

Press release

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Unipar Modernizes Chlor-alkali Plant in Brazil with BM2.7 Technology from thyssenkrupp nucera

- Replacement of the existing mercury and diaphragm plants with state-of-the-art BM2.7 technology from thyssenkrupp nucera at the chemical group's biggest plant in Brazil
- Contract also includes engineering, equipment and consulting services during the erection and commissioning of the chlor-alkali plant
- Unipar chooses thyssenkrupp nucera's environmentally friendly membrane technology, reducing 70,000 tons of CO₂ annually
- Optimize energy usage and savings with thyssenkrupp nucera's cutting-edge BM2.7 technology

São Paulo/Milan/Dortmund, October 18, 2023 – Unipar is modernizing its chlor-alkali plant at the Cubatão plant in Brazil by incorporating thyssenkrupp nucera electrolyzers. To modernize the plant, the Brazilian chemical company, a leader in the production of chlorine, caustic soda and PVC in South America, will replace the existing mercury and diaphragm plants with electrolyzers featuring thyssenkrupp nucera's highly efficient BM2.7 technology.

The company will have the largest operation in South America using the membrane technology, the most modern, sustainable and efficient on the market for the production of chlorine and soda. For the technological modernization of its Cubatão plant, Unipar invested more than R\$ 1 billion (equivalent to about €190 million). The implementation of the project is expected to be completed by the end of 2025. The electrolysis share was included in the order intake of thyssenkrupp nucera in the third quarter of fiscal 2022/23.

The optimized design features of the thyssenkrupp nucera 2.7v6 bipolar membrane (BM) allow very high energy and CO² emission savings. The unification of technologies will guarantee a production capacity of 210,000 tons of chlorine per year. Unipar will reduce its CO² emissions by 70,000 tons per year, as well as generate less solid waste, consume less energy (steam and electricity) and simplifying operations on site.

The chlor-alkali plant is also characterized by its ability to be built quickly, easily and cost-effectively, and the membrane technology from thyssenkrupp nucera is environmentally friendly. In addition to the chloralkali electrolyzers, the supplier of world-leading technologies for high-efficiency electrolysis plants will also provide engineering, equipment and consulting services during the plant's erection and commissioning.



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"The modernization of our plant is a measure of enormous importance for us in strengthening our market position. Reliability, efficiency, and energy savings due to the chlor-alkali technology used are of immense importance. By using state-of-the-art BM2.7 technology, we can achieve these important targets," says Rodrigo Cannaval, Industrial Executive Director at Unipar. The listed chemical group from Brazil and thyssenkrupp nucera have worked closely and successfully together for many years. Unipar already uses BM 2.7 technology in other plants in Brazil.

In Brazil, in addition to the plant in Cubatão (São Paulo state), it operates another production facility in Santo André (São Paulo metropolitan region), and Argentina, a factory in Bahía Blanca in the east of the country. The chemical group produces a total of 766,000 tons of caustic soda, 680,000 tons of chlorine and 540,000 tons of PVC per year at the three plants. Cubatão is the Brazilian chemical group's largest plant in terms of production, particularly of chlorine and caustic soda.

"Unipar is relying on our proven BM2.7 technology for the very important modernization of its plant in Cubatão, which will enable our customers to achieve high energy savings. This marks the beginning of another chapter in our successful cooperation on their successful chlor-alkali plants," says Dr. Gerhard Henssen, Managing Director of thyssenkrupp nucera Italy SRL.

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About thyssenkrupp nucera:

thyssenkrupp nucera offers world-leading technologies for highly efficient electrolysis plants. The company has extensive expertise in the design, procurement, and construction of electrochemical plants. Its track record includes more than 600 successfully installed projects with a total capacity of more than 10 gigawatts. thyssenkrupp nucera's chlor-alkali electrolysis plants allow significant savings in



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construction costs and offer fast, simple, and cost-effective assembly. thyssenkrupp nucera successfully made an IPO in July and is a member of the SDAX of the Frankfurt Stock Exchange since September.

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