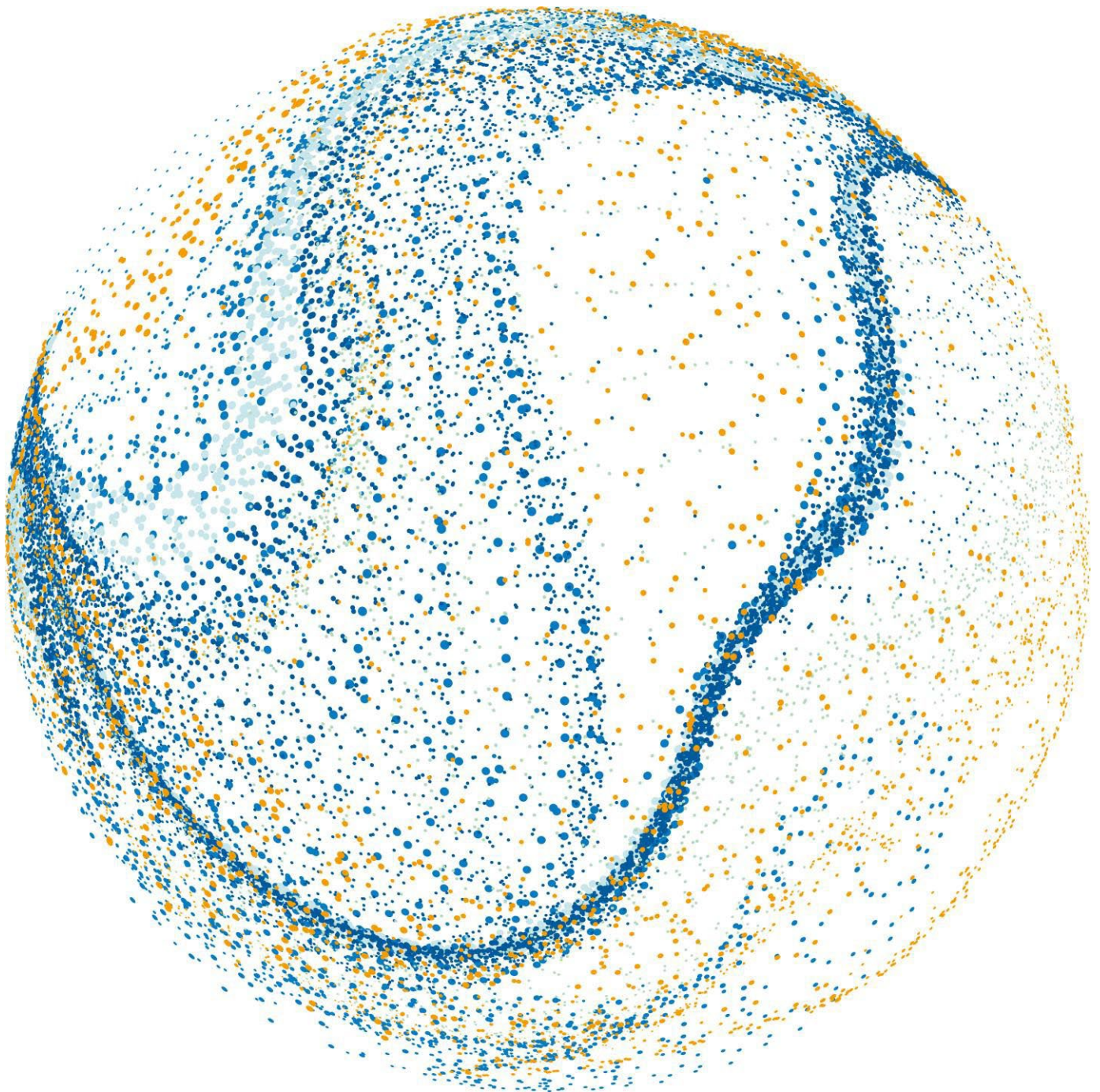


Installation Best Practices for Timm Ropes



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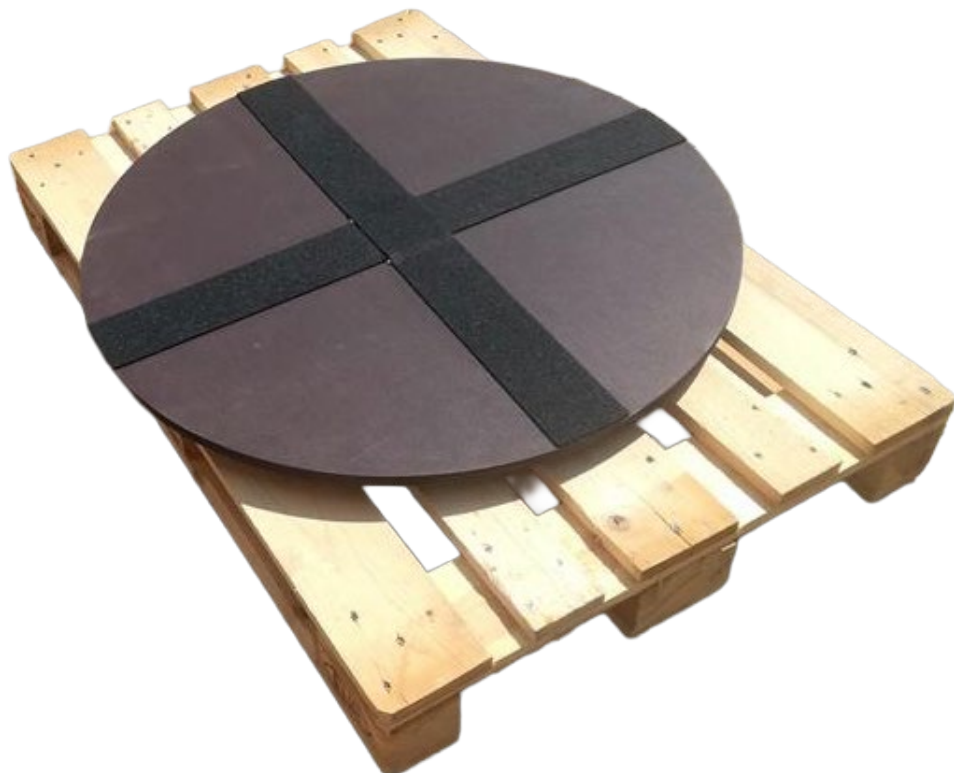
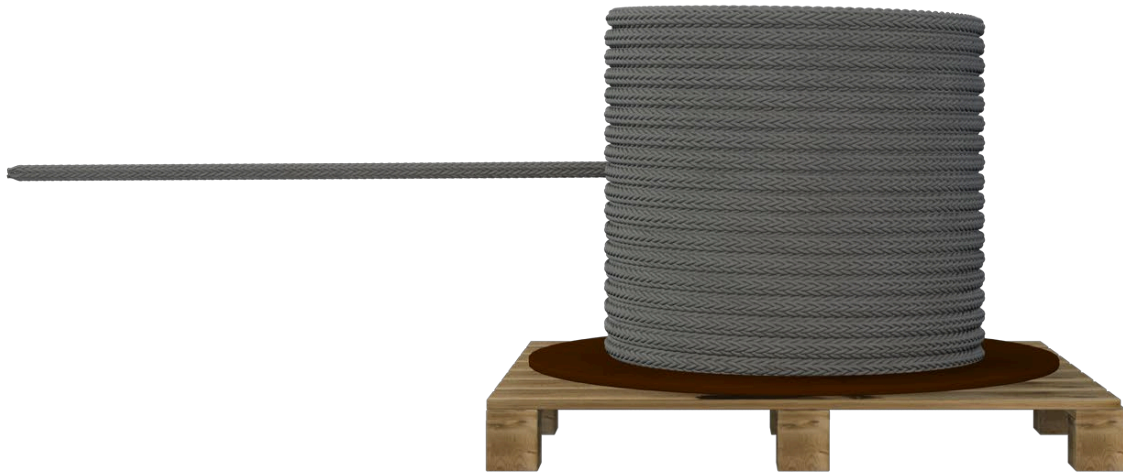
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Preparing for installation



Access Turntable

- The rotating platform ensures that the rope is installed without twist.
- Twist in the rope will reduce the overall strength, and it is important to ensure that the installation is done without twisting the rope.



Inspection Upon Arrival

- The product packaging should be thoroughly inspected, and any cuts or significant damages should immediately be relayed to a supervisor including relevant photos if possible.
- Check the product label against the packing list.
- Check the packing list against your own order documentation. "
- It is crucial that the rope certificate matches the delivered product. The certificate should be filed immediately.



Basic Storage Guidelines

If the rope is not installed upon arrival, good storage is necessary.

- Ideal storage temperature is 10°C -20°C.
- Ensure the product is secured on a level surface.
- Avoid direct exposure of sunlight.
- The ropes should not be stored in the same area as chemicals.
- The ropes should be stored in a dry environment.
- The ropes should not be stored close to any sharp edges or objects.

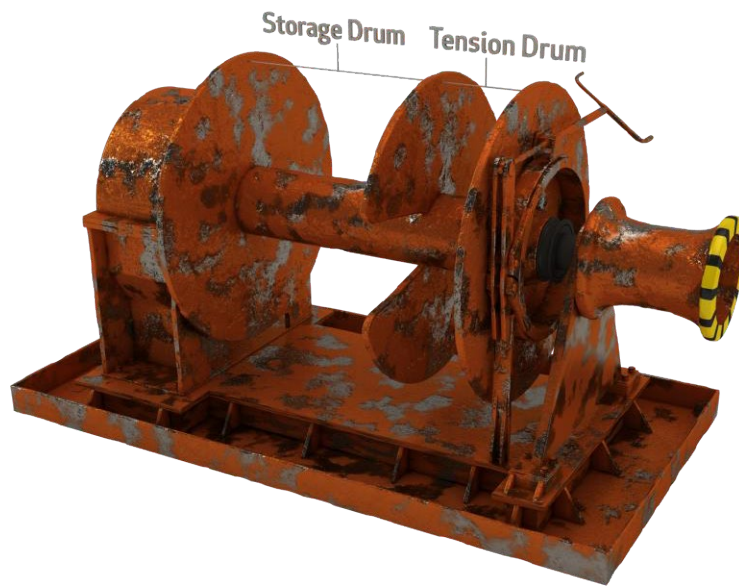


Surface Preparation for Rope Installations



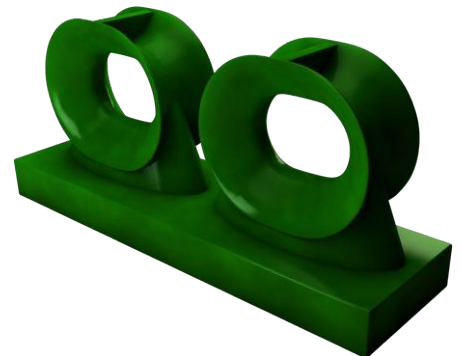
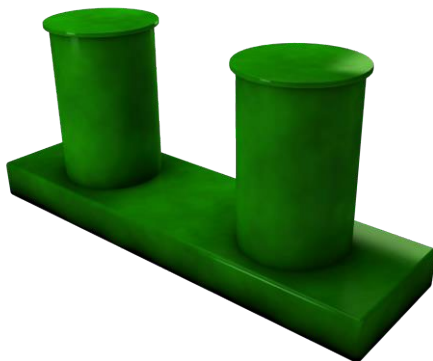
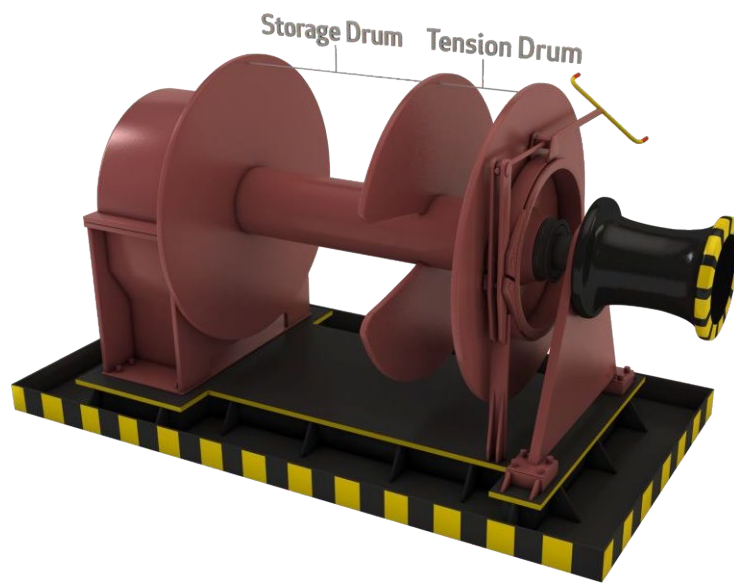
Preparation should focus on all receiving surfaces

DECK, WINCH DRUMS / FLANGES, BITTS, ROLLERS, AND CHOCKS.



After Grinding and Painting Maintenance

DECK, WINCH DRUMS / FLANGES, BITTS, ROLLERS, AND CHOCKS.



Winches

FOCUS: DRUMS, FLANGES, AND WARP HEADS

Maintenance areas:

- Loose paint, rust and edges must be chipped or sanded loose.
- All damaged surfaces must be grinded down to pure metal and winch flanges rounded off.
- Suitable metal filler must be used on severe gaps and extremely damaged areas.
- Use a suitable primer before painting to prevent rust.
- Paint, and let it properly dry.
- Do a final visual and hands-on inspection.



Chocks and Double Bitts

FOCUS: ALL RUNNING SURFACES

Maintenance areas:

- All damaged and rusted surfaces must be grinded down to pure metal.
- Suitable metal filler must be used on severe gaps and extremely damaged areas.
- Use a suitable primer before painting to prevent rust.
- Paint and let it properly dry.
- Do a final visual and hands-on inspection.



Roller Leads

FOCUS: ALL RUNNING SURFACES

Maintenance areas:

- All damaged and rusted surfaces must be grinded down to pure metal.
- Suitable metal filler must be used on severe gaps and extremely damaged areas.
- Use a suitable primer before painting to prevent rust.
- Paint, and let it properly dry.
- Do a final visual and hands-on inspection.
- Make sure the grease nipples function correctly, and that the roller leads are rotating with the ropes.



Sharp Deck Edges

FOCUS: ALL RUNNING SURFACES

Maintenance areas:

- Where the ship design itself creates a challenge, such as with the roller fairlead sheaves, we recommend using the best available rope protection – such as the Timm Chafe Guard.
- Well maintained deck equipment is still necessary to prevent unnecessary damage.
- Correct mooring plan with regards to placement of the roller sheaves is also crucial to prevent chafing damage on the rope.



Timm Chafe Guard

FOCUS: PREVENT CHAFING DAMAGES FROM ROPES

Features:

- Suitable for all types of fiber ropes.
- 100% high tenacity PES.
- Standard 3M and customized sizes.
- High melting point (260°C)

Benefits:

- Easy installation.
- Rot-proof.
- Lightweight, with a smooth surface.
- Excellent UV and heat resistance.



Timm Chafe Guard		Acera Amundsen		Timm Master		Acera DaGama	
Part number	Part description	From [mm]	To [mm]	From [mm]	To [mm]	From [mm]	To [mm]
411255	TIMM CHAFE GUARD W65 3m	16	25	16	22	16	22
411256 (supersedes 410195)	TIMM CHAFE GUARD W76 3m	26	38	23	32	23	32
411257	TIMM CHAFE GUARD W90 3m	39	44	33	38	33	40
411258 (supersedes 410199, 410215)	TIMM CHAFE GUARD W100 3m	45	68	39	45	41	56
411259 (supersedes 410207, 410203)	TIMM CHAFE GUARD W125 3m	69	82	46	64	57	68
411260 (supersedes 410912, 410914)	TIMM CHAFE GUARD W150 3m	83	102	65	81	69	96



Consequences of Incorrect Installation

- No back tension applied during installation will result in loose layers which will cause the rope digging into the layers and damaging the rope during mooring operations.



- Insufficient grinding of damages caused by steel wires on deck equipment will cause cuts and damages on the rope.



- Removing or adapting the Chafe Guard to fit the bollard at port will cause the Chafe guard to be less effective and easily damaged. This will decrease the protection of the rope.



Installation

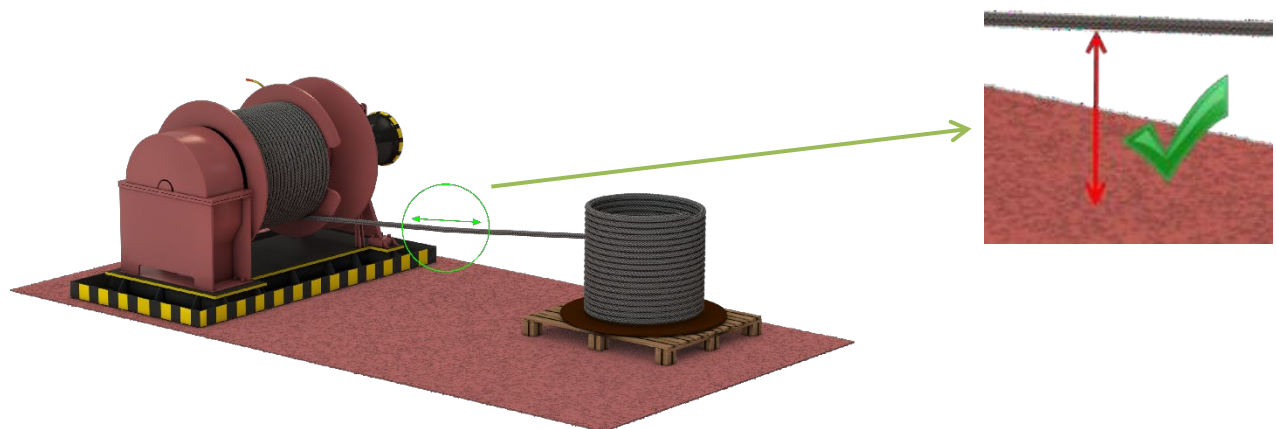
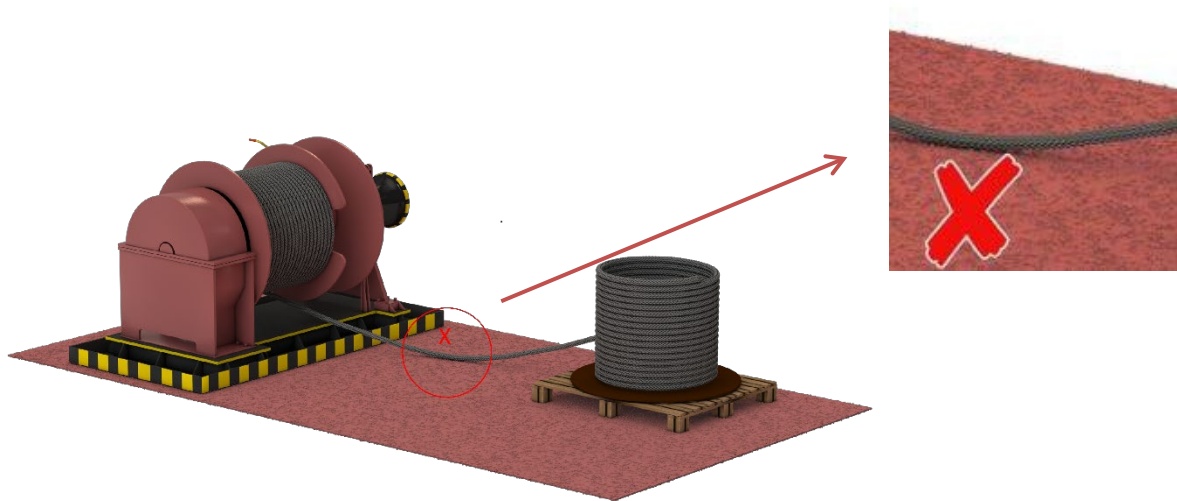


Attaching the Rope to the Drum

- Begin installation by securing the rope end/eye to the drum
- We recommend using a rotating platform for the installation
- This will ensure that the rope is installed without twist and cause reduced line design break force.

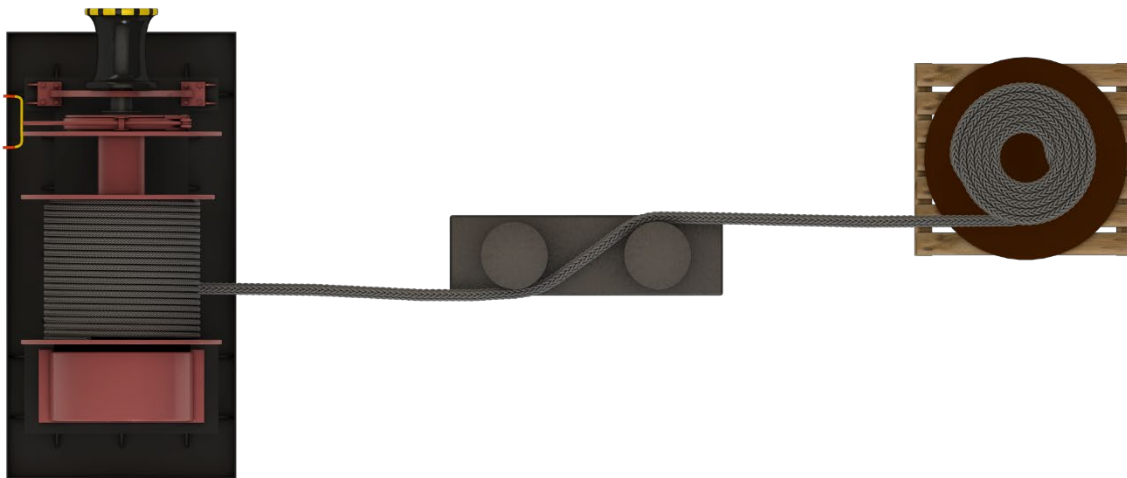


Avoid Contact Between Rope and Non-Skid Surface



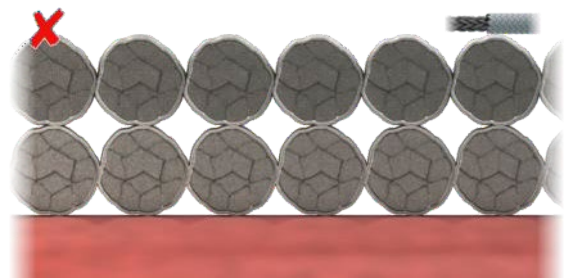
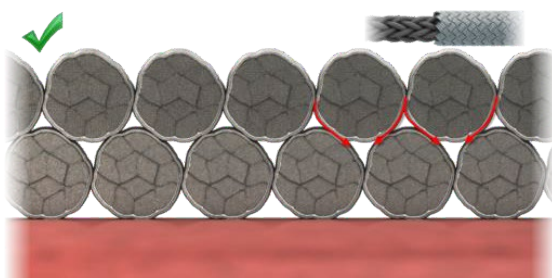
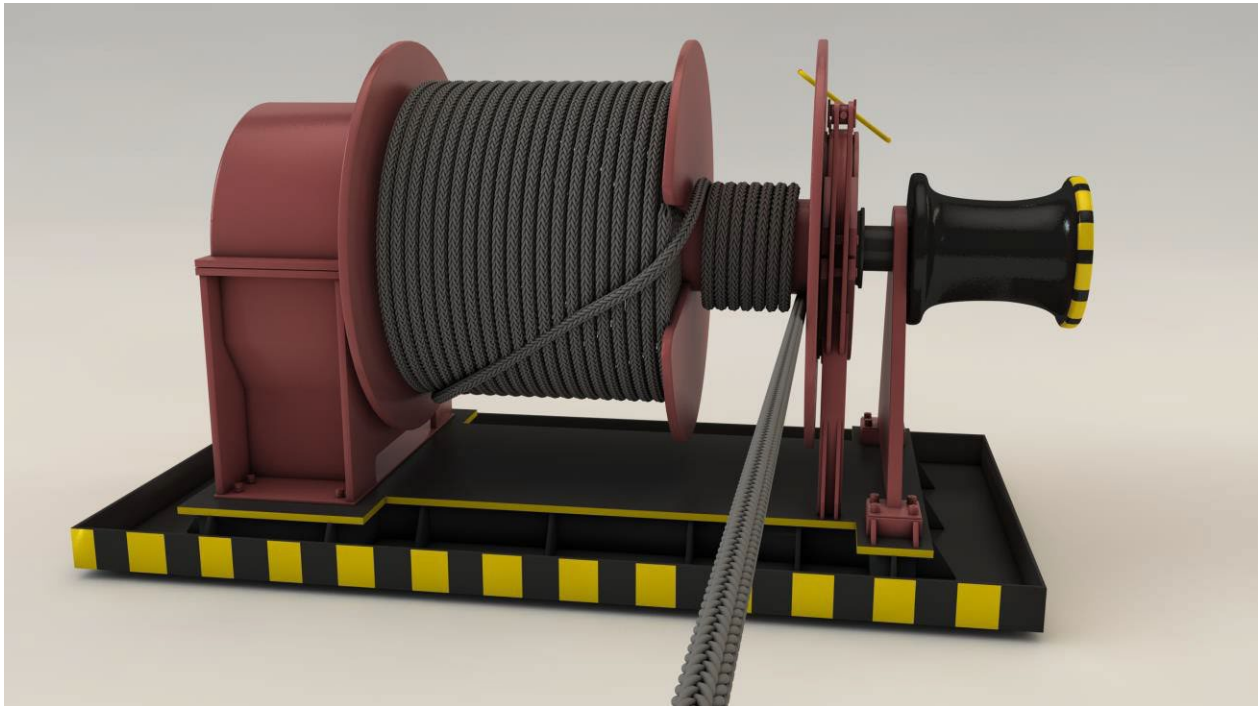
Apply Tension During Coiling

- Apply tension on the rope when coiling.
- Hand tension can be enough.



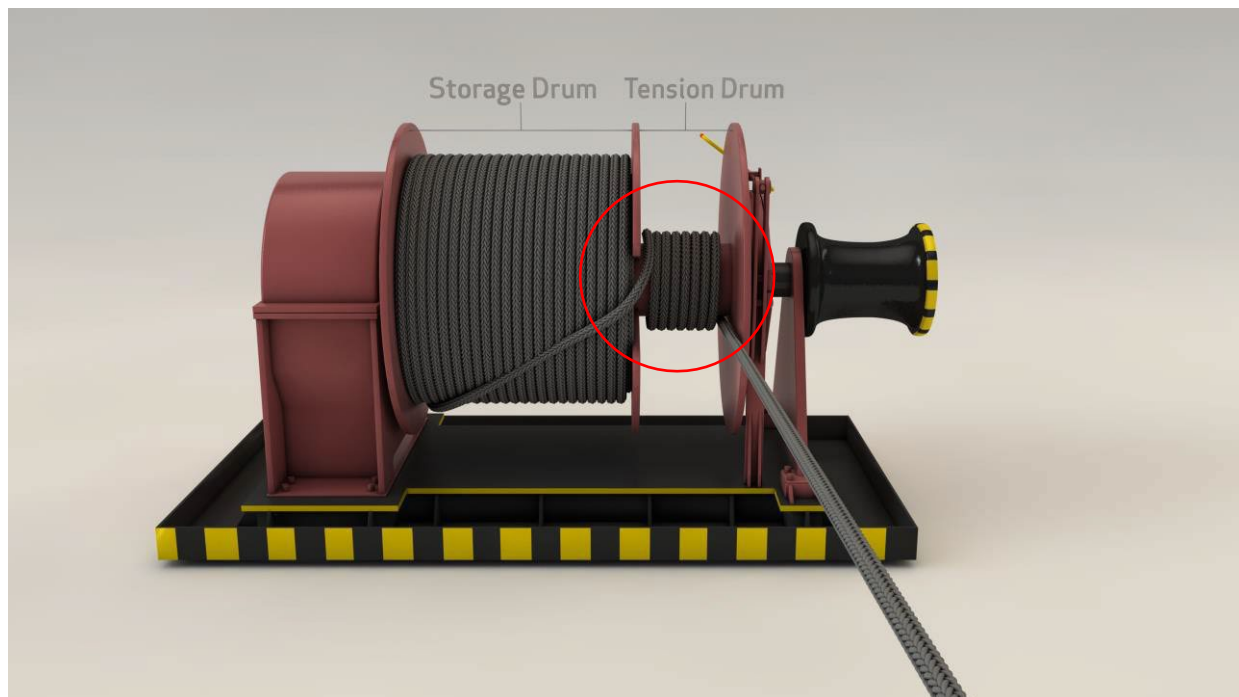
Layer the Rope Evenly

- Use the “level winding technique” to layer the rope evenly, without space between the layers, across the whole drum.
- The next layer should follow the valleys between the turns on the previous level.



Layer Rope on the Tension Drum

- For split drum winches, create one full layer across the whole tension drum.
- For HMPE fiber ropes we recommend 10 turns on the tension drum.
- For conventional fiber ropes we recommend five to six turns on the tension drum.
- With varying rope diameters and winch sizes, best practice is to make as many turns as possible in one single layer.



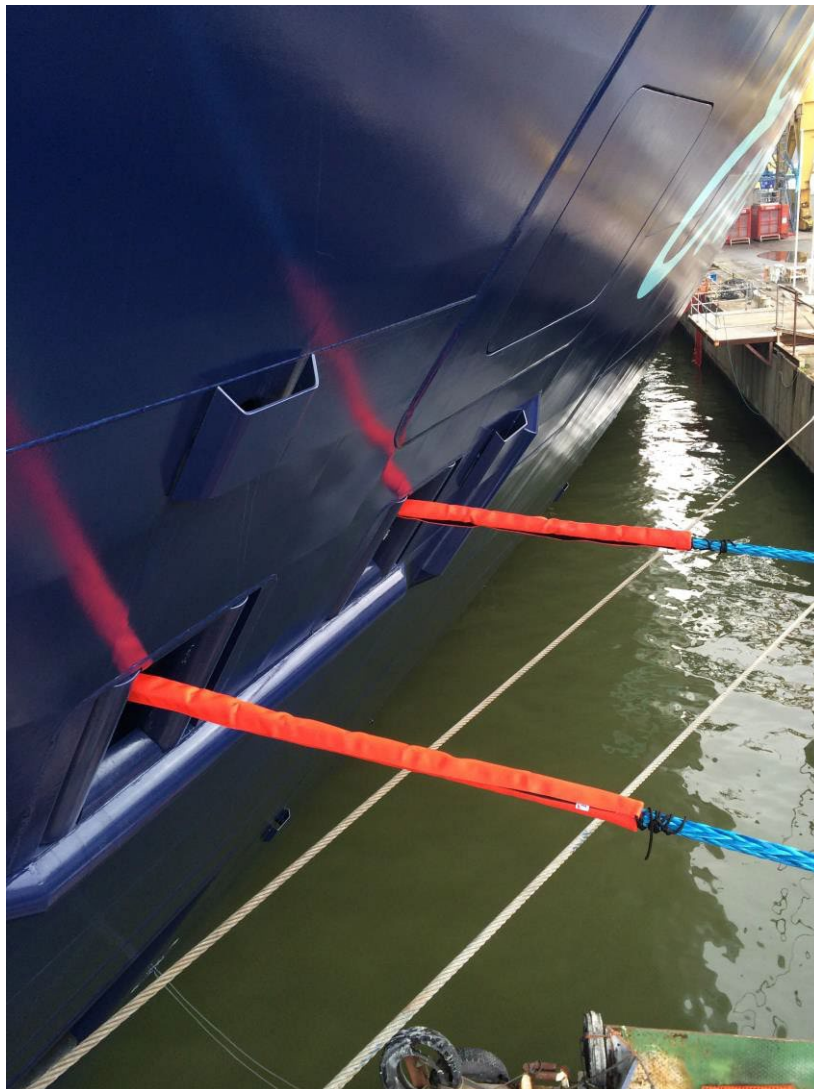
Connecting the Stretcher/Tail

- Connect the mooring tail to the mooring rope by using a cow hitch.
- Pull each side for a tight connection.
- Wind the tail on the storage drum.
- Cover the winch to protect the ropes between mooring operations.



Chafe Guard Installation

- The Chafe Guard protect the surface of the rope from abrasion, heat build-up, and UV-damage.
- Follow the Timm Chafe Guard installation manual to ensure correct installation of the Chafe Guard.
- Replace the Chafe Guard before abrasion penetrates the rope surface.
- Do not weave the ties through the rope.



Supporting and Related Documentation

Please seek further information in the following documents to ensure the ropes are kept in good conditions and facilitate for a prolonged lifespan of the ropes:

- Product sheets
- Splicing manuals
- Timm Chafe Guard Installation Manual
- Timm Rope Retirement Guideline