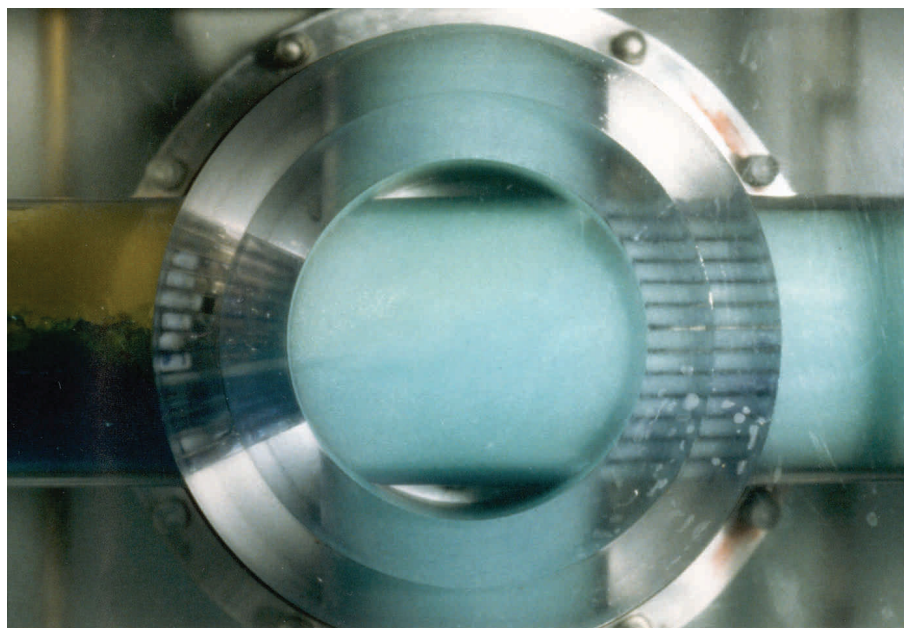


PROMIX M100 INLINE MIXER



Together creating pure
oil, gas and water.

The ProMix M100 inline mixer achieves homogenization of multiphase flows with low associated pressure drop and results in separable droplet sizes. Shearing forces in the multiphase flow are controlled and more evenly distributed with the ProMix patented design than in any other mixing device, resulting in uniform droplet distribution.



APPLICATIONS

PRODUCTION CHEMICALS

Optimal performance of production chemicals such as flocculants, emulsion breakers, scavengers and inhibitors depend on high fluid exposure which is achieved with the M100 mixer. The M100 performance can prevent overdosing, which is a serious problem not only for operational costs, but also for its effects on the downstream fluid processing.

MULTIPHASE MIXING

The ProMix M100 ensures a homogeneous multiphase distribution in the pipe with low pressure drop. Homogeneous multiphase mixing is essential for accurate sampling in quality control and production monitoring activities. For upstream mass flow meters and heat exchangers, multi-phase mixing is also crucial.

LIQUID-LIQUID MIXING

Gentle but effective mixing of two liquid streams with a low pressure drop is a main application for the M100. The M100 guarantees a homogeneous mix in any part of the process requiring it.

PRODUCED WATER TREATMENT

The M100 inline mixer is one of the key process components of the CTour produced water treatment system, in which it is used to re-mix condensate and produced water, to extract and coalesce the hydrocarbons in the produced water stream.

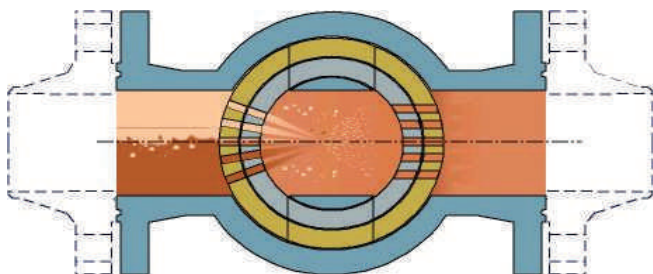
OIL DESALTING AND DEHYDRATION

As part of the ProSalt system, the M100 mixes wash water as narrow-banded droplets of separable sizes into a crude oil stream to achieve even-sized water droplets that are easily separated downstream.

TECHNOLOGY

The mixer has similarities to a cylindrical plug valve with an internal cylinder. By rotating the cylinder, the pressure drop and the degree of mixing can be adjusted. In addition, the cylinder can be designed with a full bore position that allows the pipe to be pigged, which is impossible with static mixers.

The internal cylinder at the inlet side is fitted with channels pointing towards a common focus line in the center of the mixing chamber. In this way the whole chamber is utilized and efficient multiphase mixing is achieved with a low pressure drop. At the outlet side, the channels are oriented in parallel to the pipe axis to straighten the flow.



IN-DEPTH ANALYSIS AND TAILORED CHANNEL DESIGN

Since the pressure drop can be pre-determined by the geometry of the channel pattern at the inlet and outlet sides of the mixer, the ProMix M100 inline mixer is always tailored to its particular application and can be designed to accommodate a wide turndown.

BENEFITS

- Adjustable degree of mixing
- Low pressure drop
- Allows for pigging
- High turndown ratio
- Compact design

REFERENCES

Available upon request.

FOR MORE INFORMATION

Contact your nearest ProSep office
www.prosep.com

About ProSep



ProSep is a technology-based process solutions provider for the upstream oil and gas industry.

The Company designs, develops, manufactures and commercializes technologies to separate oil, gas and water generated by oil and gas production.

ProSep's innovative offerings have been awarded three Spotlight on New Technology Awards from the annual Offshore Technology Conference in Houston in 2005 and onwards, comprising the proprietary technologies ProScav, C-Tour and ProSalt.

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