JISKOOT Laboratory Mixing
MS53 Laboratory Mixer

Introduction

Accurate sampling requires that the integrity of the sample be maintained at each step. Receivers should be suitable for the medium sampled and designed for use in conjunction with the mixing system and analysis procedure to be used. Portable receivers provide the most controlled and accurate solution.

Cameron's JISKOOT™ MS53 Laboratory Mixer

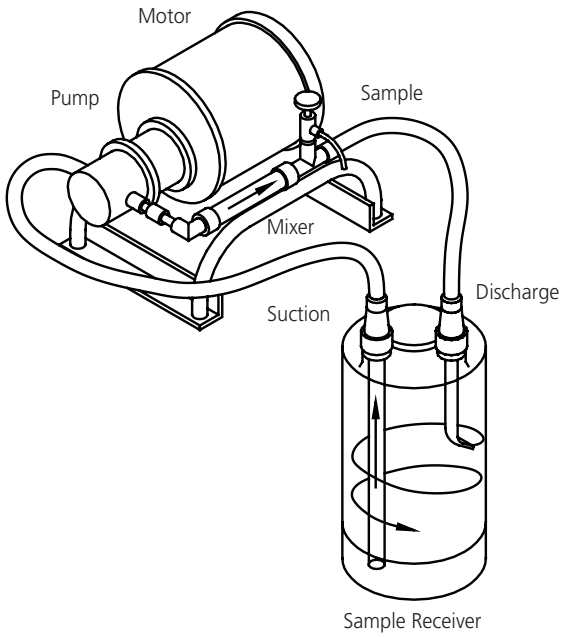
When a sample is collected in a portable receiver, it may be many hours before it is analyzed. During this time, many of the heavier components, such as water, will fall out and separate. To ensure that the sample withdrawn for analysis is representative, the contents must be thoroughly mixed. The MS53 provides an electrical or pneumatically driven pumped loop to perform this function. It is designed to be located on a laboratory bench with the receivers placed on the floor. Samples may be drawn from a takeoff valve or through an optional septum. The mixer can also be mounted in a heated enclosure to mix temperature critical oils.

Method of Operation

The laboratory mixer consists of a loop drawing fluid from the lowest point of the receiver, pumping it through a static mixer, and returning it back to the receiver. When returning the fluid, spray jets sweep the wall and base to induce swirl. A takeoff valve and/or optional septum is provided to draw off the mixed sample and deposit it directly into laboratory glassware. Typical mixing times range from 5 to 20 minutes, depending on the sample volume and type of oil. The MS53 is fitted with keyed connectors to prevent operator errors; adapters can be supplied to allow interconnection with a variety of other vendors' sample receivers.

Specifications

Fluids	Crude oil and refined products	
Pump	Direct coupled with integral relief valve, 20 liters/min (5 US GPM)	
Driver – Electrical	1/2 HP, flameproof/explosion proof, supplied complete with switch, single phase, or three phase	
Driver – Pneumatic	Air motor with regulator and silencer, 15 SCFM at 40 psi (25 liters minimum at 2.75 bar)	
Mixer	Depends on viscosity range, typically 3/4" 6 element	
Viscosity	1 to 500 cS normal (extended viscosity range available on request)	
Connections	Hoses Inlet Outlet Drawoff(s)	Buna-lined hydraulic, 1-1/2 m (5 ft) supplied, may be cut to suit 3/4" female Q-R coupling 1/2" female Q-R coupling 1/4" valve, optional septum
Standard Fittings	Integral relief valve	
Dimensions	11" x 22-1/2" x 14" (570 mm x 280 mm x 363 mm)	
Weight	83 lb (37.5 kg)	
Certification	a) ATEX Eex d IIC T3 b) UL FM Class I Div. 1 Group C & D	



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