

Leaking cargo hatch covers

The bulk carrier was loading wire coils. When loading was complete the crew taped across the transverse beams of all the cargo holds with Ram-Nek plastic gasket. During the vessel's transit it sailed through heavy weather that lasted for about two days. During this time the vessel was pitching and rolling and the cargo hatches were covered in water.

While discharging in port it was found that the steel coils in the top tiers were corroded. The steel coils below the centreline and folding seams were the most affected.

A surveyor in attendance observed that the cargo hatch covers were not in an adequate condition. The greatest number of rusted coils were in holds 1 and 3.

The surveyor tested the water integrity of the cargo hatch covers with an ultrasonic device which detected significant defects to the sealing arrangements. The gaskets were in poor condition and the hatch covers tested positive for chloride which indicates that saltwater has leaked.

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The non-return valves for the drain channel were also in a poor condition as they were clogged and the ball inside was not moving. The transverse packing on the hatch covers was leaking, there were some cracked corners and leaking side joints.

The surveyor also found a number of leaking ventilation covers.

The cargo hatches and gaskets were in a poor condition. The cleats could not be tightened beyond hand tightening.



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. Do we use weather routing?
4. How often do we inspect the cargo hatch covers?
5. Are there PMS jobs for inspecting and maintaining the cargo hatch covers?
6. Are the non-return valves included in the PMS?
7. How do we test that the cargo hatch covers are in proper condition?
8. Do we use ultrasonic testing?
9. Do we have a risk assessment on board that addresses these risks?
10. How could this accident have been prevented?
11. What sections of our SMS would have been breached if any?
12. Is our SMS sufficient to prevent this kind of accident?
13. If procedures were breached why do you think this was the case?
14. Is there any kind of training that we should do that addresses these issues?
15. What can we learn?