

Johnson Matthey and KBR sign global strategic alliance for ammonia-methanol coproduction process

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Johnson Matthey (JM), (London, UK), a leader in sustainable technologies, and KBR, (Houston, USA) announced today that they have signed a global strategic alliance agreement to license a groundbreaking ammonia-methanol coproduction process that combines the company's market leading ammonia and methanol process technologies. Under the collaboration the JM and KBR coproduction process makes the most of the synergies between the two technologies, maximizing savings while offering the highest levels of safety, flexibility and reliability.

The coproduction process combines two industry proven technologies, JM's methanol production process and KBR's proprietary PURIFIER™ ammonia process. Ammonia is primarily used in the production of urea for fertilizer, with methanol and its derivative products primarily used to produce formaldehyde, acrylic plastic, synthetic fabrics, adhesives, paints, and other products in pharmaceuticals and agrichemicals. The coproduction of methanol and ammonia in a single plant eliminates duplication of equipment compared to two stand-alone plants, reducing CAPEX. The synergies between the two technologies reduces the environmental impact of the plant and its OPEX through shared utilities and lower energy consumption, while the process grants the operator the flexibility to optimize production and adjust to opportunities within the marketplace, as opposed to separate plants tied to one dedicated product.

Both JM's methanol technology and KBR's ammonia technology showcase their heritage, deep experience, and high performance. JM has supplied the methanol industry with leading technology and catalysts for over 45 years and have licensed over 100 grassroots methanol plants in that time. Since the 1960s, KBR has licensed, engineered or constructed more than 244 ammonia plants worldwide.

"I am excited to announce the alliance agreement combining market leading technologies from KBR and JM into a new offering for our clients," said Doug Kelly, KBR President, Technology Solutions. "KBR's ammonia technology is known for its lowest energy consumption resulting in reduced carbon footprint, highest reliability and safety and outstanding financial performance."

"Methanol and ammonia hold great promise for continued energy and fuels transition to a greener world. This strategic agreement is a powerful combination that provides our customers a comprehensive solution for enhanced asset optimization, cost savings and reduced environmental impact," said John Gordon, Managing Director for Johnson Matthey. "Our partnership with KBR takes ammonia-methanol production to the next step with a single point license that delivers innovative operational agility to meet ever changing market demand."

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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 KBR

KBR is a global provider of differentiated professional services and solutions across the asset and program life cycle within the government services and technology sectors. KBR employs approximately 28,000 people worldwide with customers in more than 80 countries and operations in 40 countries.

KBR is proud to work with its customers across the globe to provide technology, value-added services, and long- term operations and maintenance services to ensure consistent delivery with predictable results. At KBR, We Deliver. Visit www.kbr.com

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