

A Case Study on Wellmaster in Zagreb, Croatia

Customer: KRAŠ d.d., Food Industry;
Contractor: GEOISTRAŽIVANJE d.o.o. Zagreb

Rigid and heavy carbon steel pipe was replaced with Wellmaster Flexible Rising Main and a new pump in July 2002.



16 years later, July 2018

Pulling out the same pump and Wellmaster, before rehabilitation. Wellmaster looks as if it was installed yesterday! Whereas the pump has severe iron bacteria corrosion. Bacteria attacked the Pump, but not the Wellmaster.



This encrustation looks to be so-called MIC (micro biological indication corrosion). The damage seems to be the result of a corrosive crease "scab" which was broken off and exposed what is happening under red and black bacterial deposits and rust. A proof that iron bacteria has no effect on Wellmaster, which cannot be said for the pump.



"scab"

Installation of the same Wellmaster and submersible Pump after service, and after well rehabilitation in July 2018.



Wellmaster has a future in Croatia

Around the world the installation of submersible pumps using steel riser pipe has been consigned to history by developments made by the British company, Angus Flexible Pipelines.

40 years ago a new flexible riser system called "Wellmaster" was launched onto the market.

This is a hose constructed with high tenacity polyester textile reinforced internally and externally with a tough polyurethane plastic. The result is a smooth bore hose that has excellent ecological, mechanical and physical properties, is easy to install in one piece and can be used in remote, inaccessible locations.

Wellmaster is not subject to corrosion, scale deposits or microbiological attack.

Due to the smoothness of the bore and the possible 15% swell of its textile yarns it possesses excellent hydraulic properties making it possible to use smaller diameters compared to steel pipes.

Moreover, the lifespan of Wellmaster is far longer than any steel equivalent.

The speed of installation and recovery of the pump will lead to significant cost savings because of the time and energy saved.

It has been used worldwide in the last 40 years and now is being adopted gradually in Croatia.

Tomislav Vojkovic, dipl. Ing
Geoistrazivanje