

Attachment Points

ABSTRACT

Current hatch protection methods present on-board ships are hazardous and commonly fail to meet protection regulations. This is leading to hatch protection to be either; substandard, unused or unfit for purpose. As a result there have been numerous accidents relating to them and these have caused either lifechanging injuries or, in most cases, fatalities.

84.21%

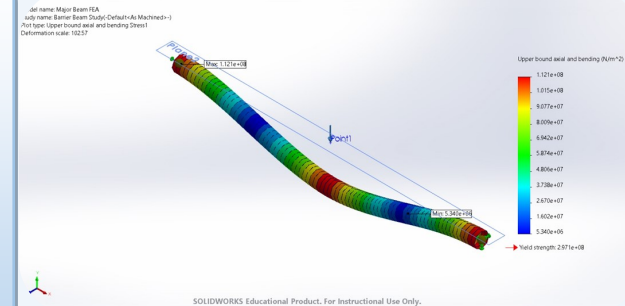


Want a barrier which can meet standards & is fast/easy to use.

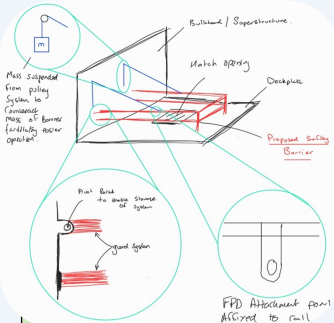
PROJECT AIM - Improve safety in the maritime industry by designing a new hatch barrier.

METHOD

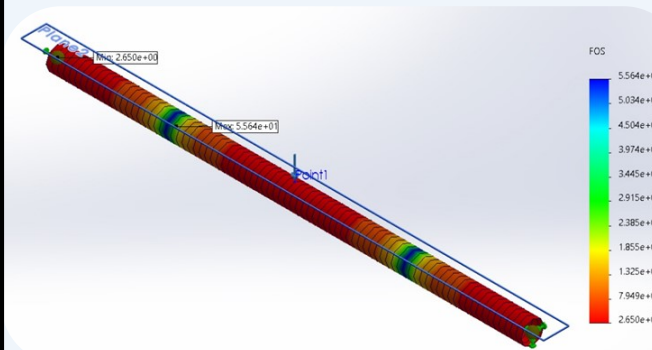
- Investigate current design issues and user needs.
- Investigate how to areas of interest which can be applied to a new design to suit user needs.
- Model a product using CAD.
- Test the product using FEA.
- Assess final product suitability.



PRODUCT DEVELOPMENT



Scan QR code for Animation.



FINAL DESIGN

The final design was assed and a user survey carried out:

- 100% thought it was safe and offered adequate protection.
- 100% agreed it met current standards.
- 83.33% agreed it exceeded current designs.

CONCLUSION

The implementation of the selected design has the ability to address the identified issues surrounding improper hatch protection. It does this by addressing and adhering to the legislation that's ignored and by minimising the detrimental factors that humans incorporate in to safety. The design although more intricate when compared to a stanchion and wire/chain arrangement is, in concept, much easier and faster to deploy, faster to stow and safer than its counterpart.