

Short introduction



The first steps made in the lab of the Szeged University

The inside cleaning and disinfecting of water-supply systems is a recurring problem of system operators. The mechanical and hydraulic solutions used so far are usually not economic, time consuming and the achieved results are not always the best. The Hydro-Gel high technology developed by OKFT Ltd. can remove the residues from the pipelines easily and it does this in a cost effective manner. This environmentally friendly technology can be applied in drinking water-supply systems, since it does not contain any harmful materials. In this expository you can find most of the information regarding this new technology.

Fold here to get a paged brochure!



**Olajipari Karbantartó
Fejlesztő és Tervező
Kft. (OKFT Ltd.)**

JURA Ipari Park 22/A.
H-6750 ALGYŐ
Hungary

Phone/fax: +36 62 268 884
Mobile: +36 20 9168 058
E-mail: okft@invitel.hu
www.okft.hu

This documentation is protected by copyright laws.
All rights reserved.
© 2014 OKFT Ltd.

V 5.1

Fold here to get a paged brochure!



New hungarian high technology

Hydro-Gel technological description



All rights reserved. © 2014 OKFT Ltd.

Historical overview

There are several different methods of cleaning pipelines, which can be employed with more or less success, according to the field experience.

The most widespread solutions are usually mechanical cleaning, for example pigging, or using sponges. Loose wastes are usually washed out by hydraulic flushing.



The jammed sponge can only be removed by disruption

All methods have their own drawbacks: during the mechanical cleanings the pigs or sponges often get stuck and cause jams.

Hydraulic flushes mean you have to calculate with extensive use of water, which goes wasted.

In order to manage this problem we developed special gels, first for the oil industry, which made the inside cleaning of hydrocarbon transmission lines much more simpler and effective.

Starting out from here, OKFT Ltd. and the Szeged University together developed an environmentally friendly gel, which can be safely used in cleaning of drinking water- and industrial water-supply systems.

The most important traits of the Hydro-Gel technology



The gel developed by OKFT Ltd. is a water based gel, which does not contain any hazardous materials, and it is completely environmentally friendly. Thanks to these properties it can be safely

used to clean water-supply pipelines. The gel – as an effect of the water pressure – travels all along the pipeline as a plug and fully takes the inside shape of the line. It can even collect residues from the remotest little cracks.

According to the job to be performed we can use different types of gels: „pushing gels” removes the rough wastes, „collector gels” on the other hand collects the loosened particles. During the process of cleaning we create „gel-trains”, where the individual “carriages” can perform different jobs.

The gel-trains are always assembled to fulfil the given tasks for example it can contain different viscosity and functional gels, disinfectants or such small devices, which can exactly map the underground pipeline system.



„Gel-train” assembly made from different types of gels

Using this new high technology we can deliver a complex solution to maintenance issues, even in one simple step. The cleaning job employing the Hydro-Gel is very simple, extremely cost effective, we recommend it to all system operators!

Practical application

OKFT Ltd. manufactures and distributes the Hydro-Gel technology with exclusive rights. Here is a summary of the specifications of the Hydro-Gel technology:

- You can save time and money with this application.
- It is not necessary to disrupt the system and there is no need for special type of flushing joints.
- The gel can be controlled inside the system using the existing valves.
- The gel takes on the shape of the pipeline and therefore removes wastes from everywhere.
- Using the Hydro-Gel we can provide a complex cleaning in one step.
- The system layout can be mapped using a micro-device, traveling along with the gel.
- The gel will not cause jams (exp. at narrowing diameter, valves, etc.) and all of it will leave the system.
- The supply line can be put back into operation right after the cleaning; there is no bad taste, odour or cloudy appearance.
- It is safe to use, it will not harm your health, will decay without leaving any hazardous wastes.
- The used gel can be released into public sewers.
- There is no materials to treat after the cleaning.
- It has OTH (National Public Health Association) license.