



# Mobile Harbour Crane

## (General cargo/grab/containers)

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### GENERAL DESCRIPTION OF THE TRAINING

From "Zero to Hero" (candidates without experiences with a crane)

The aim of the training is to provide the necessary knowledge and skills to handle and operate a mobile harbor crane to load and unload general cargo or bulk in a safe and productive way.

#### **Lifting gear and use of lifting gear:**

- ✓ Shackle between hoist and cargo
- ✓ Supervision of actions
- ✓ Maintenance lifting gear
- ✓ Calculating the W.L.L. & S.W.L.
- ✓ Use of lifting gear

#### **International signals:**

- ✓ Eye contact
- ✓ Warning signals
- ✓ General moves and signals
- ✓ Vertical movements
- ✓ Horizontal movements
- ✓ Danger
- ✓ Radio communication

#### **Safety procedures for a crane driver:**

- ✓ Storm warning
- ✓ Transport of people
- ✓ Load diagram
- ✓ Visibility
- ✓ Communication with the technical staff
- ✓ Portside and star board
- ✓ Related tasks
- ✓ Basic knowledge of ship structure
- ✓ Technical safety procedures
- ✓ Working methods

#### **Pre-use checks:**

- ✓ General daily checks (tour of the crane)
- ✓ Safety path of a crane
- ✓ Engine room
- ✓ Lights, horn, communication systems etc.
- ✓ Testing all movements before starting work

#### **Driving and positioning the crane:**

- ✓ Driving
- ✓ Crab steering
- ✓ Easy manoeuvring through bottlenecks
- ✓ Positioning the crane in the best position (hatch) to work
- ✓ Stabilizer pads and beams of the crane
- ✓ Parking the crane (off work, power cable)

#### **Operating of the crane:**

- ✓ Rotation of the crane
- ✓ Jib movements
- ✓ Combining the movements
- ✓ Beam movements
- ✓ Hook Operations
  - Following of pre-determined route with an empty hook
  - Approaching of cargo on a correct and safe way
  - Hoisting and lowering of cargo
  - Placing of cargo on trailers or heavy duty chassis (Maffi)



- Loading and unloading cargo in and out of a (simulated) hatch
- ✓ Grab Operations:
  - Operating and rotating an empty grab
  - Loading and unloading of bulk
  - Problem solving
  - Risk detection and safety
- ✓ Spreader operations:
  - Rotation of the crane with spreader
  - Combining the movements with spreader
  - Beam movements with spreader
  - Operating and rotating the spreader
  - Working with telescopic spreader
  - Operating flippers and flipper arm
  - Approaching containers on a correct and safe way
  - Hoisting and lowering containers
  - Placing containers on trailers or mafis
  - (un)loading containers from deck/in a hatch
  - Handling hatch covers
  - Working with attachments (over-height, -width)
  - Working with twin-spreader
- ✓ Problem solving

***Recapitulation and a practical test on the course***