

Systematic Pipe Rehabilitation



DS CityLiner®



Roller conveyor

mobile factory
maximum flexibility



Digital control of the resin and curing agents

The product

The pipe rehabilitation procedure with the DS CityLiner® provides a needle-felt hose with an outside coating, which is vacuum-impregnated with an epoxy resin just before the installation under defined quality conditions in an on-site mobile impregnating system and calibrated under control.

The field of application

The DS CityLiner® can be used in gravity and in pressure lines for nearly all kinds of damage. The procedure does not depend on the pipe material or the cross-sectional form of the duct to be rehabilitated and is usually applied for nominal diameters between DN 200 and DN 800 with varying inversion lengths up to 300 m and more.



Insertion of the hose liner into the egg-shaped section

The installation

Before drawing-in the hose liner, the pipe section to be rehabilitated is prepared with a robot. A hydro-dynamic cleaning and an inspection by camera take place just before the installation. After the impregnation, the hose is inserted by inversion into the prepared reach with the aid of compressed air or water pressure. The curing



Besides the material truck, site accommodation wagon and vehicles with the heating system, an inversion tower and a conveyor belt are part of the site facilities

of the epoxy resin takes place by heating-up the medium used for the inversion. The result is a product, the standard and the quality of which fulfil the high requirements of an impregnation at the factory. In the last work step a milling robot opens the existent connecting pipeline.



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resins and curing agents have a volume of 3,000 kg and they are fully air-conditioned, so that the constant resin temperature can be maintained irrespective of external influences. Accurately defined portions of resins and curing agents are transported via a regulated feed pump to the compulsory mixer, combined without a supply of air, then introduced into the vacuum sealed felt hose and finally calibrated. All the system-relevant data are permanently recorded and monitored by integrated electronic measuring devices. The calibration of the components takes place in the cycle determined by the manufacturer.

The advantages

The advantages of the DS CityLiner® and the mobile impregnation system are obvious: contrary to other rehabilitation methods, where a factory-impregnated hose is delivered to the job-site, this method provides a maximum flexibility. Any unexpected incidents at site can be handled under control just as interruptions during the building progression caused e.g. by changes in dimension or mass. Moreover, there are no logistic problems during the transport of a non-impregnated in-liner. A further safety-plus for customer and user: the product holds the "Allgemeine bauaufsichtliche Zulassung vom Deutschen Institut für Bautechnik (DIBt)" (General approval for building inspection of the German Institute of Structural Engineering).



The mixing plant

The needle-felt hose is prepared in the DS CityLiner® mixing unit. This is a mobile impregnating system, the components of which have been optimally adapted to the procedure by DIRINGER & SCHEIDEL ROHR SANIERUNG. The PLC-controlled and fully automatic mixing plant works as a closed system. The storage tanks for

The in-liner is inserted into the reach via the inversion tower



- BlueLine Procedure
- Burst Lining
- Cement Mortar Lining
- Compact Pipe
- CP-ZA 2012-Top-Hat Profile
- DS-CityLiner
- DS - Hose Relining
- DynTec (close-fit-lining)
- Flexoren Relining
- House and Industry Liner
- Installation Procedures/ Large Profile Rehabilitation
- KA-TE Robotics
- Manual Rehabilitation
- Partial In-Liner
- Pipe Relining (long pipe, short pipe and pipe run)
- Polyester Liner
- Superheated Steam Liner
- UV Liner
- and other procedures

www.dus-rohr.de

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