

Liquid hydrocarbon sampling

0.118 % - measurement uncertainty\*\*

ISO, EI (IP), API and ASTM compliant

Operator friendly & simple to maintain



## In-line sampling system

In-line samplers represent a simple but cost effective means of sampling a broad range of process fluids in accordance with the ISO, API, IP and ASTM standards.

When installed at a location where the fluid is representative (well mixed and dispersed\*) an In-line sampling system can achieve a measurement accuracy of - 0.118%\*\* . This is significantly lower than tank dipping or ship manifold samplers, which typically have an accuracy of more than -0.225%.

Repeatability of a Jiskoot In-line sampling system is achieved by using a positive displacement sampling technique. This method is unaffected by process viscosity, wax and pressure. The probes are inserted directly into the main pipeline and extract a calibrated and repeatable sample volume.



## Applications

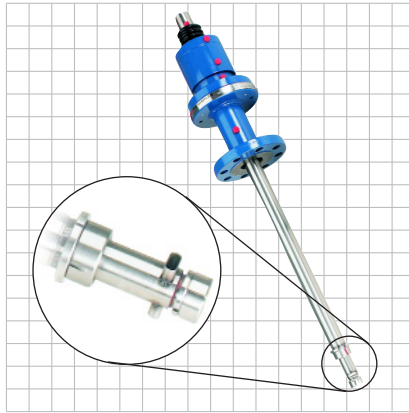
Crude oil

Liquid hydrocarbons

Refined products

Hazardous liquid sampling

## 210 Probe sampler



The probe length is selected so that the probe head is located in the central half of the pipeline.

The unique sampler head is designed to prevent flow distortion or sample bias. The sample probe actuator can be enclosed and protected by a weatherproof enclosure.

The enclosure contains the control electronics and can be heated to prevent waxing of products like crude oil.

Sample probes can be safely and easily removed for maintenance without de-pressurisation of the process using a Jiskoot Hydraulic Extractor.

## PR Sample receivers



Jiskoot offers a range of in-line probes that can be pneumatically, hydraulically or electrically operated. Our probes are available to extract either 1 or 2 cc samples per operation at rates of up to 120 grabs per minute. The samples are typically collected in either fixed volume (PR-103, PR-53, PR-23) or constant pressure sample receivers (CPC) with manual or automatic changeover.

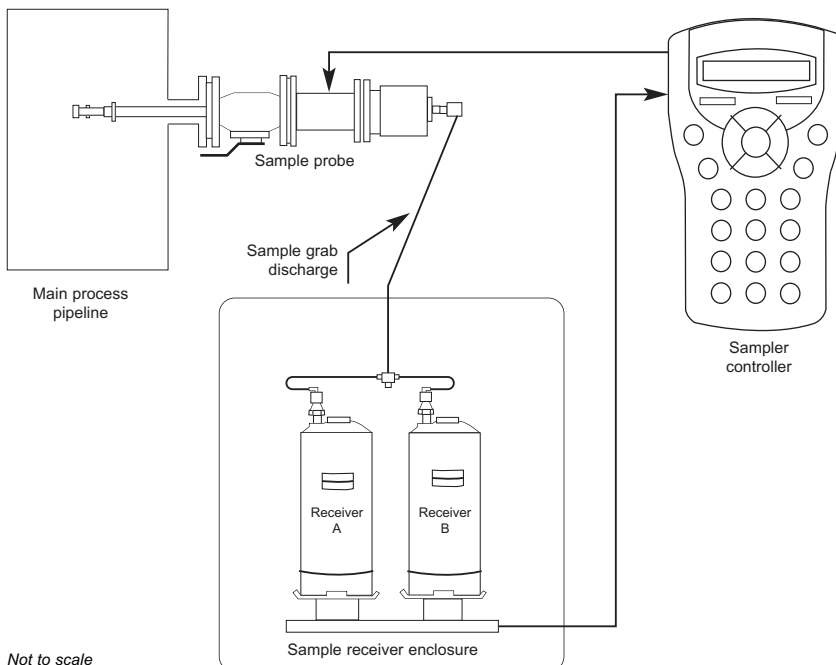
The enclosure, which is located close to the probe, can be heated to maintain an even temperature to avoid solid or wax formation.

Dynamic performance measurement can be achieved by fitting a CanWeigh system for PR receivers or a level-sensor system for CPC receivers. A sampler controller can be installed providing configuration, monitoring and control functions with DCS integration capability.

Where a higher accuracy or incremental return on investment is required Cojetix or Fast Loop system is recommended.

\* An on-line assessment of pipeline mixing can be performed at [www.jiskoot.com](http://www.jiskoot.com).

\*\* Based on data from over 200 water injection proving tests.



Not to scale



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