

DOWNPIPE ELBOW REPAIR REPORT BY ITS INSIDE WITH **MTS**.

The **Mansillas Thermoplastic System (MTS)** it is an interesting technology capable of manufacturing new pieces over existing ones or repair them by creating a continuous sheet that plasticize the surface to resist, stabilize or increase the lifetime of a varieties facilities. Solving common problems of corrosion, abrasion or damage by strong impacts, leaks or any degradation caused by an aggressive environment into concrete, metal, or wood surfaces, asphalt, polyester or any construction material.



Sample of MTS

Downpipe Elbow repair by its inside.

This facility present a break by its inside, due to this break, the downpipe elbow have water leaks.

To eliminate this break, the first step has been the handmade cleaning of the pipe to remove the dirt, preparing the surface to aplicate the primer, if it is necessary, and ending manufacturing a new downpipe elbow with The **Mansillas Thermoplastic System (MTS)**

With **Mansillas Thermoplastic System (MTS)** a new downpipe elbow has been manufactured by its inside, using the existing one as a mold, stopping leaks of water due to the break, returning the functionality to the facility without disassemble any part of it and with the mínimum curing time.

The ideal solution has been the creation of a new stucture in thermoplastic manufactured with a mobile factory, without joints with **MTS**. Protecting completely the surface and making a new downpipe elbow totally waterproof.

Before the work, at first sight we can see the break of downpipe elbow.



Initial state of downpipe elbow with the break.

The Works have been done as follows:

The first step has been the handmade cleaning to eliminate completely the dirt, preparing the surface to apply the primer and ending with the manufacture of a new downpipe elbow totally waterproof, eliminating the break, with **Mansillas Thermoplastic System (MTS)**



Downpipe elbow repaired with **(MTS)**



With Mansillas Thermoplastic System (MTS) we have created a new downpipe elbow by the inside of the existing one, with the same dimensions but with higher resistance and durability.

We can conclude that thanks to the use of **MTS** to restore these facilities, we use the minimum time with the best results, the operation time is minimal and the facility had ready in a few hours after the manufacture of **MTS**.

In this way, the **MTS** is a great ally to maintain and protect structures made of concrete, metal or polyester in industrial facilities, saving money to the customer, avoiding breaks down, pieces replacement and reducing 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.

ANNEX I: MAINTENANCE TIPS

To maximize the life of **MTS** we recommend following these tips:

- ~ Try to keep the system free of plant debris such as leaves, grass or moss.
- ~ In the presence of a lot of dirt **MTS** You can make carrier microorganisms, without participating in the biological process. Within far as possible, keep the system free of garbage.
- ~ For inner lining of pipes we recommend a maintenance sinks and grills to prevent clogging and thus obtain a proper functioning of storm drains.
- ~ Verification of proper maintenance of structures plasticized help prolong its life.
- ~ Avoid punzonamientos or use tools that can damage nearby **Mansillas Thermoplastic System (MTS)**.
- ~ For stain removal, it can be assayed a surface treatment with solvent or alcohol. strong acids is discouraged.
- ~ Tools and chemicals for cleaning your plastic sheet must be purchased on the recommendation of our technicians.
- ~ Some solvents can damage the plastic film. If this happens, the affected area must be cut and repaired with the **Mansillas Thermoplastic System**, Overlaying the original sheet at least 3 cm in all directions.
- ~ the use of abrasive products that could scratch the system be avoided as far as possible.
- ~ Avoid proximity to sources of high heat.
- ~ The (eg iron, copper or manganese) metals present in the water may cause stains deposits on the **Mansillas Thermoplastic System**
- ~ If the aesthetic appearance of the cover was an important criterion, it is essential to regularly clean the surface with water (neutral soap may be added) based on usage.
- ~ Some chemicals can discolor the thermoplastic sheet, consult our technicians if the aesthetic aspect is important
- ~ It may be necessary to provide for renewal of the last layer or decorative function suffering wear by traffic, or weather (atmospheric corrosion, UV,...).
- ~ If it was necessary to remove the primary deposits or other accessories, you must first cut THE **MTS** HARDWARE THAT UNITES WITH CONTAINMENT 2nd bund to avoid dragging across the plasticized surface.
- ~ If any corrosives spill occurs on the STM must proceed to clean water to prolong the life of the plastic sheet in perfect condition.