

Press Release

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Linde launches CO₂ scrubbing technology for early flowback gas

Munich, 16 March 2016 – Linde Gases, a division of The Linde Group, today announced the launch of its pioneering mobile technology to economically remove carbon dioxide (CO_2) from early flowback natural gas, giving producers a cost-effective way to increase recovery and achieve green completions.

The new mobile gas cleanup unit (MGCU) uses a innovative membrane technology to remove up to 98 percent of the CO_2 in the production stream. It was designed to improve well economics, with an emphasis on enhanced productivity or Estimated Ultimate Recovery (EUR), reduced environmental footprint and improved economics of the field.

Natural gas typically contains trace amounts of CO_2 . But when a well is fractured with energised fluids containing CO_2 to boost recovery, the early flowback gas may exceed pipeline specifications. The most common practice is to flare off the gas until the well cleans up enough to meet specifications.

"Linde has created an economical and environmentally friendly alternative to flaring" said Robin Watts, Program Manager, Well Completions, Linde North America. "Our mobile gas cleanup unit scrubs CO_2 so producers can monetise early flowback natural gas while minimising flaring and greenhouse gas emissions. One of the many challenges producers face is finding a way to improve well economics while complying with environmental regulations. Linde has designed the MGCU so operators can employ it profitably even during relatively short windows of operation and at low natural gas prices. It is also designed to be cost-effective at lower process volumes – including associated gas rates from oil wells."

Ust-Nr.: 040 225 50007

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San Antonio-based Mortimer Exploration Co. used the MGCU over a one month deployment to clean up gas from one of their newly completed South Texas wells.

"The results were way better than we had even hoped," said Glenn Mortimer, President of Mortimer Exploration Co. "Without the mobile gas cleanup unit, we would have incurred significant additional costs with alternative solutions and lost the revenue we were able to monetise by eliminating flaring and selling the gas into the pipeline."

The trailer-mounted skid unit can be deployed to well sites even in remote locations, and can be operational within half a day depending on location logistics. It also can be shut down, purged and driven to the next location very quickly. The flexibility of the MGCU design results in operators only paying for the gas scrubbing capabilities needed, based on length of use and volume of gas flow.

About The Linde Group

In the 2015 financial year, The Linde Group generated revenue of EUR 17.944 bn, making it one of the leading gases and engineering companies in the world, with approximately 65,000 employees working in more than 100 countries worldwide. The strategy of The Linde Group is geared towards long-term profitable growth and focuses on the expansion of its international business with forward-looking products and services. Linde acts responsibly towards its shareholders, business partners, employees, society and the environment in every one of its business areas, regions and locations across the globe. The company is committed to technologies and products that unite the goals of customer value and sustainable development.



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For more information, see The Linde Group online at www.linde.com

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