ADDE®

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ADDE® Underwater Protect

Anti-Corrosion Protection Solution for Piles and Pipes in the Splash Zone

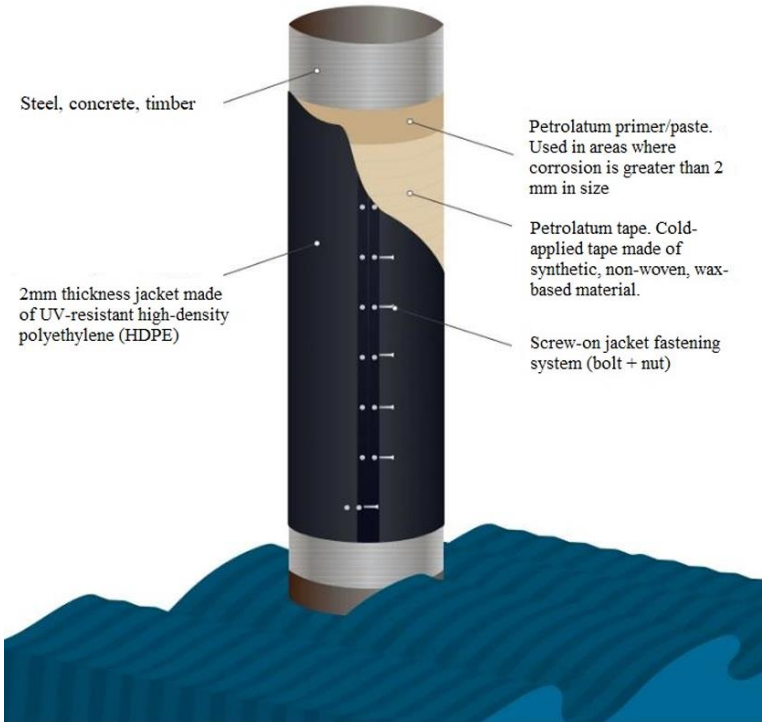
ADDE®UWP
Anti-Corrosion Protection Solution for Piles and Pipes in the Splash Zone

Product Information

Advantages:

✓Reliable and durable corrosion protection
✓ Resistant to marine and freshwater environments
✓ UV radiation resistance
✓ Suitable for underwater application
✓ Simple and rapid installation
✓ Effective protection against atmospheric conditions
✓ Compliance with environmental standards

System Structure: ADDE® UWP (Screw-Fastened Jacket)



Product Description

The ADDE® Underwater Protect (UWP) system is designed to protect piles and pipes, partially or fully submerged in water, from corrosion and atmospheric exposure. The product is specifically engineered for use in highly corrosive environments where traditional paint and coating systems are

ineffective. It offers robust resistance to marine and freshwater conditions and is a versatile solution applicable to metal, concrete, and wooden piles and structures.

The key advantage of the **ADDE® UWP** system is its ease of application both above and below the water surface, enabling protective coating application on existing structures without the need to remove existing paint layers.
The **ADDE® UWP** system provides effective anti-corrosion protection through the use of petrolatum-based tapes. These prevent moisture from reaching the steel surface, halting the corrosion process. The outer protective jacket exhibits high resistance to mechanical stress and atmospheric conditions.
ADDE® UWP Primer, based on natural wax, ensures excellent coverage of steel surfaces, even underwater. During application, the primer displaces water from the structure's surface while filling and leveling irregularities and cavities, providing reliable corrosion protection.
ADDE® UWP Tape is a petrolatum-based anti-corrosion tape incorporating a durable polypropylene (PP) non-woven fabric. The tape is spirally wrapped over the **ADDE® UWP Primer**, with applied tension ensuring water displacement and forming a sealed, reliable anti-corrosion barrier.
The applied anti-corrosion coating is encased in the **ADDE® UWP Jacket**, made from high-density polyethylene (HDPE) with high strength and UV resistance. The jacket shields the anti-corrosion coating from external loads, ensuring long-term corrosion protection under exposure to waves, strong winds, and UV radiation. The **ADDE® UWP Jacket** is secured using a reliable screw-fastening system.

Product Specifications:

ADDE® UWP	Properties	Units	Value
Primer	Density	g/m^3	0,93
	Dropping point	C	$\geq$ 100
Tape	Thickness	mm	1,2
	Coated film density	µm	100
Jacket	Thickness	mm	2
	Elongation at break	%	$\geq$ 700
	Tensile strength	N/mm^2	21

Packaging:

ADDE® UWP Primer: Supplied in 10 kg buckets
ADDE® UWP Tape: Supplied in 10 m rolls
ADDE® UWP Jacket: Sized according to the dimensions of the pipe or pile

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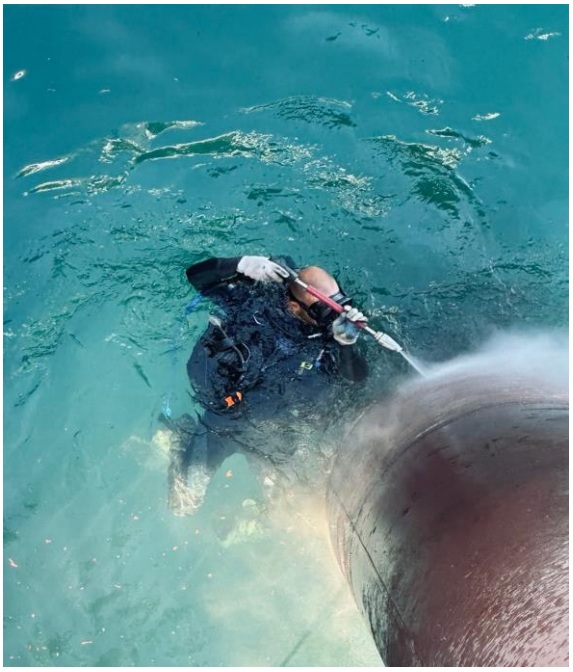
Technical Instructions

Work Procedure and Technological Process

The process involves a systematic approach to applying anti-corrosion protection to metal structures in port environments (marine and inland).

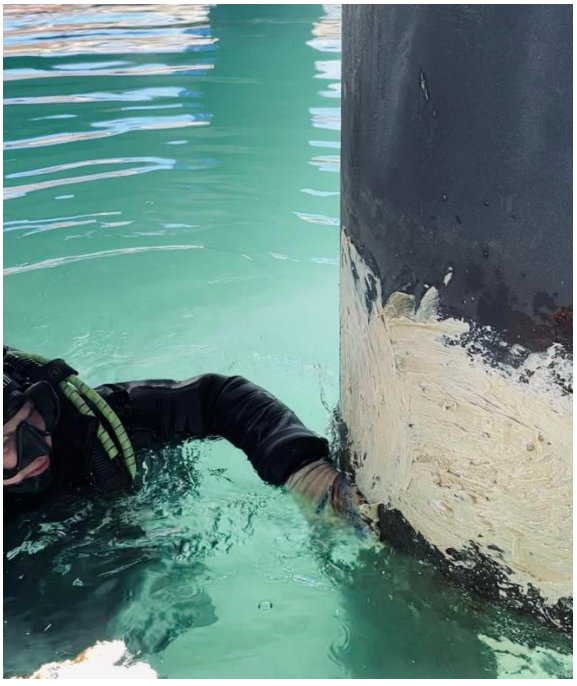
- Surface preparation

Thoroughly prepare the surface. The surface must be completely cleaned of contaminants, marine growth, biological organisms, loose rust, and poorly adhered paint layers. Immediately after cleaning, to prevent the formation of loose rust or accumulation of biological organisms, apply the **ADDE® UWP Prime**r to the prepared surface to inhibit rust formation and biological growth. For optimal results, we recommend performing abrasive blasting (above water) or high-pressure water jet cleaning. It is recommended to install the upper edge of the system with a 0.1 m overlap onto the restored paint coating.



- Application of ADDE® UWP Primer

Immediately after surface preparation, apply the **ADDE® UWP Primer** to prevent rust formation and the accumulation of biological organisms on the surface. The primer is applied manually or using a spatula, brush, or roller. The consumption rate of **ADDE® UWP Primer** is 350–500 g/m². Special attention should be paid to ensuring thorough application of the primer in hard-to-reach areas, including weld seams, bolted connections, rivets, cavities, and defects. All depressions, cavities, and structural imperfections must be completely filled with the primer. During the application of **ADDE® UWP Primer**, water is displaced from the surface of the structure, preparing it for the wrapping of **ADDE® UWP Tape**.



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- Wrapping with ADDE® UWP Tape

Begin wrapping from the top, applying a double layer of tape around the circumference of the pile (if necessary, closely abutting the overlap area), and then proceed downward in a spiral to the designated lower point, maintaining a 50% overlap. Complete the wrapping of the pile by applying a double layer around the circumference at the bottom. Use gloves or a cloth to smooth out any irregularities on the tape surface. Do not perform wrapping of piles at temperatures below 10°C.



- Jacket Preparation

Jackets are typically (but not always) supplied rolled, with labels indicating the contents of each roll. A single roll may contain jackets of various sizes. Ensure the label detailing the roll's contents is intact before removing the first jacket.

- Installation of the Plastic Jacket

If necessary, tightly roll the jacket and secure it with a fastening strap to allow it to be lowered from a boat or dock to the diver/installer. Once placed in the water, the strap can be removed, and the jacket can be installed onto the pile. When securing the jacket over the petrolatum tape, ensure that the edge strip is positioned on the outside, not tucked inward, and that the jacket is properly aligned both vertically and circumferentially around the pile. Install the jacket sections from bottom to top. Then, using a hand tool or a tension-adjusting tool, tighten the fastening bolt sufficiently to secure the jacket in place without applying maximum force. Sequentially tighten all fastenings on the jacket.

