

Integrated sampling and analysis

Guarantee analyser representivity

ISO, EI(IP), API and ASTM compliant

Built-in cross-validation, between sampler and analyser

Eliminate instrument process off-set errors

Low installation cost



# Sampling and analysis system

On-line measurement of properties like viscosity, density and water-in-oil during custody transfer; allocation or quality determination is a growing trend.

To avoid measurement errors or bias it is crucial that on-line devices are installed in a location with representative flow.

When measuring fluids like oil and water the most applicable sampling standards are the ISO, API and IP.

These standards recognise that representative flow is required to achieve accurate measurement.

They also provide methods for assessing and ensuring accuracy is achieved.





## Applications

Crude oil

Condensate

Low temp liquid hydrocarbons

Refined products

Hazardous liquids

## Dual densitometers installed in a sampling and analysis system



The representivity and low measurement uncertainty of Fast Loop and Cojetix sampling systems make them an ideal location for the installation of on-line instruments.

Integration of these devices as part of a certified sampling system maximises the accuracy and repeatability of the instrument and reduces measurement uncertainty from installation affects.

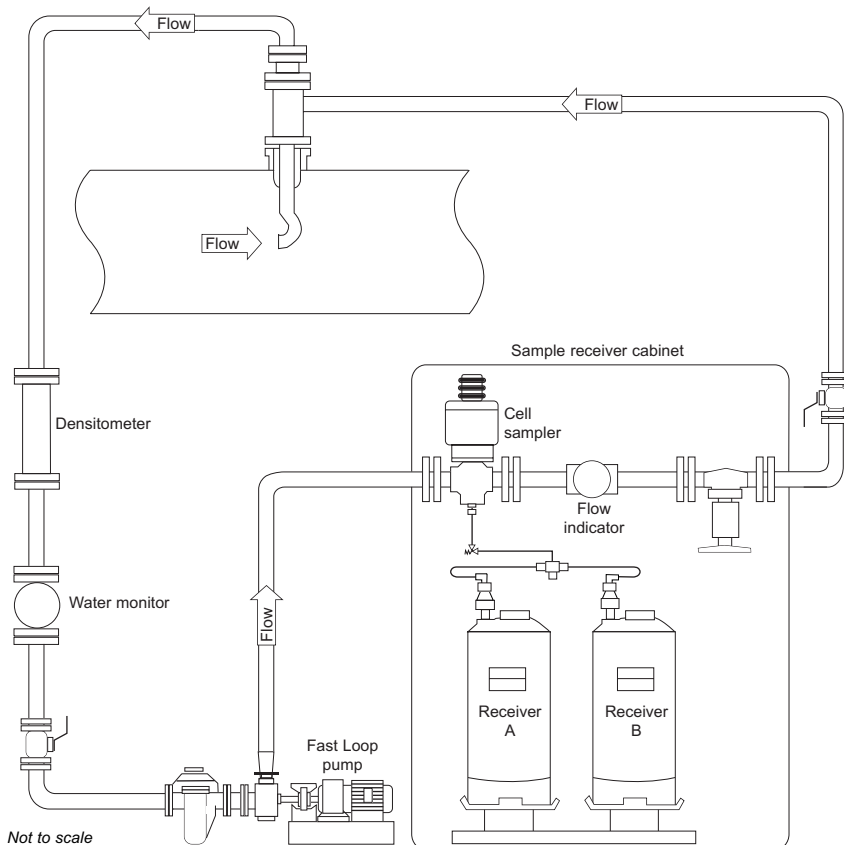
Pressure and temperature instruments can also be installed in the same loop to avoid any process offset.

Installing devices in the same loop allows on-line devices to be accurately cross-correlated using the sampler. This also provides primary samples for initial calibration and ongoing verification. Samples can also be used as the basis for re-calibration if fluid properties change.

Jiskoot has over twenty years experience of integrating on-line measurement devices as part of allocation and custody transfer sampling systems. These are often weekly and monthly sampling and analysis systems for offshore allocation measurement.

Jiskoot sampling and analysis systems are engineered to give you the confidence that the measurement provided by the on-line devices are representative and can be cross-correlated and calibrated using the most accurate sampling technology available today.

*An on-line assessment of pipeline mixing in accordance with ISO3171 annex A can be performed at [www.jiskoot.com](http://www.jiskoot.com).*



Not to scale



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