# **Cooling water Pipe Repair**

### WENCON METHOD LARGE COOLING WATER PIPE REPAIR

This method is carried out by using the Wencon UW Coating, Wencon UW Putty and Wencon Reinforcement Tape.

## JOB CARRIED OUT BY MINDERHOUD TECHNIEK VLISSINGEN

Minderhoud Techniek as RMN Service Partner has many years of experience in cold repairs with Wencon epoxy products.

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#### **Surface preparation:**

Clean the surface thoroughly in this case using a Tercoo Disc. The surface reach the same level of purity as shot blasting SA2,5 with a roughness profile of 75 micron. Degrease extra using the Wencon Bio-Cleaner.

Leaks are found in 2 different cooling water pipes. One with a temperature of 70°C and a return line with a temperature of approx. 25°C. With Wencon UW Coating in combination with Wencon Reinforcement Tape there is a strong shell made around the pipe over the entire corroded length. With this method you build a strong Epoxy Plastic Pipe around the steel pipe. The holes are first covered with some Wencon UW Putty to prevent coating is dripping into the pipe. This kind of corrosion is often visible when pipes (especially warm or hot surface pipes) are covered with insulation wool. The wool gets wet and in combination with temperature the right conditions are created for corrosion to occur. In this case it is very plausible that some cavitation inside parts of the pipe caused the leaks and created the corrosion at the surface of the steel pipes under the insulation material.





## Wencon UW Coating:

A 300 micron layer of Wencon Coating is applied on the area to repair. In the wet coating is Wencon Reinforcement Tape wrapped around very tight with an overlap of 50%. The coating then pentrates through the pores of the tape and will be smoothened with a brush. After semi-curing of the coating (must be still sticky) the next layer of 300 micron UW Coating is applied and again reinforcement tape is wrapped around. We repeat this until we have in total 3 rounds or 5 rounds of reinforcement tape with coating between each layer. Each new layer will have another color (Brown-Orange-Brown-Orange etc.) making it vissible that all areas are covered well. Finally a top layer of coating is applied an surface is smoothened. After fully cured the pressure can be brought back to the system.









In many cases this can be a very long lasting repair, but as we often don't know the internal condition of the pipe it can also be seen as a temporary repair. In all cases it is a very strong repair that can withstand high pressures.

All Wencon Products holds Class Type Approval from DNV-GL, BV, ABS & RINA.