

Neo San Unveils Purpose-built Incinerator Neo-AX

Category: Business

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Clean-tech startup, **Neo San Pvt. Ltd.** recently participated at IFAT India 2024 – a leading global trade fair for environmental technologies held annually in Mumbai. Neo San took this opportunity to launch the second variant, the Neo-AX, among their upcoming range of decentralised high-efficiency incinerators having differing capacities, tailor-made for diverse waste profiles and industries.



Neo-AX product image by Neo San

The Neo-AX targets challenging non-recyclable dry-waste categories; bio-medical waste, municipal solid-waste, sanitary and major industrial waste types, through efficient on-site incineration. Widely scalable, this machine can be deployed easily at hospitals, clinics, townships, factories, universities, airports, apartments etc. It encompasses the proper handling, treatment and disposal of any waste that is hazardous or has low to no recycling value.

The device features multiple automation systems, robust safety features, and is coupled with metallic seals, making it extremely versatile in the waste-types it can handle. The AX can handle a wide variety of waste in bulk quantities, within minutes, using a fraction of the energy currently used in waste-handling.

Consuming minimal energy, these systems safely dispose of

waste for less than $\text{€}1\text{-}2$ per kilogram of electricity used. This could save institutions and corporations large amounts of capital currently deployed towards having this waste handled. The AX can handle from 50 kilos a day, all the way to 200 kilos a day based on the model, and can also be operated 24 hours a day.

To effectively manage sanitary, medicinal, and hazardous dry waste, the Neo-AX incinerator operates at 1200°C , producing sterile ash with low environmental impact. The reduced overall emissions in the system would be a huge shift forward from traditional practices, in which dumping/open-burning and the attached logistical burden is highly polluting and expensive.

Additionally, integrated IoT systems provide real-time tracking and reporting of ESG (Environmental, Social, Governance) parameters by offering insights into the quantity of waste processed and total carbon emissions generated, ensuring transparent and accountable waste management practices and enabling practical carbon audits which are becoming increasingly important for companies.

Neo San's innovations in this single machine range from aerodynamic systems for cooling the machine to creating high amounts of heat energy using less than a unit of electricity. Combining these sub-systems enhances the temperature capacity and durability of the heating module, giving it the ability to be used across a range of industries that require heating. It can be used for large-scale heaters, industrial boilers and other energy generating applications.

This product is the first of a series of industrial incinerators that Neo San aims to launch to market this year, to tackle the growing problems of consumption and waste. Land-use is one such major problem that the company foresees. These machines will save the government large amounts of resources, land being the major one; reducing the need for existing or future landfills or dumpsites and replacing them for

commercial, agricultural or industrial application(s). Also large savings from the reduced vehicular movement and fuel consumption would be a big step towards sustainability.

About Neo San

Neo San is a clean technology company currently building decentralised solutions in waste-management. Involved in the research and manufacturing of high-efficiency incinerators, Neo San aims to decarbonize the world's most polluting industries, in order to create a sustainable future where industrial activity no longer harms our planet. Hence, dedicated to leveraging technology for positive societal impact, Neo San offers pioneering cost-efficient, energy-saving solutions for industrial applications while addressing pressing environmental changes.

