

NORSAFE TOR MK2

NEXT GENERATION ON-LOAD RELEASE EQUIPMENT FOR LIFEBOATS

Certified acc. Resolution MSC.320 and MSC.321 by DnV and USCG.



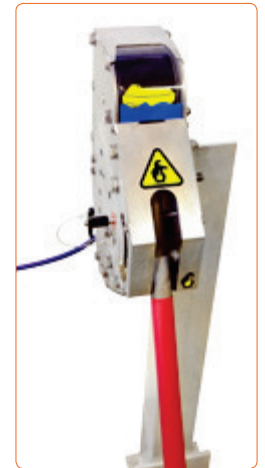
Norsafe TOR MK2

THE NEW GENERATION HOOK SYSTEM

- Certified acc. Resolution MSC.320 and MSC.321 by DNV and USCG.
- Not sensitive to wear and tear.
- No critical tolerances.
- Padlock on both sides indicating proper reset and cable adjustments.
- Made of Duplex stainless steel. (SS2377/EN 1.4462)
- Only visual inspection to be carried out by the crew.
- Successfully tested against premature release.
- All tests successfully completed and witnessed by DNV and USCG.

OTHER FEATURES

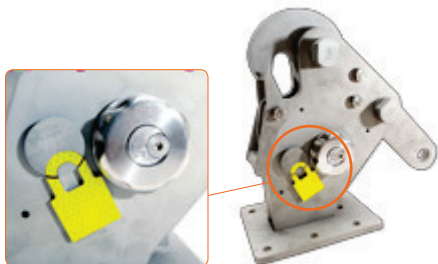
- Not sensitive to vibration or overload, when the release cable is disconnected.
- Maintenance free.
- Increased strength of release cables.
- No greasing points.



Next generation release and retrieval equipment for lifeboats

As a response to industry concerns, Norsafe has undertaken an extensive process to improve release gear for lifeboats. This targets safety issues, especially the avoidance of a premature release. The work has generated the TOR MK2 On-Load Release Hook System. Norsafe is proud to present this new concept, a further development of the long proven TOR MK1 Hook. The latest TOR MK2 Hook System is intrinsically safer and includes those safety devices required by operators and regulators. The new System has already been well received by Norsafe's key customers.

The TOR MK2 Hook System has been designed specifically for simplicity of use and clearly understandable operation. The yellow padlock, visible on both sides of the hook - indicates that the hook is set and release cables correctly located. Further, the release handles are logically built up visually to indicate, with a "lifeboat to the water" that a release is safe. The locking mechanism design of the new TOR MK2 hook ensures that secondary safety systems or fall preventers (FPD) are not necessary.



All lifeboats - new and existing - can be fitted with TOR MK2 hooks

Norsafe's new design provides minimal maintenance requirements. All parts in the TOR MK2 are made of Duplex Stainless Steel (SS22377/EN 1.4462). There is no need for galvanizing of parts and it is strictly forbidden to paint the hook. The hook is not sensitive to wear and tear and has no critical tolerances. The release cables are a new stronger RCS H type, with 250% increased safety factor to those used previously. The cables are arranged so that even if the hook is incorrectly reset, and the release handle is forced, the cables are protected from stretching or damage. The release handle mechanism presents a logical user interface, and gives actual information to the operator showing the status of the hydrostat. The on-load release activation require 4 physical actions to be performed. By this we have implemented a safety barrier against premature on-load release!

Even with the cables disconnected, the hook is able to stay closed in the most extreme load conditions and is tested to 7.5 x SWL with no damage to the hook. The release mechanism geometry is such that the hook behaves positively when exposed to load and vibration, so this will not create forces in the cables, and will not lead to an accidental release. Even with the cables disconnected. Norsafe has developed the hook to meet all new regulations from IMO for lifting hooks. All tests are completed and witnessed by the DNV and USCG. All evidence suggests that this is the safest On-Load release hook available in the market today.

The crew need only perform visual inspections on the hooks. The hook is maintenance-free for the crew and shall not be lubricated or otherwise maintained. There are no lubrication points. Further, there are no roller bearings installed in the hook system. Annual service, 5 Year Overhaul and Re-hooking shall only be performed by the OEM (Original Equipment Manufacturer) or their approved service provider. The TOR MK2 hook System is available in 3.36 Ton, 5.0 Ton, 8.0 Ton and 14 Ton.

World fleet estimates give 30 000 vessels equipped with lifeboats fitted with On-Load release hooks. For a large number of existing lifeboats, maintenance has had little priority. In such cases the hooks can present a real danger to ship's crew.

These existing On-Load hooks should be replaced with safer hook systems. Norsafe's TOR MK2 is ideal for Re-Hooking of all Norsafe brand lifeboats. Norsafe is well prepared for this activity, both in terms of engineering and our extensive world-wide service network.

Norsafe has a long term, strong working relationship with the Classification Societies and Flag States. In cooperation with them and strict following our "Re-hooking policy" we will improve safety onboard and ensure that only, our service partners will be qualified to do re-hooking on our boats.

Please see Norsafe Re-Hooking Policy:
www.norsafe.com/service
or contact Norsafe Service Department:
service@norsafe.com

24-7 telephone number to the Norsafe Group

+47 370 56 333

service@norsafe.com

Norsafe

B E T T E R B Y D E S I G N