



MOORING LINE CHAFING GEAR

The mooring line is damaged or chafed as it rubs a rough surface. In natural lines, chafing appears as a fuzzy texture or broken yarns hanging down. In synthetic lines, chafing is a hard outer layer. Chafing gear that covers the full range of motion of the ships movements prevent damage.

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MISTREATMENT OF MOORING LINES IS AN ELEVATED RISK TO FLEET

Naval Safety Command (NAVSAFECOM) discovered multiple instances in which ships are not properly utilizing chafing gear on their mooring lines. The Local Area Assessments team identified mooring line abrasions, sustainment of preventable damage, and an increased risk of ship or boat damage or serious injury to personnel.

NAVSAFECOM has identified overall lack of adherence to fundamental policy, program structure and functional areas of responsibility.

Naval Ships' Technical Manual (NSTM), Mooring and Towing, Chapter 582 offers a list of various recommended chafing gear.

- Old or discarded fire hoses
- Commercially produced chafing gear
- Smaller line such as 6-thread
- Rags
- Heavy canvas wrapping
- Leather
- Rubber



PROPER CHAFING GEAR PROTECTION CAN REDUCE WEAR AND INJURY

Without chafing gear, excessive abrasion and cutting of the line can take place; this in turn will cause a loss of line strength and eventual failure.

In order to properly protect mooring lines, an adequate length of chafing gear should be installed in areas where the line could rub against rough surfaces. Continuous monitoring of chafing gear placement should take place to ensure that the gear remains in place and is effective throughout high and low tide intervals, as well as periods of adverse weather.

Chafing gear should be installed:

1. Where the eye of the mooring line makes contact with the mooring fitting.
2. Where the mooring line passes through a chock, or along a sharp edge.
3. On fixed objects, along sharp edges that are in contact with a mooring line.
4. Where contact is possible with the edge of a concrete pier or any obstruction during tidal changes.



NAVSAFECOM RECOMMENDS THE FOLLOWING ACTIONS:

1. Deck leadership should be familiar with all references and requirements regarding mooring line care and the installation of chafing gear and train junior Sailors to do the same.
2. Duty section personnel such as the CDO, OOD and deck personnel should conduct routine visual inspections of mooring lines and installed chafing gear to verify its effectiveness. This is most critical during tidal changes and adverse weather.



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