

IsoMix System

IsoMix 4000 cc



IsoMix Bench

The IsoMix Bench sample receiver system is a design for storing and mixing / homogenizing of hydrocarbon samples prior to analysis e.g. water in oil, and other kind of analysis applicable for testing of hydrocarbons. The IsoMix system consists of a stationary constant pressure sample receiver of 1000/4000 centilitres and a mixing pump.

A sample taken into a IsoMix 1000/4000cc cylinder might be stored, or homogenized for immediate laboratory analysis. When the mixing process is finished, one (or more) representative sub sample are taken, and brought to laboratory for analysis or transfer into portable sample receiver.

This method enables laboratory personnel to extract small representative sub samples from a large sample which may consist of several liters, and then transfer it to the analyzer apparatus. This can be done with the Pressurised Oil Syringe Sub Sample Method or any other method for transferring sub samples from sample receiver to analyzer apparatus. This method has the potential to offer the user a significant number of time saving factors, since it makes the operator able to take only a small sub sample from the sampling station, and bring it to lab. for analysis. When a larger sub sample is required for other kinds of analysis, the required volume can be transferred from the IsoMix into a small sample receiver.

How the IsoMix bench works:

In the mixing unit, the sample is circulated from the receiver through an external loop, and back into the receiver by use of an air driven pump. The homogenizing process takes place when the sample flows through two nozzles located in the cylinder end cap. Fluid is forced through the small orifice of the nozzles and back into the cylinder at an extreme high velocity jet. Water is crushed into small droplets, which are then evenly distributed in the sample. The pulsating jetting effect from the nozzle also introduces a stirring motion within the fluid, thereby counteracting any tendency of gravitational separation inside the cylinder.

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