

Coatings for Tanks und Pipelines:

External coating of 90 km oil pipeline; Our “Proguard-Series” provides a tight cross linking of the polymer chains even at high substrate temperatures ($T_g > 120^\circ\text{C}$)

Ceramic Polymer GmbH
Daimlerring 9
DE-32289 Roedinghausen

www.ceramic-polymer.de



The pipeline has a diameter of 24 inch. 10 km were already coated during this current project.

One of the biggest oil refineries worldwide is located in Abadan at the Persian Gulf. From here, a pipeline with a length of 90 km leads to the port city Bandar Mahshahr. The pipeline was installed about 7 years ago. In Abadan the oil has an inlet temperature of 90°C . On the long transport distance it cools down to approx. 60°C outlet temperature.



Usually the special PP-wrapping provides long-term corrosion protection for underground pipelines. But in this case the polypropylene tapes shrank substantially due to the high service temperature. Thereby, large metal surfaces are uncovered and unprotected.

The corrosion of the bare metal is rapidly accelerated by the highly standing, saline groundwater. Thus, countless leakages occur in the pipeline; the oil flows out constantly.

Technical Information:

Coating Product: Proguard CN 100iso

Parameters of the pipeline: 90 km length, 24 inch diameter

Oil temperature: 60°C up to 90°C

Product Requirements: reliable corrosion protection, high resistance against saline groundwater



Contact Ceramic Polymer GmbH:

David Garcia Simao (Director)
+49-5223-96276-15 | dgs@ceramic-polymer.de

Jan Robert Schroeder (Sales Manager)
+49-5223-96276-16 | jrs@ceramic-polymer.de

Woldemar Haak (Sales Manager)
+49-5223-96276-13 | wha@ceramic-polymer.de

Our Product:

- Proguard CN 100iso

During its extensive refurbishment the pipeline is excavated in separate sections. The PP-wrapping is removed and surface damages are repaired. The substrate is grit blasted accurately. Afterwards our premium coating „Proguard CN 100 iso“ is applied easily by airless spraying method.

The repair and new coating of the pipeline is conducted during ongoing operation. Oil with a temperature of 90°C flows constantly through the pipe.

„Proguard CN 100 iso“ is applied directly on the hot steel substrate!

The 2-component epoxy coatings of our solvent-free „Proguard-Series“ (VOC = 0 mg) are based on ultra-modern, unplasticized special resins. The Tg-value (glas transition temperature) of these coating systems is > 120 °C. Therefore, a tight cross linking of the polymer chains is achieved even at high substrate temperatures.

**Are you searching for a high-performance coating for specific applications?
Our corrosion experts will gladly assist you!**