

# 9 Ways to Prolong the Lifespan of Ropes

Did you know that 95% of personal injury incidents are caused by ropes and wires, and 60% of these incidents take place during mooring operations?

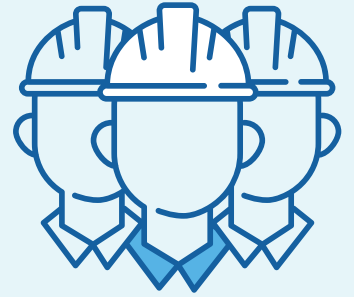
Ensuring that your mooring ropes are in the best possible working condition keeps your crew and dock workers safe and contributes towards a more sustainable future. Prolonging the lifespan of the ropes will make your operation more cost effective in the long term and will reduce the amount of material released into the ocean, thus reducing your environmental footprint.



Here are nine of our best tips to optimize your rope's performance and lifespan.

## 1 Installation should be carried out by experienced crew, according to the manufacturer's instructions

Incorrectly installed ropes have a high risk of becoming twisted. Twisting can cause a mooring rope to weaken by as much as 6% per turn per meter and this may become a safety hazard for the crew and port workers.



## 2 Regularly maintain mooring winches and fittings

Maintaining a smooth surface on mooring winches and fittings (such as mooring bits, bollards, fairleads, Panama chocks, and rollers) is key to prolonging a rope's lifespan. Sharp edges and rust will damage the rope and cause cuts, pulled strands or yarns. Debris from rust and iron may also penetrate the rope and cause further damage.

## 3 Handle ropes with care and follow the manufacturer's recommendations

This keeps the ropes in the best possible shape and lays the foundation for a long-lasting rope.

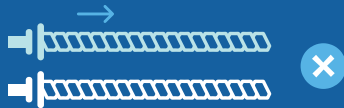


## 4 Keep ropes covered and away from sunlight when not in use

Ultraviolet (UV) degradation is a very common occurrence. Covering ropes when they are not in use will give them the best possible protection from UV rays. Indirect UV rays may still cause deterioration, even if the ropes are under shade.

## 5 Do not store ropes with chemicals

Certain chemicals can damage ropes beyond recovery. It is highly recommended to always keep all types of chemicals away from ropes.



## 6 Use the same type of ropes and tails on all positions where they are working in parallel

Ropes from different manufacturers may have slightly different elongations. Ropes working in parallel must be of the same model, construction, material, running time and condition (used/new) to prevent one of the two ropes from bearing the whole load.

## 7 Consider rope protection

Rope protection can help to prevent or limit damage to mooring ropes. There are several solutions, such as a braided protective jacket (either on the entire length or some parts of the ropes), or some form of chafe protection (such as the TIMM Chafe Guard), that can be purchased separately.



## 8 Conduct regular inspections (by crew and third parties)

Rope inspections can help reveal stress, damage, or wear on mooring ropes, and help prevent accidents before they occur. Expert advice from third parties can provide the crew with useful knowledge on how to optimize the working conditions for the ropes.

## 9 Line Management Plan (LMP)

Implementing and maintaining an updated Line Management Plan (LMP) on board will make life both easier and safer for the crew and help them increase the lifespan of the ropes on board. Software-based LMP, such as the one offered by Wilhelmsen, will keep track of the hours moored and log inspections while informing you when they are due. It also gives direct access to guidelines and manuals and helps you decide when to retire the rope.



### Wilhelmsen Ships Service

Phone: (+47) 67 58 40 00

Fax: (+47) 67 58 40 80

Postal Address:  
PO Box 33, NO-1324  
Lysaker, Norway

wilhelmsen.com

Scan now



for a closer look