



Reinhart  
Hydrocleaning SA



**PIPELINE INTEGRITY**

*Of course but low priced, please!*



# Pipeline Integrity

## Of course but low priced, please!

Pipeline integrity is a crucial topic that goes hand in hand with the need to operate and maintain a pipeline to ensure continued, safe and efficient performance.



*Extraction of a heavy waxed 6" MCT*

This article deals with pipeline integrity and the internal cleaning management of a pipeline during its lifetime.

A common issue with Pipeline Integrity is that often a pipeline operator will focus mainly on inspection data collection and pre-inspecting cleaning at planned intervals in time rather than implementing an effective production pigging strategy that will maintain an acceptable level of internal cleanliness to support successful inspection at any time.

The key to a successful inspection is the regular and continuous use of appropriate mechanical cleaning tools that will clean the line to the required level and maintain that level of cleanliness throughout its operational lifetime.



*Extraction of a waxy 6" MCT*

A consideration not always given when resource and budgets are tight.

Reinhart Hydrocleaning SA (RHC SA) is a family business based in Switzerland that has been providing a range of innovative, hydromechanical pipeline cleaning tools for over 65 years.

Designed and manufactured in house, the unique technology for pipeline cleaning can be applied to a broad range of industries and includes pipelines manufactured from steel, cast iron, PVC, Flexibles, etc..



*Extraction of a heavy waxed 16" MCT*

When it comes to pipeline cleaning, low performance off the shelf standard utility pigs are commonly used for production or maintenance pigging.

These pigs are sent more or less frequently until an inspection run, whether UT or MFL, is executed.

In many cases the cleaning performance of these standard pigs is not monitored and or verified until an inspection is either due, or the run fails due to the internal condition of the pipeline.



*Solid brown dry wax caught with the Basic head of a MCT*

A failed inspection or last-minute concerns around production cleaning pig performance and pipeline cleanliness will often result in the need to implement an expensive and time-consuming cleaning campaign to ensure a successful inspection run.

Compared to utility pigs, RHC SA's technology ensures cleaning performance is maintained over fewer runs. Throughput is maximized during continued operation and therefore provides long term cost savings.

During the past 10 years, RHC SA have implemented production and maintenance cleaning programs in various pipelines in diameters ranging from 14"-34" with length of 15km up to 356km on a regular basis in the UKNS/Norwegian sector (single and multiphase, waxy pipelines, internally coated pipelines and the removal of Calcium Carbonate scale) using RHC Hyrdocleaning tool technologies.

Maintaining pipeline condition by utilizing specialized mechanical cleaning tools on a regular basis as part of an operators ongoing production pigging and integrity



*Example of solid brown dry wax brought out by a MCT*

management strategy keeps the pipeline in a clean condition throughout its operational life maximizing pipeline performance and corrosion management.

The use of high-quality mechanical cleaning tools will reduce the frequency of regular production pig runs required to maintain a higher level of internal cleanliness when compared to running off the shelf utility pigs. It will eliminate the need for an extensive and costly cleaning program ahead of scheduled MFL or UT inline inspections in the future.

RHC SA focus on achieving the highest standard of internal cleanliness by using the best technology for the application, not simply increasing the number and quantity of cleaning runs as some others might.



*Example of brought out wax with scale by a 6" MCT*

The provision of specialized high-quality RHC mechanical cleaning tools designed and manufactured to suit the pipelines operational conditions are used initially to clean the line to the required level and thereafter when used as part of the regular production pigging strategy, they will maintain operating performance of the pipeline and eliminate the need for extensive pre-inspection cleaning programs for future inspections.

The number of production or maintenance runs necessary will be reduced and at the same time, the performance and cleaning effect of each individual cleaning run will be increased.

RHC SA is not just a company for "special cleaning jobs" but a company that is able to support and maintain long-term pipeline cleaning and integrity management on a regular basis throughout its operational lifetime.

**Writing:**

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**Final Approval:**

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*Since 1952*  
*Thinking out of the box*  
*...still not in it!*



*Tailored cleaning solutions*

*Made in Switzerland*



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