



Magic Marine Safer Sailing

Nowadays Safer Sailing is a big issue. More attention on safety is a good thing so for 2006 Magic Marine did its part on Safer Sailing. First of all there is the Safety spreader, (a clean spreader with quick release hook) on all harnesses. Secondly we've added an adjustable foot strap that can be opened completely in case of slipping trough when capsizing. To be able to cut trough thicker ropes we've designed a new Safety Knife that also can be used more easily with gloves on.

Magic Marine Safety spreader

It's best to compare our Safety Spreader with an airbag. You use it maybe ones in a lifetime. At this moment it has to be simple in use and reliable. At all other times the Safety spreader shouldn't be any different then a normal one.

Therefore we aimed to make a safe spreader with a quick release hook that's 'clean', 'not bulky' and lightweight. On top of that it has to work in the most awkward situations, for example when stuck in your trampoline or caught by ropes.

With our main goals set we've started with analysis of release mechanisms, strength and possible constructions. One major issue that occurred in this phase of the design was 'cross impact' after releasing the hook. Cross impact occurs when the force on the hook is rather angled then straight forward. The result of cross impact is a stuck hook after releasing the quick release pin. To prevent Cross Impact the hook of our safety spreader has a round base. Therefore the hook will release no matter what direction of pull on the hook.



SAFETY SPREADER KEY FEATURES:

- After releasing the pin the hook will disconnect from the spreaderbar no matter what the direction of the force on the hook is. In other words: 'cross impact' will not occur. It will not happen because of the ball shape on the end of the hook.
- The spreaderbar with the safety mechanism is clean before and after releasing the hook, because of a tight neoprene cover. After releasing the hook you wont get caught up again because of a loose pin or other parts of the spreader.
- The safety system is mounted on the Magic Marine 'tube' spreader. It's thin, light and strong. The dimensions of the complete safety spreader won't block any forward movement of the upper body.
- There's not much added weight on the safety spreader compared to a standard spreader. (About 50gram)
- The safety construction feels 'solid' there's not much margin between the separate parts. There's a spring inside the tube that shoots out the hook after releasing. When locked the spring cancels the margin between the separate parts.
- The pin to release the hook is attached to a dyneema rope.
- The Dyneema rope is constructed on the spreader in such a way that the force needed to release is cut in half.
- The standard safety spreader fits on any harness with a webbing not wider then 40mm with buckles on the side of the harness.
- The standard safety spreader has a slot on top and bottom of the spreaderbar to put trough shoulder- and leg straps.
- The standard safety spreader comes in sizes L-XL with a total width of 30cm and in size S-M with a total width of 26 cm.
- There's also a safety spreader in 2 sizes especially for the Ultimate hamess (with the buckles on the spreaderbar)
- For the Skiff Harness the safety system is welded on a stainless steel plate. The plate is permanent connected with the harness.
- There's a detachable plastic spring on the hook that acts like a retaining device after releasing the hook.