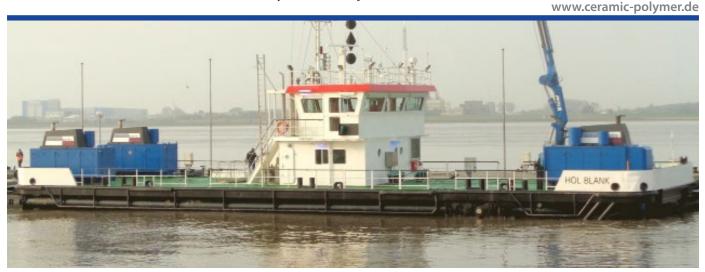
### **Coatings for Maritime Techniques:**

## Ceramic Polymer: Internal coating of pressure pipes for "HOL BLANK" still intact after 10 years of operation!

Ceramic Polymer GmbH Daimlerring 9 DE-32289 Roedinghausen



HOL BLANK - Water injection device for Bremen/Bremenhaven - Image rights: bremenports GmbH & Co. KG

In 2007, the harbor company "bremenports GmbH & Co. KG" – Department Engineering and Steel Hydraulics Constructions – built a new water injection device. For long-lasting corrosion protection of the pressure pipes they applied our coating CERAMIC-POLYMER SF/LF. Resistances to the river water and heavy abrasion characterizes this coating product. This year in summer the ship was maintained; after 10 years of operation the coated pipes are still perfectly intact.



Major pressure pipe (diameter ND 700 mm), internal coating after 10 years of operation – Image rights: bremenports GmbH & Co. KG

Technical Details	
Project:	Water injection device, built 2007
Size:	Total length 40 m, total width 10 m
Pump capacity:	2 x 3.600 m³/h against 21,5 m WC (water column)
Internal coating:	Pressure pipes, 90° elbow pipes
Coating product:	CERAMIC-POLYMER SF/LF

The water injection device "HOL BLANK" is used in the whole harbor area of the river Weser in the cities Bremen and Bremerhaven.

The ship moves upstream and pumps water in the soil of the shipping channel through special flushing tubes with nozzles. The loose segments are separated from the ground and carried away by the natural stream. Thus, the water depths which are required for the shipping traffic in the river and harbor area are accomplished.

Via 2 rotary pumps the water is absorbed through suction tubes and conveyed by pressure pipes to the flushing tubes.

The water contains a lot sludge and sand; this means enormous friction on the walls of the steel pipes. For such heavy mechanical load a coating with high abrasion resistance is essential.

CERAMIC-POLYMER SF/LF provides a reliable stability against salt water and river water. Thereby, our coating is the optimum corrosion protection material for this kind of application.



Suction tube, internal coating after 10 years of operation - Image rights: bremenports GmbH & Co. KG

In 2007, the solvent-free coating product was applied manually by brush in a thick layer. For larger pipes or surfaces the simple application by airless spraying is ideal – with one coating layer comprehensive protection to corrosion and abrasion is achieved.

Also at previous inspections the company "bremenports GmbH & Co. KG" was very satisfied with the condition of the coated pipelines. Even after 10 years of operation the pipes are still intact; just some slight repairs of the coating were necessary.

Due to the excellent physical properties, CERAMIC-POLYMER SF/LF is perfectly suitable for all maritime applications. This coating passed several tests series e.g. ISO 20340 and satisfied our customers in versatile reference projects.

# bremenports

Harbor company for development, planning, building and maintenance for the harbors Bremen and Bremerhaven:

bremenports GmbH & Co. KG Am Strom 2 DE- 27568 Bremerhaven / Germany

Phone: +49 (0) 309 01-315 Email: office@bremenports.de Web: www.bremenports.de

### Contact Ceramic Polymer GmbH:

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

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

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

#### Our Product:

- CERAMIC-POLYMER SF/LF



90° elbow pipes, engine room - Image rights: bremenports GmbH & Co. KG



Internal coating of adapter pipe, after 10 years of operation Image rights: bremenports GmbH & Co. KG

Are you searching for reliable corrosion protection for specific environments? We provide durable coatings for highest product requirements and gladly support you with our experience and technical competence!