

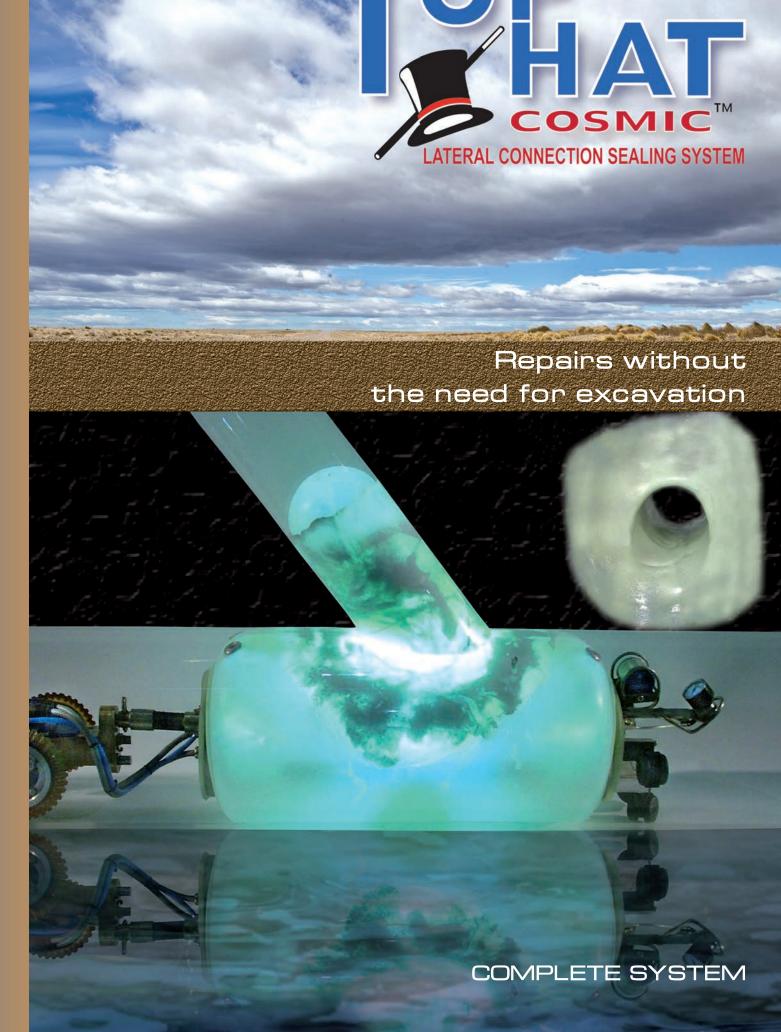
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**GRP-TOP-HAT** 

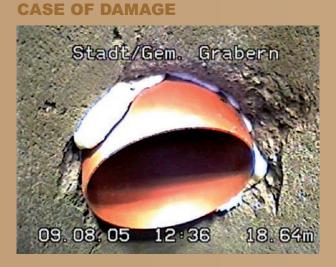




# Cosmic - Sondermaschinenbau GmbH







#### **RECONSTRUCTION**



# www.top-hat.at

self-supporting

No traffic jams

No need for road closures

By-pass pumping avoided



TOP HAT -How it Works

The TOP HAT system is a procedure remote controlled robot, that is lowered to 15 minutes. The materials used take used for the repair of sewer systems into the manhole and through the mains. only seven minutes to set, avoiding the (channel in the duct system) of both The TOP HAT system is the fastest me-need for by-pass, pumping the existing house connections and mains sewer thod of repairing sewers world-wide. sewer system or creating prolonged trafpipes. This is achieved with the use of a Problem areas can be repaired within 12 fic jams and delays.

#### REPAIRS WITHOUT THE NEED FOR EXCAVATION

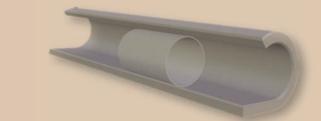


1 House System With the TOP HAT system the house connection is completely isolated from the mains and repaired locally. -0 0=

# **2** House Connection Isolated repairs are possible to house connections with a diameter from 100 to 300 millimeters with a seamless laminate.

## Mains Pipe

Isolated repairs of pipes with a diameter between 80 and 900 millimeters by means of part liner - localised repair.

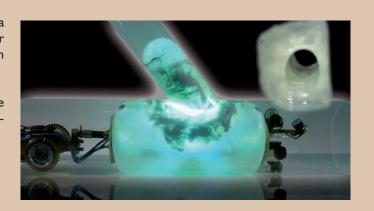


### GLASS FIBER LAMINATE (GRP)

Liner and hat system consists of a polyester impregnated glass fiber Durable results that last laminate, which is also used in aviation industry. for 50 years

An epoxy resin ensures a durable tried and tested bond to the existing pipe or liner. Material is structurally

50 year warranty on materials.



With the glass fiber laminate both "T" and "Y" systems can be repaired. The TOP HAT system material is hardened with UV light and takes only 7 minutes. That is the fastest procedure in the world. The material is environmentally friendly and is constantly subjected to strictest quality controls.



TOP HAT complete system glass fiber laminates are approved and certified.





#### THE MANY ADVANTAGES OF TOP HAT

Because our glass fiber laminate has the fastest hardening time world-wide (7 minutes), by-passing of existing systems can be avoided in 80% of cases! This eliminates the inconvenience of road closures during repair.

> The GRP material is structurally self-supporting and prolongs the life of the existing piping beyond 50 years!



Because of the characteristics of this glass fiber Laminate, repairs can be dealt with in one procedure and at a faster rate than any other material.

TOP HAT is market leader in the USA and with more than 30,000 successful system repairs world-wide!

