

UNIGEL PARTNERS WITH ELESSENT CLEAN TECHNOLOGIES FOR MECS® SULFURIC ACID PLANT

Ultra-low emissions and the production of carbonless energy at new plant showcases environmental stewardship in the region

ST. LOUIS, MO, USA, January 11, 2023 – Brazilian chemical maker Unigel RI (Unigel) – one of Latin America's largest chemical companies and Brazil's top manufacturer of nitrogen fertilizers – has contracted with MECS, Inc. (MECS), a subsidiary of Elessent Clean Technologies, for the construction of a new sulfur burning sulfuric acid plant to displace the import of sulfuric acid for their downstream chemical processes. The new plant will be constructed in the coastal state of Bahia. With sustainability as a core value, Unigel's new plant will also be used to generate utility steam that will provide reliable and carbon-free power throughout their industrial complex.

“The design and construction of this new sulfuric acid plant, the first for Unigel and the first for Brazil in over 15 years, is an integral step to enabling more streamlined operations and positioning Unigel as a key player in the widespread distribution of sulfuric acid to consumers. Unigel operates on four major pillars: sustainability, quality, safety and reliability; and we knew we needed the market leader for this project. The MECS® technology, products and equipment used in the plant's design are world class and will ensure our commitment to our customers while ESG practices are met.” said Unigel CEO, Roberto Noronha Santos.

The project also contributes to the challenges of decarbonizing the production chain, since the steam produced in the new sulfuric acid plant will be free from the burning of fossil fuels thereby reducing greenhouse gas (GHG) emissions. This is in addition to other environmental initiatives promoted by Unigel, including Brazil's first green hydrogen plant which Unigel is pioneering. “Unigel focuses on investments that enable the company to decarbonize its operations while also providing solutions for the industry,” said Noronha.

The MECS® sulfuric acid process design for Unigel incorporates state of the art products and technologies, such as MECS® GEAR® catalyst for ultra-low emissions and high conversion, Brink® AutoDrain™ technology for operational efficiency, as well as UniFlo® distributors, acid coolers and acid piping. The addition of the new plant will also facilitate increased capacity for Unigel to better serve their clients, as well as benefiting the region by contributing to a more competitive sulfuric acid supply chain.

“We are excited to have the opportunity to work with Unigel to supply the MECS® sulfuric acid technology at the Camacari, Bahia facility. The plant is essential to Unigel's operations at the complex as it brings them greater energy and raw material independence. We have worked closely with Unigel over the last few years to generate the optimized solution for the plant, while ensuring maximum efficiency so Unigel can remain a reliable supplier into the future,” said Eli Ben-Shoshan, CEO, Elessent Clean Technologies.

Startup of the new sulfuric acid plant at the Bahia, Brazil site is expected to take place in the first half of 2023.



The MECS[®] sulfuric acid technology has been in use for over 90 years in phosphate fertilizer, non-ferrous metals (leaching & smelting), oil refining and general chemical industries. MECS[®] technologies feature breakthrough solutions, many of which have revolutionized the performance, quality and cost-effectiveness of customer operations. They include MECS[®] heat recovery systems (HRS[™]), MECS[®] SolvR[®] regenerative SO₂ scrubbing and MECS[®] MAX3[™] sulfuric acid production technology. Integrated into these MECS[®] technologies are proven specialty products such as catalysts, Brink[®] mist eliminators, DynaWave[®] scrubbers, ZeCor[®] corrosion resistant alloy products, and acid coolers all of which are specifically designed for the most demanding operating environments. Licensed and marketed by Elessent Clean Technologies, the MECS[®] technology is the world-leading sulfuric acid production technology with more than 400 licensed acid plants worldwide since the 1960's. Elessent Technologies is committed to long-term customer satisfaction and support for the life of customer asset.



About Elessent Clean Technologies

Elessent Clean Technologies is a global leader in process technologies to drive sustainability and carbon neutrality in the metal, fertilizer, chemical and oil refining industries with an unwavering commitment to customer support. We provide extensive global expertise across our portfolio of offerings in key applications – MECS® sulfuric acid production, STRATCO® alkylation, BELCO® wet scrubbing and IsoTherming® hydroprocessing. Offering critical process equipment, products, technology and services, we enable an array of industrial markets, including phosphate fertilizer, non-ferrous metals, oil refining, petrochemicals and chemicals, to minimize their environmental impact and optimize productivity. We are dedicated to helping our customers produce high-quality products used in everyday life in the safest, most environmentally-sound way possible, with a vision to make the world a better place by creating clean alternatives to traditional industrial processes. Learn more at www.ElessentCT.com.

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