

Technical Bulletin

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Subject: Stainless Steel Hardware – Cold Welding

Cold welding is a process where 2 similar metals become bonded together without the addition of an external heat source. This phenomenon occurs across many metal types including stainless steel. This is an issue which is generic across industries when using similar metals, and is no specific in any way to Capital Safety parts.

Capital Safety offer many different products in various materials including stainless steel. Stainless steel is a smooth material which is susceptible to this type of action. It has been known in limited cases that when using stainless steel hardware that the turning actions of the nut down the length of the bolt can generate sufficient heat to cause cold welding. To best resolve this issue it is recommended to use an anti-seizing type paste, which lubricates the surfaces but which does not cause the hardware to become over lubricated and work loose. Capital Safety recommends this type of paste to reduce the potential of this happening. We take the action of pre-applying this paste on many of our products, however not all. This paste can be used on any materials where you can see this action and not specifically on Capital Safety components.

Capital Safety (ANZ) recommends the use of Molybdenum Disulfide grease on stainless steel fasteners to prevent seizing.

Please contact Capital Safety on 1800 245 002 (Australia), 0800 212 505 (New Zealand) if further clarification is required.