

JISKOOT ShearMix Electric Sample Receiver Mixing Station



Cameron's JISKOOT™ ShearMix electric sample receiver mixing station is designed to homogenize the contents of a constant pressure sample receiver at the sample collection line pressure to ensure analysis sub-sample representativity and retention of light ends.

The ShearMix is the only integrated mixing system that uses laboratory mixing techniques to homogenize liquid hydrocarbon samples with the repeatability required for Karl Fischer analysis. It complies with the requirements of IP 386 (and equivalent standards) and will mix water and light hydrocarbons of viscosities ranging from 0.5 to 600 cSt (i.e., light crude oils to condensates). The ShearMix is designed for use with the JISKOOT CPC sample receivers or those from other vendors with suitable exchange fittings. Sub-samples can be withdrawn from the system for analysis through an atmospheric valve or by using a pressurized syringe.

The ShearMix system offers significantly better sample homogenization than that provided by internal mixing balls or baffles. The system can be used with all types of constant pressure receivers, from 0.5 to 4 liters.

Features

- Samples are homogenized at process pressure, ensuring representativity and minimal loss of light ends
- ShearMix can be used with most constant pressure sample receivers
- Top and bottom samples can be drawn to validate the mixing process at any time
- ShearMix uses the same technique as laboratories for sample homogenization
- Samples can be withdrawn directly into a pressurized syringe or through a valve
- Easy to flush, drain, and keep clean
- Simple to operate, repair, and overhaul
- Compact
- Complies with IP 386 and the ISO 3171, IP 6.2, and API 8.2 sampling standards (when operated within specification as part of a compliant sampling system)

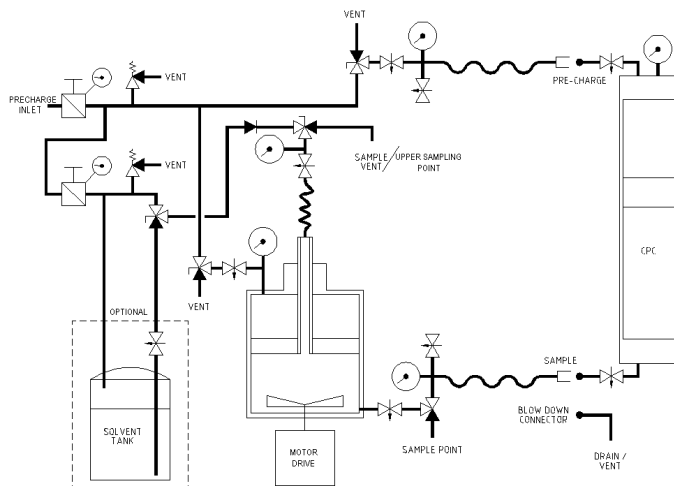
System Operation

A charged Constant Pressure Cylinder (CPC) sample receiver, under process conditions, is placed vertically onto the mixing bench station. The combination of valves allows the contents of the receiver to be transferred to the mixing vessel while maintaining process pressure.

Mixing is commenced via electric power. After a predetermined time, mixing is stopped, and a fully

homogeneous sample may be extracted as an atmospheric sample or by using a pressurized syringe receptacle.

Upon satisfactory sample analysis, a cleaning process, which involves flushing the mixing vessel, CPC, and associated pipe work with solvent, is conducted to ensure cleanliness and prevent contamination of further samples.



Specifications

Liquids	Hydrocarbons (condensate to crude oil)
Maximum Operating Pressure	150 bar at 100° C
Design Pressure	150 bar
Process Temperature Range	32° F to 104° F (0° C to 40° C)
Viscosity Range	0.5 to 800 cSt
Density Range	0.60 to 0.95 g/c
Materials	All wetted materials will be corrosion resistant, normally in (316) stainless steel Suitable for NACE MR-01-75 applications
Power Requirements	Single phase 115/230 VAC, 50/60 Hz
Dimensions	700 mm x 550 mm x 1100 mm (W x D x H)
Designed for Safe Area Use	

Options

PED Certification	NACE Certification
Solvent Purge System	Pressurized syringe take off

LOCATIONS

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