





**FULLY LINED MANHOLE** 

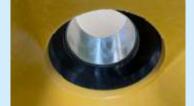


## **FLEXLINER**®

# FULLY LINED MANHOLE FLEXLINER® - PP-CORPROTECT® - FLEX-KONUS

Incorporated transition strips on PP/PE or FRP on the FLEXLINER allow vertical continuation of the rehabilitation with PP-CORPROTECT lining as well as with FRP materials.

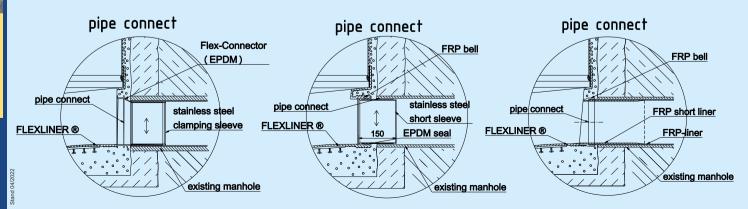






Different connection options to the existing pipe can be used e.g. :

FLEX-Connector with stainless steel clamping collar FRP joint for liner sleeve or FRP joint for short liner





#### TRENCHLESS MANHOLE REHABILITATION WITH THE FLEXLINER



Environmentally friendly trenchless manhole rehabilitation is possible with the PREDL FLEXLINER within the fastest time. For insertion through the cone into the manhole, the FLEXLINER is folded up undivided and without destruction and unfolded again to its original size in the manhole.

By using the FLEXLINER rehabilitation method and modern 3D laser scanning manhole data acquisition, an optimal preparation of the rehabilitation work and a significant reduction of the rehabilitation effort on site is possible:

- a dimensionally accurate digital copy of the old manhole by 3D laser scan
- Based on the laser scan data, a hydraulically optimized solution for channel routing and sustainable rehabilitation of the rising shaft structure is worked out
- conclusive and permanent bonding with the concrete by means of bonding bridges
- The installation of FLEXLINER and PP-CORPROTECT results in a durable, high-quality rehabilitation.

#### Old manhole digitization and modeling







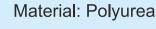








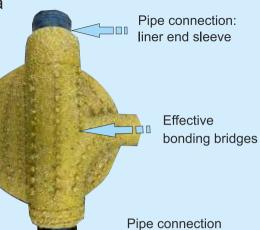
#### **Technical features**





Berm: with integrated slip protectionter

Manhole edge: with vertical transition to PP/PE or FRP



### Installation of the FLEXLINER®

















with FLEX-Connector



