

### CONCRETE PROTECTION

#### Lining systems

Concrete protective liners are generally used for rehabilitations as well as new installations of diameters larger than one metre. Concrete protective liners are used for lining concrete pipes and steel pipes, which take up the mechanical loads.

The lining of such pipes combines the good mechanical properties of concrete and steel with those of polyethylene (PE), e.g. excellent abrasion resistance, non-corroding and good chemical resistance. In the end a permanently leak-proof composite pipe with a long lifetime is created.

With concrete protective liners various pipe cross-section shapes can be lined without difficulty.

# RELINING WITH CONCRETE PROTECTIVE LINERS

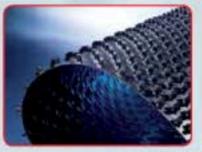
#### The Sure Grip® principle

The unique and patented form of the V-shaped anchor studs, which are directly formed onto the liner during the extrusion process, allows safe mechanical anchoring of the concrete protective liner to the concrete.

This design guarantees optimal anchoring to the concrete or injector, even though plastic and concrete do have different thermal expansion coefficients.

Depending on the project requirements, different stud forms and liner thicknesses can be used.





Sure Grip®



Ultra Grip®



SCS SelfCleaningSystem with bionic surface



Sure Grip® with signal layer



## SURE GRIP® CONCRETE PROTECTIVE LINERS



#### **Hose relining**

The inliners, customised for each and every dimension, are drawn from manhole to manhole. The inliner is sealed with balloons and water pressure is added depending on the grouting length. Afterwards special mortar is injected.

#### Segment relining

Short pre-fabricated inliner sections are inserted into the channel and then welded together by means of extrusion welding. Afterwards they are fixed to a formwork system. Similar to hose relining, the gap between the liner and the old pipe is finally filled with highly flowable injection mortar.

