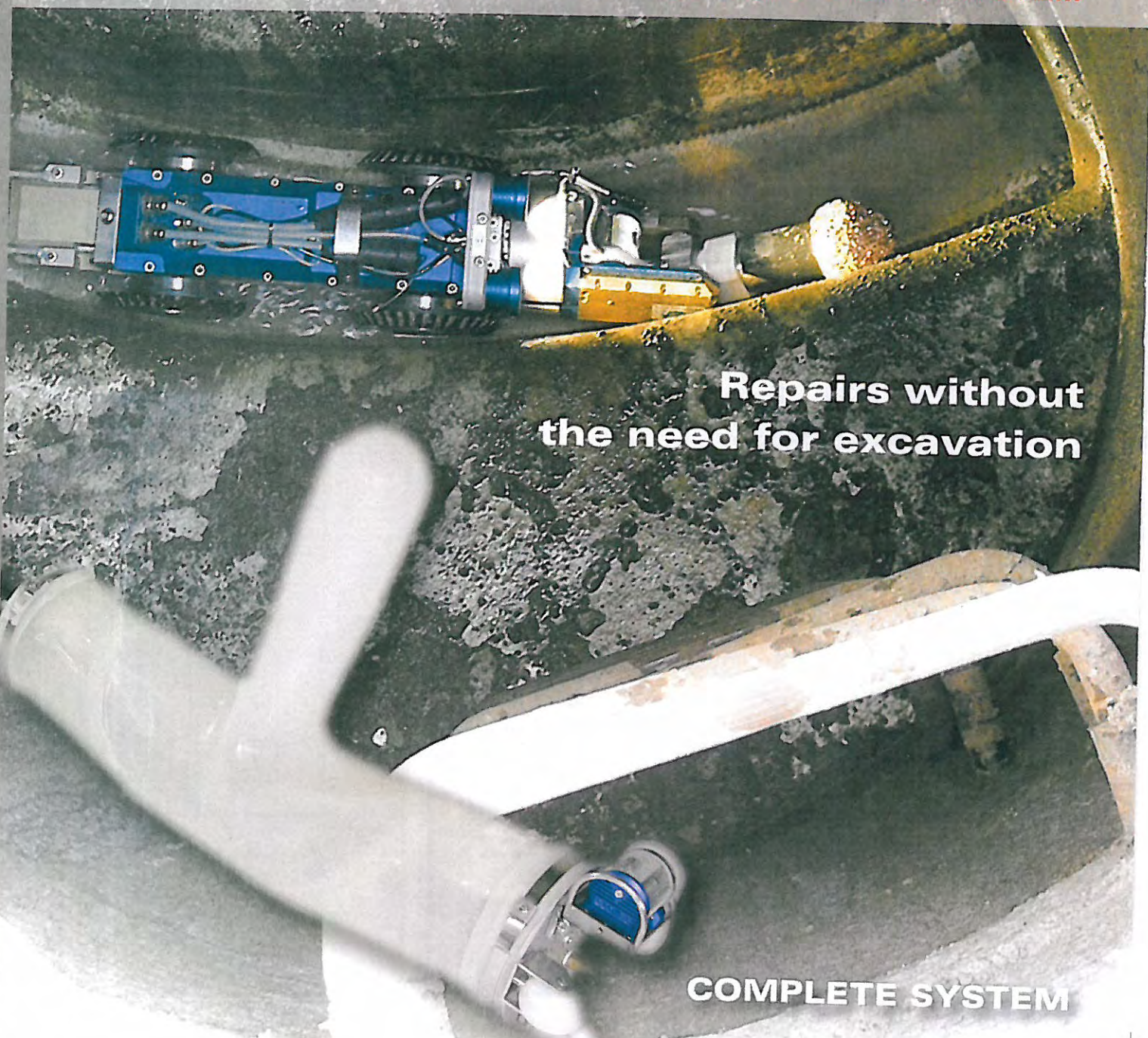


# TOP HAT



**COSMIC™**

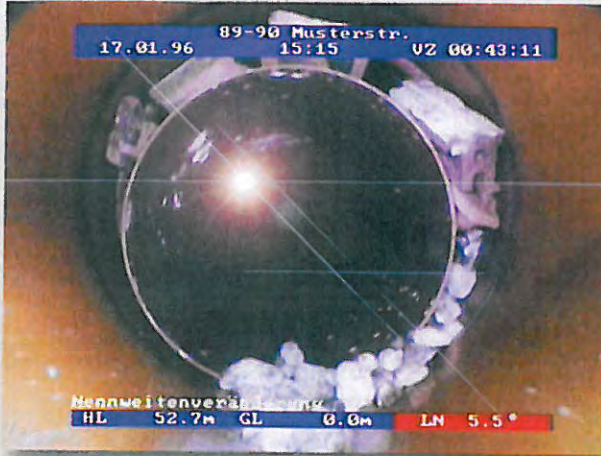
**LATERAL CONNECTION SEALING SYSTEM**



**Repairs without  
the need for excavation**

**COMPLETE SYSTEM**





**CASE OF DAMAGE**

Repairs without the need for excavation

- Sewage System Repair
- Isolated Repairs
- Domestic Systems

**RECONSTRUCTION**

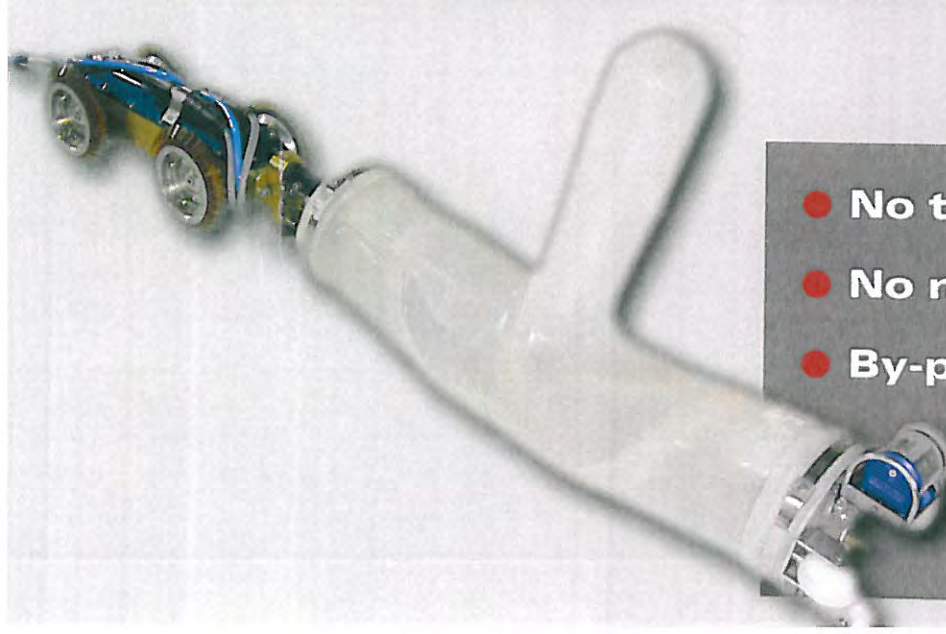


Glass Fiber Laminate (GRP)

- Durable results that last for 50 years
- Material is structurally self-supporting

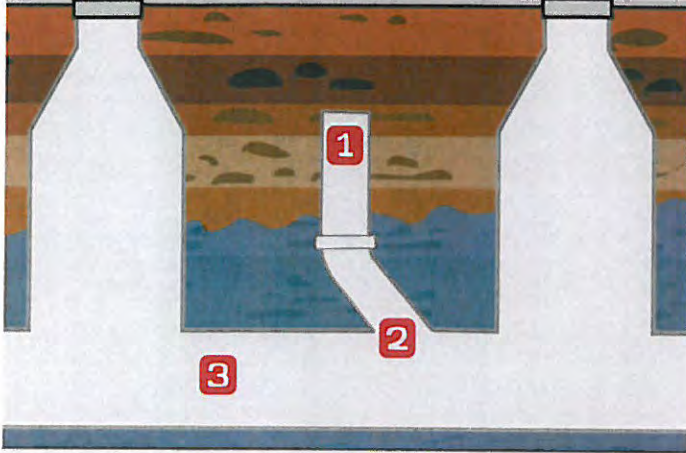
- No traffic jams
- No need for road closures
- By-pass pumping avoided

**The many advantages of TOP HAT**



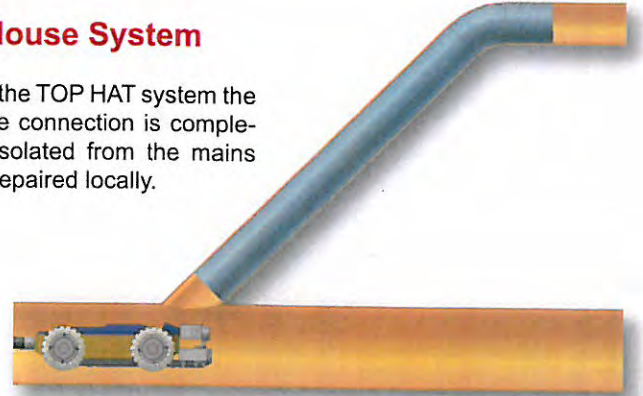


# TOP HAT - How it Works



## 1 House System

With the TOP HAT system the house connection is completely isolated from the mains and repaired locally.



Liner and insert system consists of a polyester impregnated glass fiber laminate, which is also used in aviation industry.

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

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.

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!





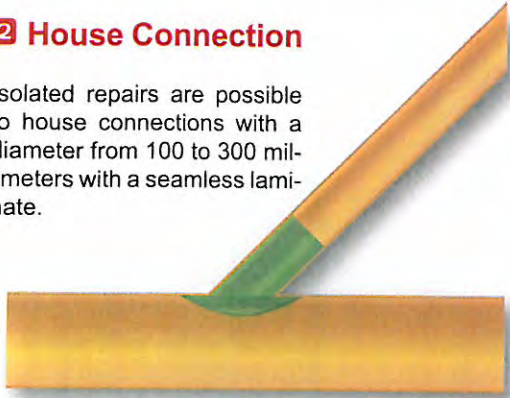
The TOP HAT system is a procedure used for the repair of sewer systems (channel in the duct system) of both house connections and mains sewer pipes. This is achieved with the use of a remote controlled

robot, that is lowered into the manhole and through the mains. The TOP HAT system is the fastest method of repairing sewers world-wide. Problem areas can be repaired within 12 to 15 minutes. The materials

used take only seven minutes to set, avoiding the need for bypass, pumping the existing sewer system or creating prolonged traffic jams and delays.

## 2 House Connection

Isolated repairs are possible to house connections with a diameter from 100 to 300 millimeters with a seamless laminate.

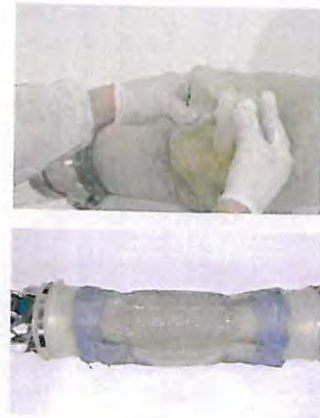
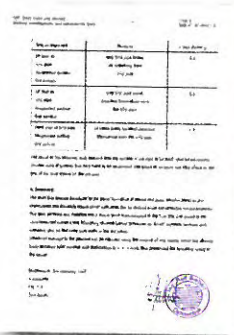


## 3 Mains Pipe

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

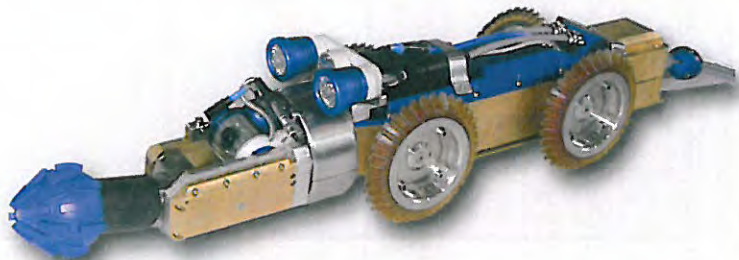


**TOP HAT complete system glass fiber laminates are approved and certified.**



**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!





**Joint with short liner  
and insert technology**

**GRP-Lateral  
Liner**

**Home  
Connections  
Repairs**



**GRP-TOP-HAT**

**GRP-Short Liner**



**Crack repair with  
short liner**



**Collar repair with  
short liner**



**Joint with insert  
technology**



**Joint with short liner and  
insert technology**





# TOP HAT COSMIC™

LATERAL CONNECTION SEALING SYSTEM

The TOP-HAT complete system is produced by Cosmic Sondermaschinenbau GmbH in Austria. This high-tech company has been involved with the rehabilitation of pipe and sewage systems for over 20 years. Its know-how and numerous patents (international and/or European) as well as its global distribution network have made Cosmic a leading provider of pipe and sewer rehabilitation plants. The company is also active in the field of special machine construction and sells the product TOP-HEAT, a patented boiler using rapeseed, around the world.

## Cosmic - Sondermaschinenbau GmbH

FB-Nr.: FN 157158s ● UID-Nr.: ATU42191301 ● Handelsgericht St. Pölten  
A-3072 Kasten ● Steinbruck 35  
Tel.: +43 / 2744 / 7004 ● Fax: +43 / 2744 / 7004 - 9  
E-Mail: c.office@cosmic.at ● Homepage: www.cosmic.at