

Johnson Matthey and thyssenkrupp renew partnership for world class collaboration in ammonia production

After collaborating successfully for 20 years and working together to deliver 21 projects, Johnson Matthey (JM), a global leader in sustainable technologies, and thyssenkrupp, a technology provider for world-scale ammonia plants, have signed an agreement to renew their collaboration around ammonia process and catalyst supply.

The partnership was founded two decades ago and sees thyssenkrupp exclusively use JM's world class catalysts for its uhde® ammonia process built in that period. Through constant innovation, thyssenkrupp is licensor of the largest ammonia plants in the world. The uhde® ammonia technology has ultra low energy consumption and enables the highest production in a single-train unit, thus minimizing investment costs, and is suitable for small to large scale capacity plants of up to 5,000 metric tons per day. Thanks to this collaboration over the past two decades thyssenkrupp have built over 20 ammonia plants with a total capacity of 40,000 tonnes per day using JM catalysts, representing nearly 9% of global nitrogen fertilizer production, enough to feed 350 million people.

Dr. Sami Pelkonen, CEO of the Chemical and Process Technologies business unit at thyssenkrupp Industrial Solutions: "We are proud to continue our partnership with JM, which has seen so many successes such as the construction of the world's largest ammonia plants employing the uhde® process, and several repeat orders from customers all around the world trusting in our technology, EPC competence and service capabilities."

"We are extremely proud of our ongoing partnership and are thrilled with the opportunity to continue to apply our deep knowledge in catalysis, pushing the boundaries in energy efficiency and higher capacity," said John Gordon, Managing Director, Johnson Matthey. "It has been fantastic to see our world-class catalysts deliver optimum reliability with the lowest operating expense for the thyssenkrupp uhde® ammonia process for five of the world's largest scale ammonia plants."

About Johnson Matthey

Johnson Matthey is a global leader in science that enables a cleaner and healthier world. With over 200 years of sustained commitment to innovation and technological breakthroughs, we improve the performance, function and safety of our customers' products and in 2020 we received the London Stock Exchange's Green Economy Mark, given to companies that derive more than 50% of revenues from environmental solutions. Our science has a global impact in areas such as low emission transport, pharmaceuticals, chemical processing and making the most efficient use of the planet's natural resources. Today more than 14,000 Johnson Matthey professionals collaborate with our network of customers and partners to make a real difference to the world around us. For more information, visit www.matthey.com.

Inspiring science, enhancing life

About thyssenkrupp

thyssenkrupp is a technology group with strengths in materials. Over 162,000 employees in 78 countries work with passion and technological know-how to develop high-quality products and

intelligent industrial processes and services for sustainable progress. Their skills and commitment are the basis of our success. In fiscal year 2018/2019 thyssenkrupp generated sales of €42.0 billion.

The Chemical & Process Technologies business unit combines unique technological expertise and decades of global experience in the engineering, procurement, construction and service of chemical plants. We develop innovative processes and products for a more sustainable future and thus contribute to the long-term success of our customers in almost all areas of the chemical industry. Our portfolio includes leading technologies for the production of basic chemicals, fertilizers and polymers as well as complete value-chains for green hydrogen and sustainable chemicals.

For more information visit: www.thyssenkrupp-industrial-solutions.com

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