RenewSys Launches CONSERV E – NT Encapsulant — The Perfect Match for N-type TOPCon PV Cells

CONSERV E – NT is a game-changer for N-type TOPCon modules, offering unmatched output and durability

Mumbai, India, December 2023 – The solar PV market is constantly evolving, driven by the need to maximize efficiency while extending the lifespan of solar PV modules.

Currently, N-type TOPCon Modules are the natural successor to Mono PERC and Multi technologies, offering higher efficiencies and a longer operating life.

However, N-type TOPCon cells are far more susceptible to environmental damage, thus the significant need to safeguard them. This necessity has driven our Innovation team to formulate an Encapsulant that protects N-type TOPCon cells, ensuring unmatched output and durability.

RenewSys, the trailblazer in PV Encapsulant and Backsheet manufacturing, is proud to introduce India's first POE (Polyolefin Elastomer) Encapsulant specifically formulated for N-type TOPCon PV cells, CONSERV E – NT.

RenewSys' newly designed Encapsulant, CONSERV E – NT, contains a free radical scavenger that effectively shields TOPCon cells from irreversible damage caused by free radicals generated during the day-to-day PV module functioning. Some common causes of these attacks include fluctuating temperatures, high heat, water ingress, and chemicals from other components of the module.

CONSERV E – NT extends multiple key advantages to module manufacturers, reducing rejection rates and boosting production efficiency

CONSERV E – NT offers several notable benefits to module manufacturers. It features a wider lamination processing window, allowing for a larger range of acceptable operating conditions during lamination. This directly translates to increased throughput and higher productivity in module manufacturing plants by minimizing module rejections due to lamination issues.

CONSERV E – NT is compatible with laminators with both one-side and two-side heating. Another significant advantage of CONSERV E – NT is evident in Glass-Glass TOPCon PV modules, where its use renders the modules bubble-free. The encapsulant also effectively restricts string shifting, a long-standing challenge in module production. These factors

further contribute to a reduction in module rejection rates, ensuring a streamlined and efficient manufacturing process.

CONSERV E – NT POE Encapsulant is versatile and suits both Glass-Glass and Glass-Backsheet N-type TOPCon solar modules.

Mr Avinash Hiranandani, Vice Chairman and Managing Director, RenewSys, says, “This innovation reinforces our position as a leading Indian manufacturer with a strong global reach. We are known for introducing commercially effective products in the highly competitive solar polymer market."

“Having a focused and agile team driving innovation has enabled us to offer an encapsulation solution for TOPCon cell-based modules at the opportune time. This also serves as our testimony of future readiness and agility.

“This Encapsulant will help manufacturers reap many rewards as more and more Indian Module manufacturers introduce their TOPCon offerings.

“It also ensures that deterioration of TOPCon modules in the field during day-to-day operations is prevented, providing confidence to end customers—homes and businesses adopting solar power—and ensuring India's energy security is in safe hands.”

About RenewSys:

RenewSys is the **1st integrated manufacturer** of Solar PV Modules (2.5 GW) and its key components – Encapsulants (6 GW), Backsheets (4 GW), and Solar PV Cells (130 MW)

Headquartered in Mumbai, RenewSys is the ‘Renewable Energy’ arm of the Enpee Group, an international conglomerate established in 1961, with a heritage of manufacturing excellence. The Group has offices and distributors/agents in India, Mauritius, Nigeria, South Africa, Singapore, UAE, and representative offices in the USA, Mexico, Brazil and countries across Europe. Read more at www.enpee.com

RenewSys Bengaluru, with its team of polymer experts and world-class European machinery, has produced and supplied over **22 GW of Encapsulant and Backsheet** worldwide. It is credited with innovations such as India’s first transparent Backsheet, UL certified POE, and India’s only Backsheet patent, among others. This award-winning facility also houses an independently run, one-of-its-kind NABL-accredited Encapsulant and Backsheet testing lab.

RenewSys Hyderabad is a hub for R&D and innovations like India’s 1st 5BB and 6BB PV cells, Bifacial, Glass-Transparent Backsheet Module, High efficiency – DESERV Galactic and Galactic Ultra modules. It houses a state-of-the-art Module Testing Laboratory where PV modules can be tested under rigorous conditions like damp heat, temperature cycling, and UV exposure. We manufacture solar PV modules (1.1 GW capacity) and PV cells at this facility.

RenewSys Patalganga is home to our World-Class Large Format Modules with state-of-the-art Module Manufacturing Technology and a comprehensive product testing center. It is located an hour away from JNPT port in Maharashtra and currently operates with a capacity of 1.4 GW.

Read more at www.renewsysworld.com