

## FluiMix™ Sampling and Analysis Loop – Technical Data Sheet

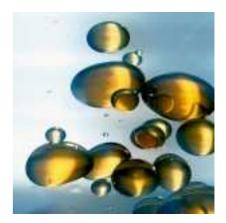
FluiMix<sup>™</sup> Ltd has developed zero pressure blending technology that offers the following benefits to crude oil/condensate sampling and analyzer packages. FluiMix<sup>™</sup> will provide fully homogenous flow for measurement and sampling of crude/condensate that is fully compliant to the following international standards:

API 8.2, ISO 3171, ASTM D4177, EP 6.2

FluiMix™ Ltd will guarantee the performance of its sampler and analyser packages to within 0.025% of the true percentage of water present in a typical crude or condensate flow line or sampling point.

The benefits of a FluiMix™ system are:

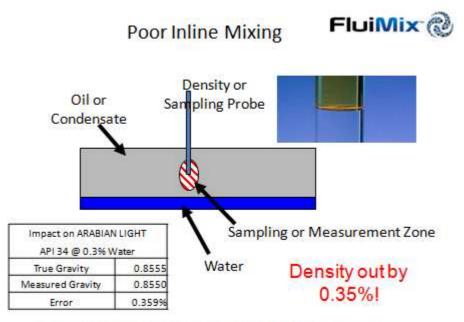
• Flow Conditioning - FluiMix™ ensures that the flow conditioning meets API 8.2, ASTM D4177, EP 6.2 and ISO 3171 sampling standards. This ensures that any measurement is made in fully representative flow no matter what the flow rate of the blend. Any water that is not captured in the measurement can add error up to 0.4% however a FluiMix™ is guaranteed to be within 0.025% of the true water content.



- Flow Proportional Sampling FluiMix™ Ltd can supply a flow proportional ISOLOK™ API-C cell and ISOLOK™ API-P probe sampling unit (complete with self change sample cans, self diagnostic controller and reporting functionality) to ensure compliance to the sampling standards. The sampler technology uses advanced low surface energy coatings and super duplex body construction to significantly improve reliability.
- Online Fiscal Density Measurement Online density measurement can be as much as 0.4-8% inaccurate if the densitometer is placed in non mixed flow. FluiMix™ Ltd include fiscal densitometers within FluiMix™ sampling loops to ensure that the density is measured accurately.
- Sulfur Measurement Accuracy Online sulfur measurement requires the sample to be taken from homogenous flow otherwise the measurement can be out by as much as 0.5%. FluiMix™ Ltd uses Rigaku NEXT units located within the FluiMix™ Analyser/Sampling loop to ensure sulfur is measured accurately from 200 ppm to 6%.
- Salinity Measurement Online salinity measurement can only be accurate if the
  measurement stream is taken from homogenous flow. A FluiMix™ Analyser Loop ensures that whatever salinity
  analyser technology is used, the measurement stream is representative and fully mixed.
- B, S and W Measurement Fully mixed flow is required to ensure that any B,S and W measurement is accurate.
   The FluiMix™ analysis and sampling loop ensures that B,S and W is measured to the accuracy of the technology chosen.

FluiMix™ Ltd will also supply automatic change over systems; constant pressure sample cylinders and the necessary lab mixing equipment to ensure that your samples are fully compliant.





Measurement Misses all of the water

## FluiMix™ typical layout that mixes and captures a truly representative measurement or sample

