

This abstract will be presented during LNG2023 conference on 10-13 July in Vancouver, Canada among many other innovative projects, ideas and outlooks. LNG2023 will provide a unique platform for the global LNG industry and key stakeholders to discuss, debate, and showcase the latest industry developments and opportunities.



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THE APPLICATION OF DRY FOGGING FOR AIR COOLED LNG PLANTS AS A HAR (HOT AIR RECIRCULATION) MITIGATE SOLUTION

LNG plant capacity is limited by various factors. One of the most crucial factors is the air temperature in LNG plants limiting LNG production if too high. JGC/ELBRONS BV offers an innovative air control system, which is the combination technology of AIRLIZE LNG® owned by JGC and COOLINGMIST™ & LNG SCREEN TECH™ owned by ELBRONS BV. AIRLIZE LNG® is JGC's comprehensive engineering support services including weather simulation, plant operating data analysis, CFD simulation, while COOLINGMIST™ & LNG SCREEN TECH™ are the fogging technology and special screen technology to prevent/reduce Hot Air Recirculation (HAR). Although, the performance enhancing technologies have been applied in oil and gas plants, water scaling of the equipment due to incomplete evaporation of water mist often becomes an issue combined with mechanical problems such as motor and drive issues. Therefore, ELBRONS BV developed a high efficiency dry fogging system in collaboration with JGC to prevent incomplete evaporation by spraying ultrafine water mist. This unique technology was introduced for the essential equipment, such as a large C3 air-cooled condenser of a LNG plant in Southeast Asia in 2019, and has been in operation ever since with good results both in terms of durability and performance improvement. It helped increase LNG production and improved the thermal efficiency of the liquefaction process. This presentation will describe the application of AIRLIZE LNG® integrated with COOLINGMIST™

To view the full conference agenda, visit <https://www.lng2023.org/lng-programme-overview>