

## GOLDSEAL GROUP CONFINED SPACES

Objective: To clarify Goldseal Industrial Rustproof provides superior solutions in enclosed environments

Background: Closed environments challenge surface coatings in a number of ways

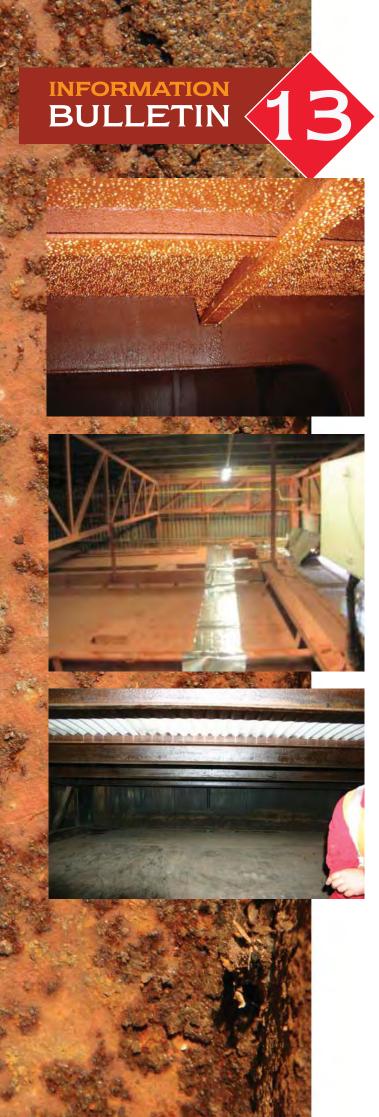
- Closed environments such as confined spaces or barge interiors have surfaces that are often dirty or difficult to prepare
- Many are condensation environments such as shaft or pile interiors, attics, near refrigeration machinery or above processes that produce steam
- Many closed environments have poor airflow which stalls the cure of solvent or waterbased paints such as water treatment plants and sewage works.
- Many surfaces are not completely dry from a coating perspective which can trap water molecules under a film
- Some are low temperature areas in mines, tidal power stations which can restrict cure.

Goldseal Industrial spray grade has been formulated for such conditions.

Goldseal is a specialty product designed to address difficult corrosion environments. It is a compound not a paint. Goldseal can be applied in damp environments, at low temperatures (and Alpine conditions) directly onto oxidised steel and old paint systems without grit blasting. It penetrates steel and displaces moisture, encapsulating and neutralising existing corrosion. There are two formulations for different situations, Goldseal Hot spray and Goldseal Coldspray.

Goldseal Hot spray is a 97% solids formulation that is applied molten by standard airless spray. With a VOC rating of 2.9% w/w it can be applied to bridge bearings, barge interiors or situations where no air movement restricts the use of solvent borne or catalyst containing coatings

The Goldseal group has over 25 years experience in these situations.



Case Study: Barge interior BHP New Zealand Steel. The barge interior was inspected and the bilge cleaned manually with limited success. Some rust scale could not be completely removed. The barge interior walls and framing were encapsulated in Goldseal Industrial hot spray. A programmed inspection a year later then rechecked the heavy scale areas. The Goldseal compound had penetrated these areas and softened the scale. The lower hull and bilge areas were re coated. An inspection in 2009 showed the Goldseal to be in good condition, HAVING DELIVERED A 20 YEAR SERVICE LIFE TO DATE.

Case Study: Cool Store attics have been a classic area of condensation damage. The upper layers of the cool store panelling are prone to corrosion in the attic. The joins of these panels can absorb condensation moisture, which freezes inside the polystyrene panels adding tons of weight to the cool store ceiling. Goldseal can neutralise the corrosion and seal the joins in one application. In this case Goldseal is an excellent example of an extension of asset life solution for older buildings.

Case Study: Sewage digester hoods Auckland NZ. This hidden cavity above the sewage digester is the perfect environment for Goldseal.

Some maintenance paints are seen, need regular cleaning or are part of corporate colours. However where the requirement is maximum corrosion protection, minimum down time and longest service life Goldseal CSI technology is ideal. In extreme unwashed environments Goldseal delivers outstanding value for every maintenance dollar.

Goldseal Coldspray is a soft semi mobile compound and can be applied to localised areas under wharfs and through long reach nozzles to inaccessible areas from a mobile 10lt pressure pot. (see bulletin six)

Case Study: Motorway Bridge Bearings New Zealand. Goldseal has been applied to bridge bearings in confined spaces for many years and is recommended by Opus International Consultants, as the product can be applied with little surface preparation, has no low temperature cure issues and no Health and Safety issues involving solvents, catalysts or VOC toxicity.



Case Study: Port Loading area retained by sheet piling. A concrete ship docking wharf is extended over water with a sloping boulder bank from the sheet piling to the waters edge. There are 2 relevant issues.

■ There is no seal between the top of the sheet piling and the concrete, so corrosion will expand and eventually reach the rebar and cause spalling.

SOLUTION: Fill the join with Goldseal Coldspray using a pressure pot

■ Stripping thick rust off sheet piling, sandblasting and paint coating without intercoat contamination is difficult. As this is a completely sheltered environment with no rain fall to wash off the salt from the spray zone a paint coating will deliver a short service life

SOLUTION: Coat the whole area above the boulders to the top of the sheet piling with Goldseal Hot spray, then remove the spray tip and fill the concrete join with a pencil stream of Hot spray. If the underside of the wharf is beginning to spall, then spray the whole underside of the wharf and spalling will diminish to zero over 18 months (See Quest Independent Inspection report of Raglan wharf after 20 years of spalling treatment)

## **GOLDSEAL GROUP**

## Rustproof Services (NO) 2005 Ltd

P.O. Box 186, Whishing, 3542. N. Z.

Telephone: 078662304 Freephone: 0800787877 Mobile: 0276315657

E-mail: rustproof services@gladsomeness

www.goldsealrustproofing.com