Mooring Safety – Large Vessels Stats and Facts

FACTS

1. Mooring lines under tension can snap back with significant force if they break or suddenly release. This can cause severe injuries or fatalities to crew members or nearby personnel.
2. During line handling or winching, crew members may get caught in pinch points between lines, bollards, or other equipment. This can result in crush injuries or limb entrapment.
3. Wet and slippery surfaces on decks, docks, or fenders increase the risk of crew members slipping or falling during mooring operations, leading to injuries or falls overboard.
4. Poor vessel control or sudden changes in wind or current can cause the vessel to collide with docks, piers, or other vessels. This can result in damage to the vessel, infrastructure, or injuries to personnel.
5. Strong tidal forces and currents can make mooring challenging. Unpredictable currents or sudden changes in water level can put excessive strain on mooring lines, leading to equipment failure or vessel instability.
6. Inadequate or damaged fenders may fail to absorb the impact between the vessel and the dock or other vessels. This can result in damage to the vessel, infrastructure, or injury to personnel.
7. Malfunctioning or improperly maintained mooring equipment, can fail under stress, causing accidents, injuries, or damage to the vessel or infrastructure.
8. Adverse weather conditions, such as high winds, rough seas, or heavy rain, can make mooring operations more challenging and increase the risk of accidents or injuries.

STATS

- Many of mooring accidents have occurred during the handling of ropes/wires, where ropes/wires have parted (53%) or where ropes/wires have jumped/slipped off drum ends/bitts (42%) with 5% caused by actual equipment failure.
- The average period of incapacity for work with mooring injuries is 48.0 working days, the hospital bed for hospitalization in the surgical department – 20.6.
- Among International Group P&I Clubs, there have been 858 injuries and 31 fatalities involving mooring operations during the five-year period to 2021.
- Statistical evidence shows that in 53 per cent of all cases of personal injuries arising from mooring incidents, ropes (wire or fibre) have parted under load and personnel within ‘snap-back zones’ have been hit. In 42 per cent of cases, ropes/wires have not parted, but injuries have resulted from ropes jumping/slipping off drum-ends or bitts, or personnel being caught or ‘dragged’ by ropes, fixtures coming off mountings and from other causes.