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MarineProtect[®]

Prepared for the challenges faced at sea.

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Because the sea shows no mercy.

Your guarantee for the perfect solution: As the inventor of the Petrolatum Tape, we know how maximum corrosion protection works, even under extremely difficult conditions.

MarineProtect®. Always protected.

Ports and domestic ports, oil rigs, offshore wind farms: In environments subject to extreme corrosive and mechanical stresses, MarineProtect[®] provides **extremely reliable long-term protection on piers**.

Protection in extremely harsh environments.

Seawater is one of the most aggressive natural environmental media. Piers and pipes in the water are under constant attack by the ever-changing mixture of **air**, **UV radiation** and **salt** that is particularly prevalent in splash zones where oxygen flows through, but that can also be found in intertidal zones. Mechanical loads such as **rough seas**, **flotsam**, **ice and infestation with marine growth** accelerate the process of decay. It is only possible to defend against these extremely harsh conditions on a long-term basis with the correct protection from DENSO: **MarineProtect**[®].





One system solution – all the benefits.

- Wide range of application areas: round or hexagonal piers and pipes made of metal, concrete or wood, entirely or partially submerged in water.
- Simple, quick & cost-efficient use: above and under water, no water evacuation required, no interruptions and no waiting times.
- **Environmentally friendly**: complies with the OECD aquatic guidelines 201, 202 and 203.
- **Tough**: reliable mechanical protection, even against flotsam or ice.
- **Low-maintenance**: easy inspection thanks to simple opening and closing of the jacket.
- **Flexible**: also suitable for the retroactive protection of existing systems.

Heavy corrosion on piers

Aggressive salt deposits



Corrosion protection is as simple as that.

No additional equipment, no drying, no waiting times: A particular advantage of MarineProtect® is the quick and easy application both above as well as under water. Once any residues or deposits have been carefully removed from the surfaces, there are just three processing steps required to achieve maximum reliability.

MarineProtect[®]: perfect protection in just three steps.

MarineProtect[®]-Primer

based on a natural wax: for outstanding coverage of the steel surface - especially under water.

> Full primer coat by hand or with a roller or palette-knife.



MarineProtect[®]-Tape

2. based on petrolatum: a very flexible tape for easy application, creating a reliable corrosion protection coating on all surface shapes.



Spiral wrapping with at least 50 % overlap.

Applying the jacket for especially

high mechanical protection.

MarineProtect[®]-Jacket

3. made from durable and resilient High Density Polyethylene (HDPE): a coating with an extremely high level of mechanical protection – even against breakwater, flotsam, ice and sustained UV exposure.



The right solution for all conditions.

Whether in a port, a domestic port or an offshore wind farm: every environment poses its own specific challenges. MarineProtect® provides the solution - with two system versions that ensure precisely the type of protection required under the respective conditions.

The right system for any requirements.

MarineProtect[®]-2000 FD

- Tailored project solution with extremely high mechanical resilience, e.g. against severe ice conditions.
- The jacket is fixed in place using a safe and reliable screw connection.
- Particularly suitable for maritime environments.

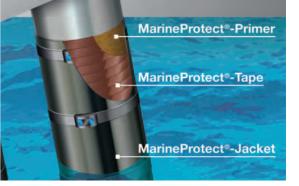
MarineProtect®-2000 FD with screw system

MarineProtect[®]-100

- Adaptable to piers with changing dimensions due to corrosion or erosion.
- The jacket is fixed in place using the Smart[®]Band tension belt system.
- Particularly suitable for piers in coastal waters and stagnant waters.

MarineProtect®-100 with tension belt system







Reliable protection across the globe.

From Bora-Bora to Turkmenistan: MarineProtect[®] has been used successfully for many years in the Caribbean Sea, the Atlantic Ocean, the Caspian Sea and the Black Sea.



Peru, Port of Talara MarineProtect®-2000 FD 206 piers, DN 1000 (40")



Iran, Urmia Lake Bridge MarineProtect[®]-100 372 piers, DN 800 (32")



French Polynesia MarineProtect®-2000 FD 1.019 piers, DN 300 (12")





Russia, Black Sea, Port of Taman MarineProtect[®]-2000 FD 500 piers, DN 1220 (48")



Germany, Port of Kiel, Ostseekai MarineProtect[®]-2000 FD Pier protection on the largest cruise ship dock, DN 2400 (96")

Advantage through expertise.

With its Petrolatum Tape, patented back in 1927 and continuously developed since then, DENSO Group Germany continues to set standards in the passive corrosion protection for pipelines. This experience and the unique composition of selected raw materials have all been taken into account in the formulation of MarineProtect[®]. The MarineProtect[®] Tape reliably keeps moisture away from surfaces, preventing corrosion from occurring in the first place.



East Timor, Tibar Bay Port MarineProtect®-100 30 piers, DN 1800 (72")





The advantages of MarineProtect®:

- Reliable and cost-efficient
- Quick and easy application both above and under water
- No time-consuming drying process, no waiting times for curing
- Also perfect for the retroactive protection of existing systems
- Environmentally friendly, non-toxic to fish and marine mammals

"Absolutely resistant, even under the highest loads in port facilities with chemical industry, like ours in Huelva."

Pascual García, Department Manager for Industrial y Marítima, GEOJET SL, Spain





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