Crane Barge Safety Stats and Facts



FACTS

1. Crane barge structures can be subjected to significant loads and stresses during lifting operations.
2. Overloading the crane or the barge itself can cause instability, leading to accidents, such as tipping or capsizing. Improper load distribution, inadequate counterweights, or unbalanced loads can also affect stability.
3. Improper lifting techniques, lack of communication, or operator error can lead to accidents.
4. Malfunctioning of crane’s hoisting or rigging systems, can lead to mechanical failures.
5. Crane barges operating in busy waterways or congested areas are at risk of collisions with other vessels.
6. Crane barges use electrical systems for various operations. There is a risk of electrical shocks, fires, or explosions, posing serious dangers to workers and the barge.
7. Human error, lack of training, inadequate supervision, or complacency can contribute to accidents.
8. Accidental spills of fuel, lubricants, harm marine life and ecosystems.

STATS

- The Occupational Safety and Health Administration (OSHA) states that 1 in 1,000 maritime crane operators will suffer fatal injuries.
- According to statistics cited in a National Institute for Occupational Safety and Health report, one crane tips over during every 10,000 hours of crane use in the United States. Nearly 80% of these tip overs are caused by operator error. The same report states that nearly 54% of these incidents were the result of failure to extend outriggers before swinging a boom or making a lift maneuver.
- 4 main types of cranes have been associated with crane-related fatalities. Of the 307 fatal crane incidents, 216 (71%) involved mobile or truck cranes. Sixteen of the fatal incidents involved tower cranes (5%), 13 involved floating or barge cranes (4%), and 12 involved overhead cranes (4%).
- Cranes pose a great risk to pedestrians, cyclists, motorists, and workers if proper safety protocols are not adhered to. In their most recent analysis on crane accidents, the U.S. Bureau of Labor Statistics reported that an average of 44 people die in crane-related accidents in the U.S. each year. Crane accidents occur equally at construction sites (24%) and factories or plants (24%), with nearly 70% of crane accident fatalities occurring in the specialty trade, heavy

and civil engineering, and construction industries. Additionally, just over half of all fatal crane injuries involved the worker being struck by an object or equipment.

- According to Certification Bureau (CICB), 90% of crane accidents happen because of human error.
- Crane collapses were the fourth leading cause of death. An unstable, uneven or icy surface on which the crane was sitting accounted for 12 fatalities (15%). Overloading the crane accounted for another 10 deaths (12%). In 7 cases (9%), the crane load or boom shifted. In 56% percent of the reported cases, there was no information provided as to the cause in the CFOI narrative. Of the 81 crane collapses, 34 involved mobile cranes.