factors that affect the maximum capacity of the equipment, relation between the CMU/SWL of the equipment and cargo weight;</li> <li>7. Labor Accident Prevention;</li> <li>8. Collective and Individual Protection Equipment;</li> <li>9. Applicable Items From Regulatory Standards (NR-6, NR-10, NR-11 and NR-17);</li> <li>10. Lifting Equipment: characteristics of cargo handling equipment; characteristics and construction of steel cables, resistance and flexibility, rejection factors of steel cables; steel cables lubrication, cables examination, configuration of slings;</li> <li>11. Special Risk Situations (cargo handling next to energized electric network, adverse climatic conditions, among others): mooring several types of cargo using different methods of sliding;</li> <li>12. Workplace ergonomics;</li> <li>13. Practical Exercises: inspections and criteria of rejection, maintenance and care to avoid equipment damage, accessories, evaluation, diameter measurement and utilization of the inspection criterion for steel cables, inspection of signaling equipment, practical exercises with lifting equipment.</li> <li>14. Final Assessment.</li> </ol> <p>Technical Reference: NR 6, 10, 11, 17 and 34.</p>
Exam	<p>The students will be evaluated through direct observation at practical activities and two theoretical evaluations will be done during the course. The passing mark is 60% to each theoretical evaluation.</p> <p>Validity: N/A</p>