



The Swedish Club

MONTHLY SAFETY SCENARIO

MARCH 2022

Injured during cargo operation

A general cargo vessel was in an African port preparing to discharge its cargo of steel bars. The Chief Officer planned the cargo operation and told the bosun to prepare the cargo hatch covers and ship's crane to lift off the hatches, which would be carried out by the ship's crew.

The plan was to start with the most aft cargo hold of the four holds. Each hold had two cargo hatch covers. Two ABs attached the lifting gear to the first hatch cover. They were all wearing the correct PPE, including work boots, a high visibility jacket and a hard hat. The lifting gear included wires with shackles that were secured to the hatch cover. When the wires were secured to the hatch, one AB attached a fibre web sling to the wires as it was difficult to hang the wires on the crane hook.

As the hatch was lifted it swung into the coaming of cargo hold 3 and became stuck. Two ABs tried to push the stuck hatch cover, at which point the web sling snapped and broke and the cargo hatch cover fell onto the coaming of hold 4.

One of the wires was slightly loose and hit one of the ABs on his arm, and another wire hit the other AB in the head.



Fortunately, the hatch cover did not hit either of the ABs. The lifting gear was made of wire with wire rope legs and a shackle at the end. All the gear was class approved with valid certificates.

During a later inspection it was found that the web sling was in a poor condition. It was soiled with oil stains and some broken fibres. The web sling had a Safe Working Load (SWL) of 10 tonnes with a safety factor of 6:1. This means that the sling would have broken if more than 60 tonnes was applied in a straight pull. This would only apply if the web sling was in a good condition. There were no certificates for the web sling. The cargo hatch cover weighed less than the SWL of the web sling.

It seems that the web sling broke because the hatch was stuck, and the crane continued to be briefly used. When the ABs approached the hatch and tried to free it, the sling broke.

The vessel had no risk assessment or procedures for how the lifting operation should be conducted and how the lifting gear should have been



secured. The danger zone for the hatch and gear had not been identified by the crew. The AB operating the crane had received the required training for operating it.

The injured ABs had to be taken to hospital. They recovered and continued to work at sea.

Questions

When discussing this case please consider that the actions taken at the time made sense for all involved. Do not only judge but also ask why you think these actions were taken and could this happen on your vessel?

1. What were the immediate causes of this accident?
2. Is there a risk that this kind of accident could happen on our vessel?
3. How could this accident have been prevented?
4. Do we have a risk assessment for this kind of job?
5. If we do, could this risk assessment be improved?
6. What are our procedures when we see someone working dangerously?
7. How should we approach a person working dangerously?
8. Are all the relevant crew trained for how to act in a situation like this?
9. Is there any kind of training that we should do that addresses these issues?
10. What sections of our SMS would have been breached if any?
11. Does our SMS address these risks?
12. How could we improve our SMS to address these issues?
13. What do you think was the root cause of this accident?