

## Human Element Maritime Enhancement Tool (H.E.L.M.E.T)



Picture 1 - cargo crane

### HELMET ELEMENT 10.2 Item 4 "Cargo Handling Gear"

**FINDING:** During an onboard HELMET assessment, our HELMET Assessor noticed that the cover of a hoisting limit switch of a crane was damaged and the limit switch was inoperative.

In an effort to verify the condition, the Assessor requested evidence from the:

- Company's procedures with regard to routine inspection and maintenance schedule for the cranes' limit switches
- Latest inspection's result
- Defect report

According to the company's procedures, the covers of the switches need to be always in good condition, while inspection reports indicated that routine inspections were carried out as per company's PMS system. However, the condition of the limit switch was stated as satisfactory in the last inspection report conducted a week ago and no defect report had been created.

### IS THIS IMPORTANT?

A hoist limit switch is a safety feature setting the hoist travel within a prescribed travel range which obstructs the crane from lifting loads above its rated capacity. When such a limit switch is defective, the tension in the wire rope can exceed its breaking load and an incident might occur. The bad condition in which the limit switch was found declares that the routine inspection program of the company had failed to detect a possible dangerous condition, while the fact that it was uncovered, indicates non-compliance with company's procedures.

**SUGGESTIONS:** Crane limit switches' functionality needs to be inspected at regular intervals as per company's PMS, but also tested before each crane operation. Additionally, the waterproof covers of the limit switches need to be properly maintained to protect them from weather conditions.



Picture 2 - limit switch

**Notice:** Tip of the month is circulated by P@S monthly in an effort to inform the industry of the red flags raised from the implementation of our onshore and onboard HELMET risk assessment program to meet highest standards, carried out by H.E.L.M.E.T. Assessors.

#### Prevention at Sea Ltd

52 Arch. Makariou III Ave., Ydrogios Tower  
6017 Larnaca, Cyprus  
Tel: +357 24819800

#### PREVESEA

91 Ak Miaouli Str.,  
85 38 Piraeus, Greece  
Tel: +30 210 6437637

✉ info@preventionatsea.com  
🌐 www.preventionatsea.com

