

+ JISKOOT

Crude oil blending systems





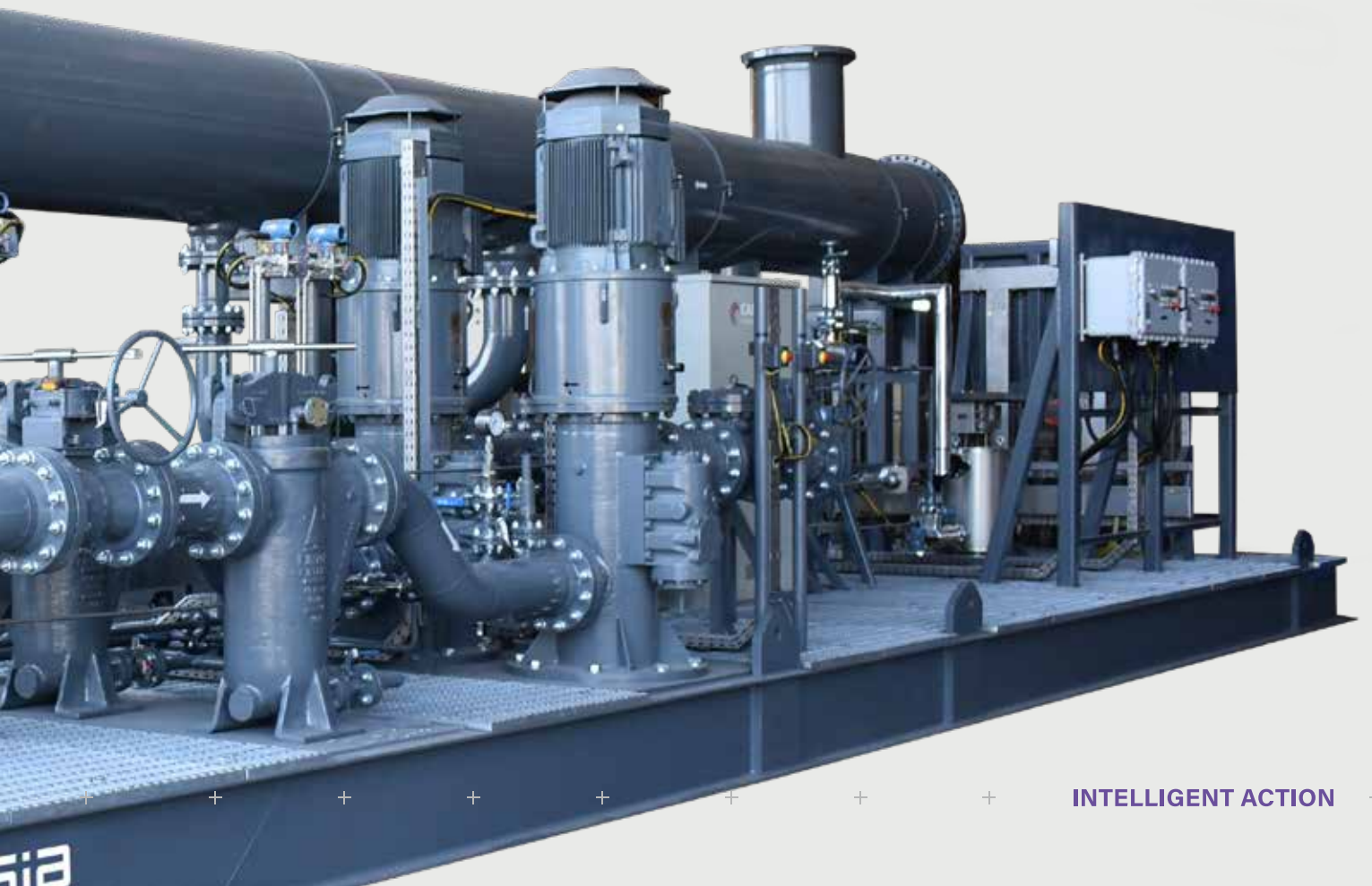
The dynamically changing crude oil prices, along with the availability of lower-cost, high-sulfur, high-viscosity, heavy-density, and high-TAN crudes, makes in-line blending one of the most efficient methods to optimize product quality and maximize profitability. Blending lower-value oil with higher-specification crudes to optimize both quality and cost can deliver multimillion dollar returns.





Sensia provides turnkey, high-accuracy in-line blending solutions for heavy, viscous, waxy, high-sulfur crude oils, condensates, and other unrefined hydrocarbon liquids. Sensia's JISKOOT* blending systems are designed to deliver customers an optimal return on their investment and have a significantly lower capital cost than a traditional in-tank blending infrastructure.

In-line blenders deliver greater operational and commercial purchasing flexibility that can enable continuous profit optimization. Our blending solutions are designed specifically for your application and supplied as a turnkey package that is fully skid-mounted with an integrated control system and that comes with a blend performance guarantee.



In-line blending has moved from simple ratio control systems to quality trim systems that utilize online analyzers to continuously optimize the cost and quality of blended crude.

The blending is achieved using a combination of measured and dynamically calculated, flow-weighted, quality parameters (based on the feedstock specification). Quality trim blenders utilize these parameters to automatically optimize blends to correct for any variations in feedstock quality or errors in blending models. Blended crude can be optimized for quality parameters such as density, viscosity, Reid vapor pressure/true vapor pressure (RVP/TVP), sulfur, or total acid number (TAN) for pipeline, terminal, or refinery applications.

Blended crude homogeneity, stability, and consistency are key requirements for optimal blending operations. A high-energy, high-shear JISKOOT JetMix* pipeline mixing system is used to ensure crude homogeneity and optimize the representivity and repeatability of any online analyzers used by the blender. Feedstock streams as well as the blended stream can be continuously measured and adjusted to optimize quality and minimize give-away in real time using unique control algorithms that have been developed and refined in JISKOOT systems since the 1960s.

JISKOOT crude oil blenders are guaranteed to deliver a consistent blended product that is dynamically optimized even in the event of changes in feedstock quality, flow rate, loss of power, or the unlikely failure of a system component.

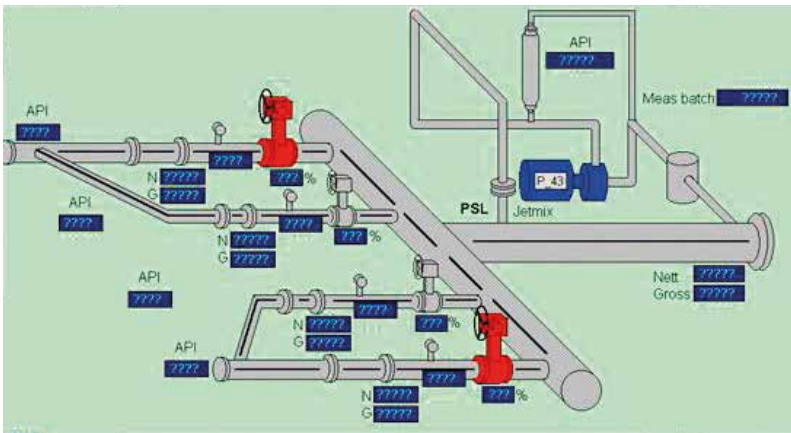
All JISKOOT blenders have an automated failsafe feature to ensure operation in conditions where other systems fail. They are designed with minimal pressure drop to enable optimal throughput in all recipes.



In-line crude oil blender



Crude oil blender

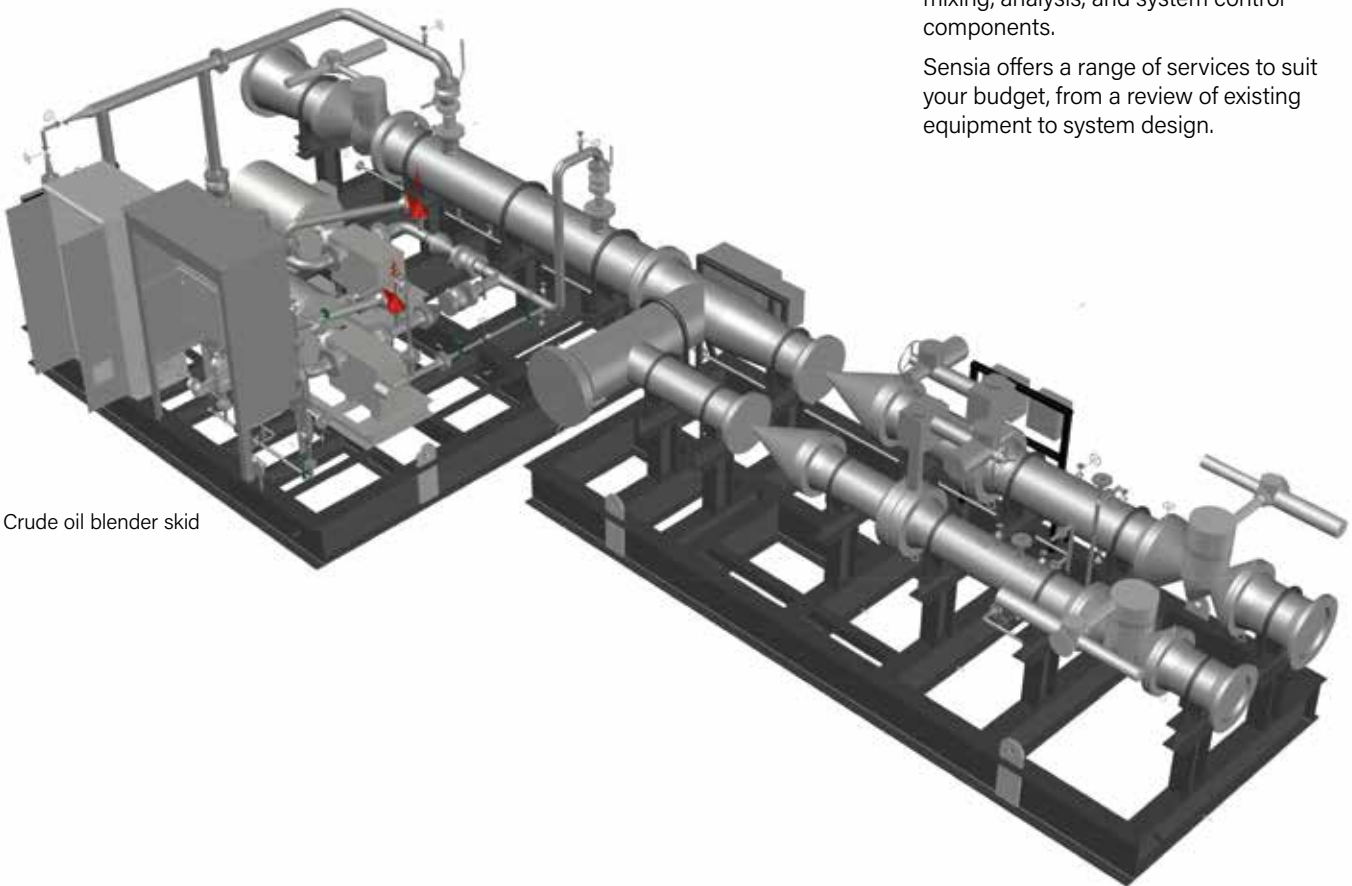


The JISKOOT blender control system uses proven, standard, real-time software that can be operated completely stand-alone (for remote locations) or fully integrated as part of a plant PLC, DCS, or OMS system (as required). All blending data can be fully analyzed and reported. The control system features fully automated and manual recipe management and multilevel security.

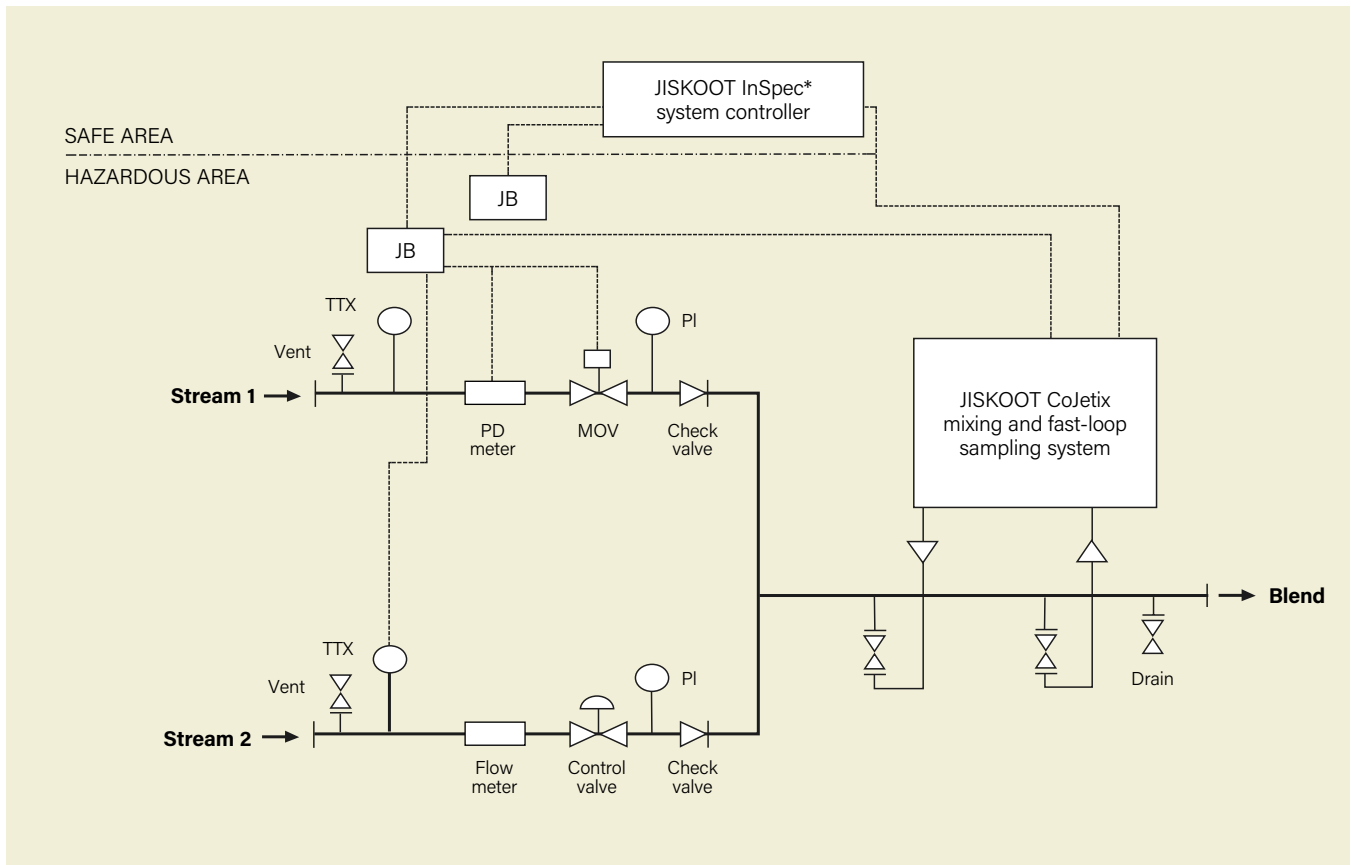
The control system is designed for simplicity. After it is initiated, the blending process is fully automatic, only informing an operator if an alarm condition occurs.

The performance of a crude oil blending system is so much more than the sum of its parts. It is determined by the successful selection and integration of all of the flow measurement, flow control, mixing, analysis, and system control components.

Sensia offers a range of services to suit your budget, from a review of existing equipment to system design.



Crude oil blender skid



JISKOOT InSpec* system controller and the JISKOOT CoJetix* mixing and fast-loop sampling system

FEATURES

- + Blended crude specification is guaranteed at all times during the blending process.
- + The JISKOOT JetMix pipeline mixing system guarantees homogeneity of the final blended product, which improves the accuracy and performance of online analyzers.
- + The cost and quality of the final blend are continuously optimized by the blending control system and the chosen analyzers.
- + Blended crude quality can be adjusted or limited by both measured and dynamically flow-weighted calculated quality parameters.
- + Blended crude oil is on specification at all times during the batch.
- + Failsafe analyzer feedback protection is built into the control system.
- + The extremely low pressure drop enables blender operation at a wide range of flow rates and recipes.
- + Proven standard blending control software ensures a system that is easy to use and support without any specialized training.
- + Leveraging the JISKOOT brand's 60+ years of blending expertise ensures that the chosen system will meet the operational, contractual, and financial obligations of your business.
- + Choosing Sensia as your trusted blending system provider ensures that from initial consultation, through equipment selection, engineering and design, fabrication, installation, and commissioning we are working as your partner to meet your business and operational objectives.



Sensia offers a complete range of services for hydrocarbon blending and sampling. Please contact us or our local representative to discuss your needs.

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Add intelligent action to your oil & gas solutions

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