

ENAP'S ACONCAGUA REFINERY REDUCES EMISSIONS WITH BELCO® GAS CLEANING TECHNOLOGY

Reducing refinery FCCU emissions to minimize environmental impact

ST. LOUIS, MO, USA, September 20, 2023 – The third quarter marked an important milestone for Chilean oil refiner ENAP Refinerías S.A. (ENAP) with the successful startup of their newly installed BELCO® wet gas scrubber at the Aconcagua Refinery located in Concón, Chile. This is the second BELCO® wet gas scrubber installed on an ENAP fluid catalytic cracking unit (FCCU) with the first one commissioned in 2019 at the Bío Bío Refinery.

The introduction of BELCO® technology at the Aconcagua Refinery is an important accomplishment in ENAP's continuous commitment to spearheading the adoption of air quality control measures in South America. ENAP's new BELCO® gas cleaning installation will reduce sulfur oxides and particulate emissions from the FCCU to well below Chilean regulatory requirements.

Ramiro Abel Gonzalez, Latin America Business Development Manager, Elessent Clean Technologies, said of the project, "The startup of this project serves to improve emissions control with the highest operational reliability, and it has established ENAP as a leader in protecting the environment. By developing tailored emission control solutions, Elessent is delighted to be able to help refinery customers worldwide meet site-specific environmental, energy consumption, cost and operation targets."

BELCO® gas cleaning technology uses a unique, proprietary design consisting of a water spray tower equipped with a filtering module and droplet separators. Larger particulate and SO₂ are removed in the spray tower, and fine particulate is removed in the filtering module section, so that only cleaned flue gas leaves the tower. The process is fully automated, and the new custom-designed system has analyzers that allow for constant online monitoring.

Eli Ben-Shoshan, Elessent CEO, commented, "For many of our customers, environmental stewardship is a priority. They want to limit emissions but need efficient systems that enable them to achieve their goals reliably, consistently and quickly. BELCO® gas cleaning is a robust technology that will allow the Aconcagua Refinery to achieve its goal of reducing air emissions with minimal maintenance over the next few decades."

BELCO® technologies cover a complete range of gas cleaning technologies for industrial applications including the BELCO® wet scrubber, SHELL third stage separator (TSS), and NO_x reduction technologies. These technologies reliably control particulate, SO_x and NO_x emissions to the most stringent regulatory



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requirements. BELCO® wet scrubbing technology is the global standard for limiting flue gas emissions from oil refinery fluid catalytic cracking units (FCCUs), fluid cokers, fired heaters, and boilers using a unique, single up flow tower with robust, non-plugging features. The BELCO® wet scrubbing technology is the world leading FCCU flue gas emissions control technology with more than 150 licensed units worldwide. The SHELL TSS technology provides protection from particulates for FCCU turbo expanders and can meet regulatory particulate emission requirements. Used across multiple industries, the NO_x reduction technology uses a simple ozone oxidization process that converts NO_x to water soluble compounds that are easily removed with wet scrubbing. Learn more at BELCO.ElessentCT.com.



About Elessent Clean Technologies

Elessent Clean Technologies is a leading source of solutions for decarbonizing the industrial manufacturing sector and transitioning the industry to a sustainable future. Our clean technology solutions minimize environmental impact and optimize productivity while remaining cost competitive. As a responsible supplier and partner to the metal, fertilizer, chemical, petrochemical and oil refining industries, our technology portfolio includes MECS[®] sulfuric acid production, STRATCO[®] alkylation, BELCO[®] gas cleaning and IsoTherming[®] hydroprocessing. Offering critical process equipment, products, technology and services, we are dedicated to helping our customers produce high-quality, cleaner products for the world. Learn more at www.ElessentCT.com or connect with us on LinkedIn.

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