

PT AMMAN MINERAL INDUSTRI PARTNERS WITH ELESSENT CLEAN TECHNOLOGIES FOR PROVISION OF MECS® SULFURIC ACID TECHNOLOGIES

New sulfuric acid plant guarantees strict control of particulate and sulfur dioxide emissions for optimum air quality in critical region

ST. LOUIS, USA, February 8, 2023 – Indonesian mining company, PT Amman Mineral Industri (AMIN), has partnered with Elessent Clean Technologies (Elessent) for the provision of a new smelter off-gas MECS[®] sulfuric acid plant equipped with MECS[®] DynaWave[®] wet gas scrubbing technology. The new plant will be constructed in Sumbawa, Nusa Tenggara Barat, Indonesia with anticipated startup in 2024.

Over the last few years, Indonesia has become a critical region for the battery metal marketplace. As the EV revolution sweeps the globe, consumers are procuring more vehicles to support energy transition. Battery metals are essential for the production of electric vehicles, as well as numerous other electronics, and producers are turning to Indonesian mining operations for access to materials. Elessent's MECS® sulfuric acid plant technology provides sulfuric acid used in HPAL (high-pressure acid leaching) extraction of battery raw materials with the most stringent control of emissions. With a new office in Jakarta, Elessent's subsidiary, PT MECS MandR Solution, will be a local provider of technical services to customers throughout the country.

"AMIN chose Elessent for their reputation in meeting environmental regulations and the high reliability of their technologies. Using MECS® acid plant design and its incorporated technologies, our new plant will expectedly meet site-specific environmental, cost and operational goals, as well as environmental requirements." said Mr. Anil Upadhyay, Copper Smelter Project Director, AMIN.

The MECS® sulfuric acid process design for AMIN incorporates state of the art technology including both MECS® pre-conversion technology, which offers a novel approach for processing gas streams with elevated sulfur dioxide concentrations, and MECS® DynaWave® wet gas scrubbing technology. DynaWave® scrubbers clean and condition the off gas from the copper smelter furnaces upstream of the sulfuric acid plant and are the gold standard for gas cleaning applications. Licensed and marketed by Elessent Clean Technologies, MECS® DynaWave® scrubbing technology has been successfully used at more than 400 sites worldwide.

The new sulfuric acid plant will enable AMIN to provide high quality sulfuric acid to the local Indonesian market, as well as benefiting the country and region by tightly controlling air emissions from the smelter.



The MECS® sulfuric acid technology has been in use for nearly 100 years in the phosphate fertilizer, nonferrous 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 assets. Learn more at ElessentCT.com.



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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