

INOXAP commissions India's first Ultra-High Purity Electronic Grade Nitrous Oxide Plant

The Plant with a capacity of 1700 TPA would deliver 6N purity levels

Nitrous Oxide is a critical input for the solar & semiconductor segments

A significant step towards India's self-reliance; commissioning of the Plant strengthens the gases & chemicals supply chain for the electronics industry through import substitution

Mumbai, 17th January 2025: India's largest industrial gases manufacturer, INOX Air Products (INOXAP), has announced the commissioning of India's first Ultra High Purity (UHP) Electronic Grade Nitrous Oxide Plant with a capacity of 1700 Tons Per Annum (TPA) at Manali, Chennai. The state-of-the-art facility would produce UHP Electronic Grade Nitrous Oxide with an exceptional 6N (99.9999%) purity level, adhering to tightly controlled specifications for ensuring minimal contamination. The Plant's capabilities make it a transformative solution for the electronic, semiconductor and solar industries, while ensuring superlative quality for the final product. With ready availability of Nitrous Oxide, a critical input for the solar and semiconductor segment, the commissioning of this Plant strengthens the gases and chemicals supply chain for the electronics industry through import substitution.

As an industry-first, INOXAP's Nitrous Oxide Plant is a pioneering move, which showcases its intent to stay ahead of the curve in order to augment the high-tech sectors. Aligned with the goals of India Semiconductor Mission, the Plant aims at driving advanced manufacturing and fostering self-reliance in high-tech sectors. The Plant also depicts INOXAP's commitment to sustainability and energy-transition.

Sharing his views on the commissioning of the plant, **Siddharth Jain, Managing Director – INOX Air Products** said, "The commissioning of India's first Ultra-High Purity Nitrous Oxide plant is a strong testament of INOXAP's capabilities of creating powerful assets and solutions that create tremendous value for its stakeholders. We are committed to make our country self-reliant while building a strong supply chain for essential gases for the electronics, solar and semiconductor segments. We are constantly evaluating opportunities to invest towards building product offerings for next-gen technology sectors which will define India's future economic growth trajectory."

Nitrous Oxide's unique properties contribute to the precision, efficiency, and environmental sustainability of processes crucial for creating the electronic devices. Nitrous Oxide plays a critical and multi-faceted role in the electronic devices industry, particularly in gas-phase chemical deposition for the production of solar PV cells and semiconductors (chips, circuits, and transistors). It reacts with Silane or other silicon precursors to create high-quality oxide films, used as electrical insulators in microelectronic transistors. It also serves as an oxygen precursor for silicon oxide, silicon oxynitride, low-k dielectric thin films and metallic oxides.



About INOX Air Products:

INOX Air Products is the largest manufacturer of Industrial & Medical Gases in India. The company offers a unique portfolio of gases, equipment and services through a massive manufacturing capacity of 4600 TPD of liquid gases delivered from 48 operating locations. With our extensive network of operations, and a vastly diverse client ecosystem, INOX Air Products empowers more than 1800 small, medium and large manufacturing organizations across dozens of sectors, enabling and empowering them on their way to achieve their vision. In our glorious journey of more than half a century, we have made massive strides on all the metrics of its business operations, by our sheer reliance on our virtues of customer-centricity, transparency and delivering value through quality. We take pride in our 1400 strong workforce, working tirelessly across the country, unleashing the virtues of integrity and innovativeness, well complemented by their ready-to-serve spirit.

Established in 1963 by the Jain Family as Industrial Oxygen Company Ltd in Pune, Maharashtra, the Company aimed to augment and capitalize upon the rapid industrialization taking place in the country. In 1999, Air Products & Chemicals Inc., USA acquired a 50% stake in the Company, giving birth to INOX Air Products. The venture remains till date, one of the longest Indo-American partnerships in the manufacturing sector.

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