

ExxonMobil Develops Efficient New Technology to Dehydrate Natural Gas

- Represents a step-change in efficiency and significant reduction in operational footprint
- Size, weight and cost of natural gas dehydration reduced for land-based and offshore operations
- Technology licensed to Sulzer for commercial application across the industry

HOUSTON--(BUSINESS WIRE)-- [ExxonMobil](#) announced today its development of cMIST™ technology, which dehydrates natural gas using a patented absorption system inside pipes and replaces the need for conventional dehydration tower technology. This “in-line” technology could be deployed at both land-based and offshore natural gas production operations.

The new technology, developed and extensively field-tested by ExxonMobil, more efficiently removes water vapor present during the production of natural gas. Removing water vapor through the use of dehydration technology, typically accomplished using large and expensive dehydration towers, reduces corrosion and equipment interference helping to ensure the safe and efficient transport of natural gas through the supply infrastructure and ultimately to consumers.

cMIST reduces the size, weight and cost of dehydration, resulting in reductions of surface footprint by 70 percent and the overall dehydration system’s weight by half, which has significant added benefits on offshore applications.

“By leveraging our industry-leading experience with upstream applications, our researchers were able to create this advanced natural gas dehydration technology, which represents a step-change in operational efficiency and a significant reduction in footprint,” said Tom Schuessler, president of ExxonMobil Upstream Research Company.

ExxonMobil’s cMIST technology relies on a proprietary droplet generator to break up conventional solvent into tiny droplets that become well dispersed in the gas flow thereby increasing the surface area for the absorption of water from the gas. This is followed by an inline separator that coalesces the water-rich glycol droplets and moves them to the outside wall of the pipe for effective separation from the dehydrated natural gas. The water-rich glycol is regenerated using a conventional system and is sent back to the droplet generator to be used again. The droplet generator uses the energy from the flowing natural gas to create droplets of the right size.

ExxonMobil has licensed cMIST technology to the Chemtech division of Sulzer, a leading player in separation technologies, to facilitate deployment across the oil and gas industry.

“We are proud to have been selected as worldwide exclusive licensee of the cMIST

technology, which includes our patented compact HiPer™ inline separator,” said Torsten Wintergerste, president of the Chemtech division. “We look forward to servicing the oil and gas industry with this unique technology, allowing for much needed reductions in capital expenditures for both greenfield projects and existing facilities seeking brownfield debottlenecking opportunities. cMIST technology complements the Sulzer line of compact multi-phase separation technologies and will maximize benefits available to oil & gas operating companies around the world.”

ExxonMobil’s Houston-based Upstream Research Company and New Jersey-based ExxonMobil Research and Engineering division develop a range of innovative technologies aimed at producing energy more efficiently. The two organizations employ more than 1,000 PhD scientists and engineers.

About ExxonMobil

ExxonMobil, the largest publicly traded international oil and gas company, is a leader in developing and applying technology to overcome global energy challenges. ExxonMobil holds an industry-leading inventory of energy resources, is among the largest refiners and marketers of petroleum products and its chemical company is one of the largest in the world. For more information, visit www.exxonmobil.com or follow us on Twitter www.twitter.com/exxonmobil.

About Sulzer

Sulzer, headquartered in Winterthur, Switzerland, since 1834, specializes in pumping solutions, rotating equipment maintenance and services as well as separation, reaction, and mixing technology. Customers benefit from advanced solutions and services in the fields of process technology and separation equipment, as well as two-component mixing and dispensing systems. Reliable service concepts help Sulzer to maintain its leading position in its market segments. The company creates reliable and sustainable solutions for its key markets: oil and gas, power, water and selected industries. Sulzer serves customers around the world through a network of over 170 production and service sites and has a strong footprint in emerging markets. In 2015, the company achieved sales of roughly CHF 3 billion with around 14 000 employees. www.sulzer.com

Cautionary Statement: Statements of future events or conditions in this release are forward-looking statements. Actual future results, including the impact and results of new technologies, could vary depending on the success of marketing and licensing efforts; the outcome of commercial negotiations; the development and competitiveness of alternative technologies; political and regulatory developments; and other factors discussed in this release and under the heading “Factors Affecting Future Results” on the Investors page of ExxonMobil’s website at exxonmobil.com.

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