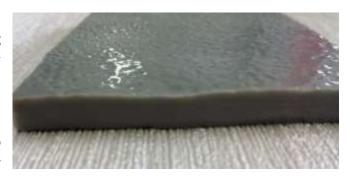


INTERNAL RECOVERY PIPE WITH MTS.

MANSILLAS THERMOPLASTIC SYSTEM (MTS) is an interesting technology capable of manufacturing new parts over existing ones or repairing them by creating a continuous sheet that plasticizes the surface to resist, stabilize and increase the useful life of various installations. Solving their common problems of corrosion, abrasion, damage due to heavy impacts, leaks or any degradation caused by an aggressive environment on concrete, metal, wood, asphalt, polyester surfaces or practically any construction material.



Sample of MTS used.

Pipe recovery by the inside.

It is a section of Steel pipe from a sanitary cistern that has a lot corrosion, due to this problema, the thickness of the pipeline is weakened, this facility can have leaks and section losses with the passage of time.

To eliminate this corrosión, teh first step has been the mechanical milling of the pipe by robot and the crealing of all the waste produced by the milling, leaving the surface prepared to apply primer, in case it was necessary, and finishing with the manufacture of *Mansillas Thermoplastic System (MTS)*

With *Mansillas Thermoplastic System (MTS)* a new pipe has been manufactured by its inside, using the existing as a mold, stopping its deterioration by corrosion and preventing section losses and leaks with time, returning functionality to the pipeline and without having to disassemble the installation.

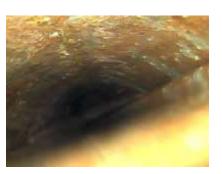
The ideal solution has been the creation of a new structure in thermo-plastic by manufacturing with mobile factory in situ without joints or joints, with STM. Protecting the surface completely and making a new section of totally sealed pipe.

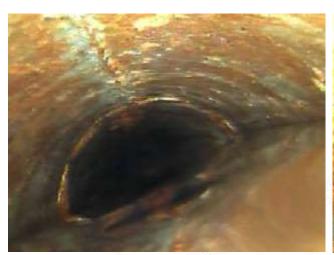


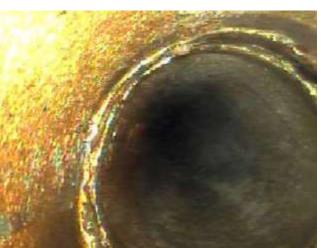
Before milling and cleaning the pipe, we can see its state with a lot of corrosion in the pictures:











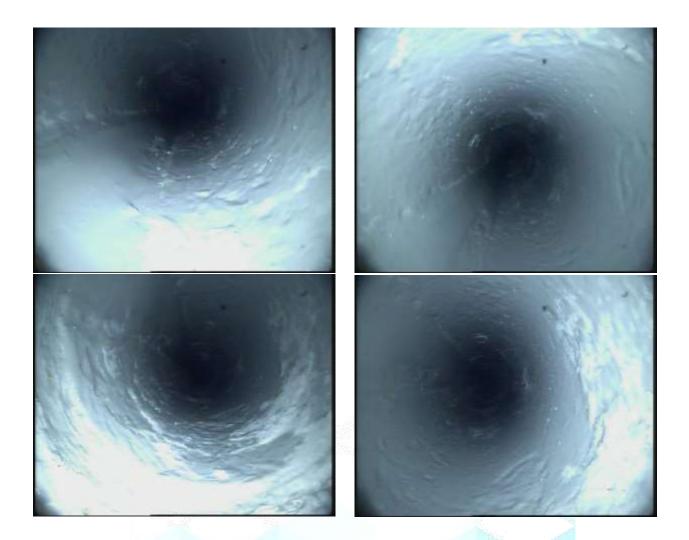
Initial state of pipe section inspected with endoscopic camera



The Works have been done as follows:

The first step was the mechanical milling of the pipe using a robot to eliminate corrosión completely, continuing with an exhaustive cleaning with water and drag to eliminate all the remains produced by the milling, leaving the surface prepared for the application of primer, if it is neccesary and ending with the manufacture of a new section of completely sealed pipe with *Mansillas Thermoplastic System (MTS)*.

As a result, we obtain a new section of pipe, totally waterproof, without corrosión and watertight.:



Pipe section finished once the MTS is manufactured



With Mansillas Thermoplastic System we have created a new pipe section over the existing with same measurements but with bigger resistance and durability than the old.

We can conclude that thanks to the use of *MTS* for the rehabilitation of these facilities, the shortest possible time is used with the best results, because the operation time is minimal and the installation was operational within a few hours of implementing the *MTS*.

In this way the STM becomes a great ally for the maintenance and protection of both concrete, metal or polyester structures in industrial facilities, with the consequent economic savings for the customer avoiding breakdowns, replacement of parts and minimizing downtime.

Mansillas Thermoplastic System features (MTS):

- Advanced technology for the creation of a new body over the existing support, which provides a perfect barrier or shield against external attacks.
- Ability to manufacture new parts.
- Adaptation and specific design of the system for each project.
- Complete technical Mobility: Implementation of the system in place required by the client, using mobile autonomous factory.
- Faster implementation of projects: fast uptime 6 to 20 seconds.
- Indifferent system to moisture and temperature: Not sensitive to high humidity and can be applied to virtually any temperature without complication.
- Low permeability classification and water vapor transmission.
- Excellent physical properties: abrasion resistance, tensile, impact, tear, fire, chemical ...
- Excellent adhesion.
- Continuous system without joints or cracks: removing accesses fluids, bacteria or other contaminants that enter the support and degrade.
- Long-term stable system, keeping their original physical properties even with long-term aging and obtaining the durability of the structures.
- Environmentally friendly.

