



Coatings for Maritime Techniques and Offshore:

## Ceramic Polymer: Internal coating of cooling water intake risers for extensive FLNG-Project in Australia

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The liquid gas tanker „Prelude FLNG“ is the world’s biggest swimming offshore facility. For the protection of the cooling water intake risers the company EUPEC Pipecoatings applied our internal coating CERAMIC-POLYMER SF/LF-3, which provides outstanding resistances against abrasion and corrosion.



Internal coating of the intake risers

The ship is huge; 488 m long, 75 m wide and 90 m high. It anchors above the „Prelude“-gas field, 200 km off the Australian coast, extracts the natural gas out of the ground and liquefies it. The storage capacity is 600,000 metric tons.

Per hour, 50 million (!) liters of sea water are required to cool down the gas during the liquefaction process at minus 162°C (-260°F). The internal coating of the risers has to feature an outstanding abrasion resistance to withstand such strong streaming water.



### Technical Details

**Project:** Internal coating of cooling water intake risers

**Diameter of the pipes:** 1.07 m + 0.76 m

**Total area:** 3,800 m<sup>2</sup> internal coating

**Coating product:** CERAMIC-POLYMER SF/LF-3

**Product requirements:** excellent abrasion resistance and stability against sea water

**Application of the coating:**

EUPEC Pipecoatings, FR-Gravelines/France



**Our partner for the comprehensive protection of pipelines**

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Cooling water intake risers of the „Prelude“



Our product was subjected to numerous tests

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**Our Product:**

- Ceramic-Polymer SF/LF-3

**Product Advantages of CERAMIC-POLYMER SF/LF-3**

- superior abrasion resistance
- excellent chemical resistance
- temperature stability up to 150°C (300°F)
- long-lasting corrosion protection
- 1-layer-system
- short curing times (after post-curing of 1 h at 30°C (86°F) the pipes were already transportable!)
- free from solvents
- offshore-suitable - Test according to ISO 20340 (Performance requirements for protective paint systems for offshore and related structures)

**One thin film, fast drying-time by post-curing**

The internal coating for the cooling water intake risers was applied with a layer thickness of 500 µm (20 mils) simply by airless spraying method. Just one layer is sufficient to prevent the pipelines long-term from serious abrasion and heavy corrosion damages.

The curing time of the freshly coated pipes was reduced effectively by post-curing. Already after 1 hour warming in the oven at 30°C (86°F) the pipelines were transportable!

**Are you searching for resistant coatings with specific physical properties?**

**We offer a versatile product range and competent technical support!**