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JISKOOT Fast-loop Sampling System

Pumped bypass, flow-through sampling system

Bypass, or fast-loop samplers have a significantly higher accuracy (-0.035%)* than in-line systems. They were developed in response to demands for an offline, fully isolatable sampling system that incurs no pressure drop in the main process.

The fast-loop system extracts a representative stream from the process line using Cameron JISKOOT* ByScoop. The ByScoop is mounted in the central half of the pipeline through a single seal housing that allows installation by hot tap. The ByScoop is designed to minimize disturbance to the flow regime and uses a forward facing internally bevelled take-off to ensure representivity.

Applications

- Crude oil
- Condensate
- Low temperature liquid hydrocarbons
- Refined products
- Hazardous liquids

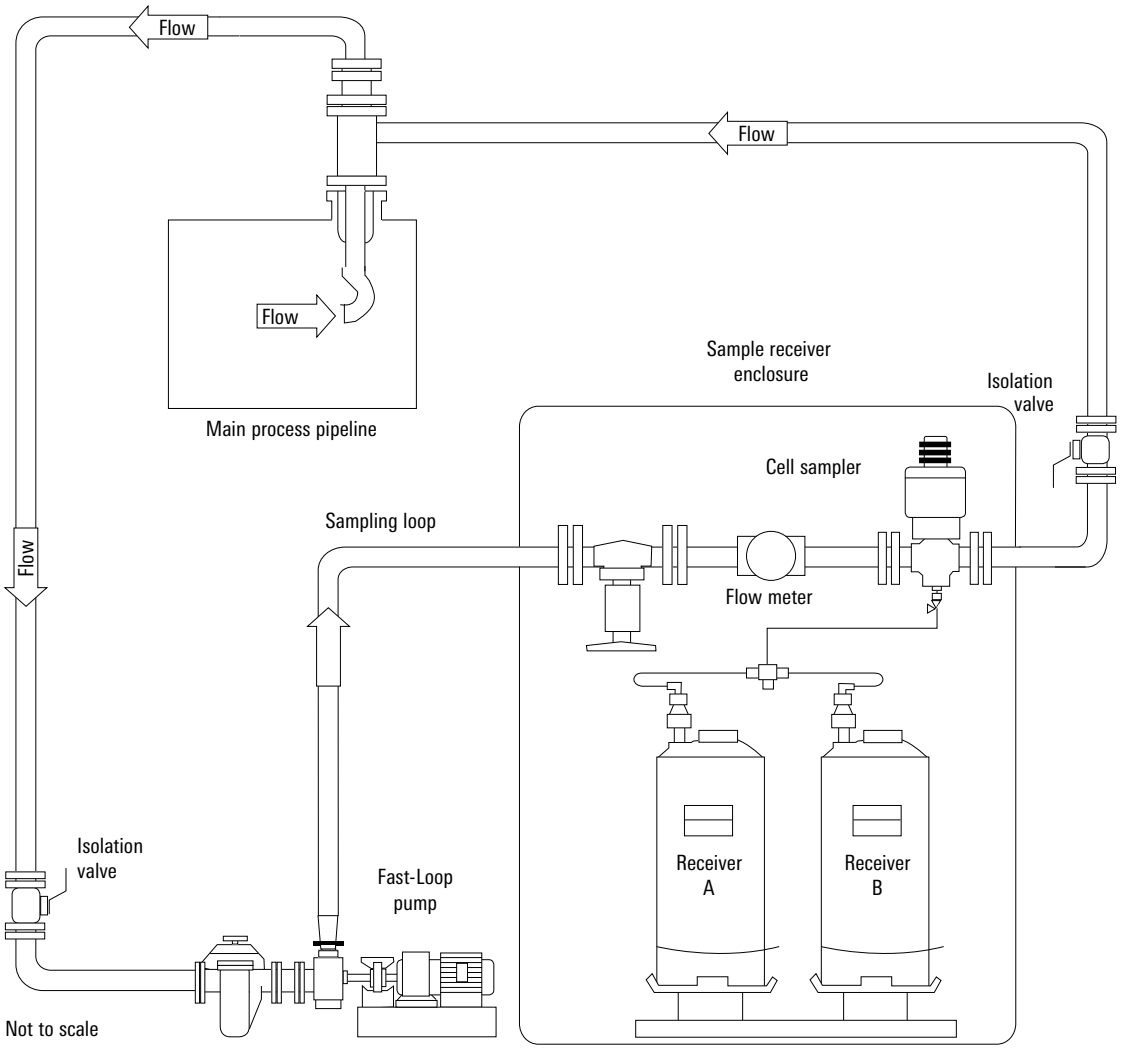
Features

- Liquid hydrocarbon sampling
- -0.035 %—measurement uncertainty†
- ISO, EI(IP), API and ASTM compliant
- Low inter-batch sample contamination risk
- Operator friendly and simple to maintain
- Low installation cost

210 Cell Sampler

ByScoop Take-Off

Typical systems schematic



The extracted stream flows through a pumped sample loop which is designed to have no water traps and sufficient fluid velocity to maintain sample representivity and homogeneity throughout the system.

The loop passes through a sample receiver enclosure which can be located in a convenient position for the operator. The enclosure is fully isolatable so any maintenance work can be carried out with no impact on the main process line.

The enclosure contains a flow-through cell sampler which discharges 1cc samples directly into a sample receiver. The short distance travelled by the sample minimises the risk of cross-contamination between batches.

The enclosure, which can be heated to maintain an even temperature to avoid solid or wax formation, also houses the sample receivers. These can be fixed volume (PR-103, PR-53, PR-23) or constant pressure sample receivers (CPC) with manual or automatic changeover.

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 pipeline mixing[‡] is required a JISKOOT CoJetix* sampling system should be considered. This is a combined JISKOOT JetMix* and fast-loop system.

Systems are custom designed for your application and components are selected for maximum reliability.

[†] Based on data from over 200 water injection proving tests.

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