Mooring Safety – Large Vessels Fatality File



Crew Member Dies During Mooring Operation

In order to attach the aft towline, the ship’s messenger line was lowered through the aft centreline Panama fairlead to the tug. The mate of the tug received the line and tied it to the tug’s messenger line, which was attached, in turn, to the steel tow wire. The aft mooring team on the cargo vessel took up the slack in the messenger lines and attempted to heave up the tow wire by hand.

The tug’s mate realised what the cargo vessel’s crew were trying to do and indicated to them, by shouting and using hand gestures, that they should use a winch to heave up the tow wire. The tug’s steel tow wire was 44mm in diameter and weighed 7.8 kg/m. While the use of steel wire ropes is common, a significant number of tugs use towlines made from synthetic fibre. These materials are significantly lighter than a steel wire of equivalent diameter and strength and therefore can often be heaved in by hand.

The cargo vessel’s mooring team then decided to arrange the hauling operation.

The carpenter had taken approximately eight to ten turns of the thick messenger line around the drum. These turns accumulated towards the outboard end of the drum as it rotated due to the angle of the lead from the pedestal fairlead. The free end of the messenger line then became entangled in ‘riding turns’, causing it to be heaved back into the warping drum with the part under tension. As this was happening, the tow wire came up onto the cargo vessel’s deck and the towing eye nearly reached the aft bitt.

As heaving continued, the messenger line slipped off the side of the warping drum, causing the tow wire to drop back down towards the tug. This re-occurred on several attempts until at one point, when the carpenter was standing with his head a few centimetres away from the drum, he was heard to cry out. The second officer stopped the winch and quickly moved around to the drum end. There, the carpenter was found slumped forward on the messenger line with a loop of rope hanging loosely around his neck. After medical attention at the port, the victim was declared dead due to a fracture dislocation of the cervical spine.