



KORMARINE 2015

Hall 4, L21



INTRODUCTION

For many years, fires and other accidents have been an issue within engine rooms and associated areas. In 2003, SOLAS introduced requirements to shield against oil spray onto hot surfaces. More recently, EI15 code for hazardous area classification now recommends "porous spray guards" to coalesce oil leak, "rendering it non-hazardous".

Now, there are many shielding products marketed as solutions to oil and HP steam spray. However, through our regular work on-board a variety of vessels, we are alarmed to see products which are either not fitted correctly, or simply not of a suitable design to stop spray outs and mist formation.

From our own pressure testing process, we have seen ill-fitting or poorly designed shields CAUSE spray and mist. It is important therefore, to ensure that shielding solutions are fit for purpose and installed correctly.

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BAD DESIGNS / INSTALL

The following shield types are commonly used on-board vessels, and often installed incorrectly. Our in-house testing of these shields demonstrates considerable lateral spray-out and mist formation.

Steel Bands



Held tight against the flange, generally with poor connection design with open gaps.

- Not pressure-containing, so pressure will force leak out.
- Release is not controlled.
- Release typically results in side spray and/or mist formation.
- Easily installed incorrectly

Splash Tape



Convenient tape solution, should be wrapped with 50% overlap, all the way down to pipe.

- Often used above maximum pressure rating
- Typically installed incorrectly
- As a 'band', the release is not controlled.
- In all cases above, release results in side spray and/or mist formation.

Single-Ply Fabric





Low cost materials with no internal central scrim.

- Single-ply material easily pierced by spray
- Resulting spray also transformed to mist formation

OUR SHIELDS

Our shields are designed to prevent spray and mist formation. Each shield design is also tested in our Pressure Test Facility, where we can simulate flange leaks, regulating pressures up to and in excess of 100Bar.

STAINLESS STEEL SAFETY SHIELD: internal mesh & quick release connector



Design ensures pressure diffusion to prevent spray & mist.

- Multi-layer internal mesh diffuses pressure
- No side spray or mist formation
- Simple fitting & removal, no mistakes
- Effective at very high pressure

PTFE SAFETY SHIELD: Multi-layered, Teflon Coated Fibreglass



Design envelopes flange, where oil coalesces and drips safely.

- Multi-layered Teflon Coated Fibreglass
- · Central thickened scrim for added protection
- PTFE coated fabric, stitching & pull-cords
- Can be made to fit virtually any shape

Visit www.flangeguards.com to view video of shield testing



APPLICATIONS

Typical applications for shields include fuel oil, lube oil, thermal oil, steam, LNG and acids. Whilst flanges are generally identified as weak-points, our shields can be made for a variety of other pipe joints and fittings:-

Expansion joints, compensators & hose Whole pump-sets

Filter heads & bodies Valves; Ball, butterfly, NRV, Bonnet etc



Our solutions...

THE FLANGEGUARD DIFFERENCE

QUALITY Highest quality materials & most effective shield design

All shield designs

Special designs for any pipe joint or shape



We all know that oil and HP steam leaks can result in catastrophe so when the price of failure is high, never compromise on quality.

CONTACT US

We have worked on international projects, directly with clients in South Korea and around the world. However, we can also put you in touch with our network of local representatives and agents.





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