

## Working principle of plastic pigging technology

After collecting all the data we create the appropriate pig cleaning technology for each pipeline, which guarantees a trouble-free cleaning.

The pigs are pushed forward by the pressure behind the newts. To drive always this medium is used, which is normally transported in the line.

The speed required for the optimum efficiency is determined in advance taking into account the deposition, the degree of hardness, the encrustation and the type of pig required and adjusted by appropriate pressure and flow control to the requirements. The required pressure at a nominal diameter of e.g.  $\varnothing$  150 mm is in consideration of the o.g. Criteria at about 1-2 bar.

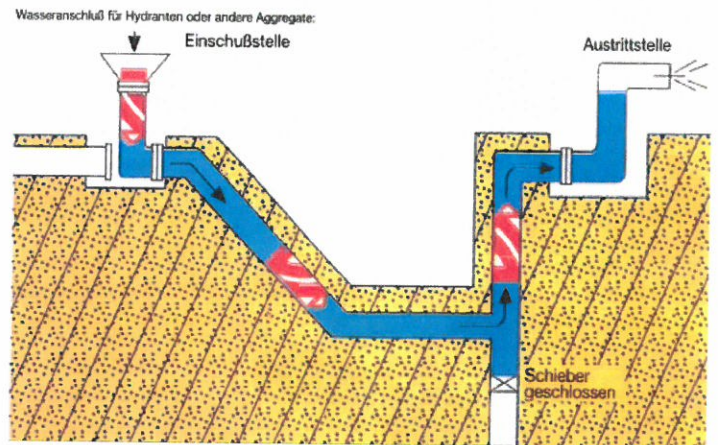
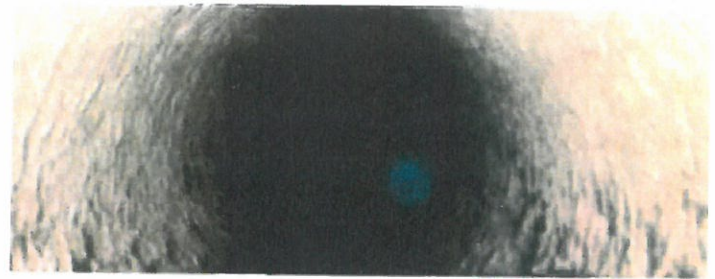
Pig journeys always take place first with a test pig, who can't get stuck. After them the cleaning pig trips follow in a specific order, depending on the type of deposit and test they result. The braking effect caused by the irregular sediment and the rubber-like surface causes the pig to move forward only jerkily. This results in a hammering pulsation, which dissolves the sediments. All pigs have rear cylindrical sealing surfaces. Since the pigs do not completely seal the pipe, some of the dammed up medium (e.g., water) is directed past the pig to remove the deferred scraps. This creates a strong turbulence in front of the pig, which contains part of the dissolved deposits, whereby additionally a sanding effect can be achieved. In addition, the liquid in the line serves as a means of transport. The appropriate pig is selected depending on the deposit, e.g. for silicon carbide deposit a pig with steel wire brushes or cross spin coating.

As a result of the deposits swept away by the liquid jet dirty water flows from the pipeline for a certain time before the outlet of the pigs.

From the ratio of the duration of the polluted water to the transit time of the pig, the purity of the pipeline can be determined. The individual pig passages are recorded by means of a pressure recorder diagram and also can be located by means of pig ends on the pipeline.

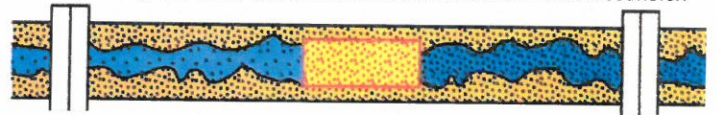
With growing success, we manufacture our UNIMOLCHE for every pipe material, every type of deposit and every application, our references prove it. Special technologies and Unimolche have been developed for pipelines, which which actually are not cleanable by pigs.

Pigging technology also is usable for: emptying, filling, calibrating, testing, locating, sterilizing, dedusting, descaling.



Reinigungsablauf:

1. Überprüfung des noch vorhandenen Durchmessers mittels Testmolch



2. Vorreinigung mit einem Unimolch des beim ersten Arbeitsgang festgestellten Rohrdurchmessers



und stufenweiser Abbau der Ablagerungen durch verschiedene Unimolch-Typen



3. Endkontrolle mittels Testmolch, Originaldurchmesser wieder vorhanden

