

Rajoo ushers in a new era for solar cell manufacturers



Lamina®è, India's first mono & multi-layer EVA/POE sheet line for encapsulant sheets for solar cells

MARKING its foray into the renewable energy sector, with Lamina®e sheet extrusion lines, Indian company Rajoo has taken a giant step forward, matching extrusion excellence with functionality to produce the highly complex EVA/POE sheet for solar cells.

Understanding that if India is to realise the vision of its renewable energy programme, local manufacturing of related equipment will play a pivotal role, believes Rajoo. Extending its extrusion skills, leveraging its strong understanding of the polymer chemistry (EVA being a rubbery material, and low shrinkage being a crucial parameter) and its 15 years of experience in producing sheet extrusion lines for EVA, Rajoo Engineers, has built India's first line to produce EVA/POE encapsulant sheet for solar cells.

This move will allow the country to save precious foreign exchange and, at the same time, empower solar panel manufacturers while presenting a solution for plastic processors that is more cost-effective to buy and operate.

The versatile solution of Lamina®e series of sheet extrusion lines comes with an output range of 300 to 900kg/hr (in both

monolayer and multilayer versions), a width of 1 300mm to 3 000mm and a thickness range of 0.30mm to 0.90mm. The line is equipped with a fully automatic and continuous gravimetric feeding system and has energy-efficient extruders with universal barrier screws. The screw elements and screw profiles are designed according to the physical and chemical nature of EVA and POE resin. Furthermore, the peculiar EVA-use T-die is designed as per the extrusion rheology.

This solution has chartered a diversification for Rajoo to look beyond extrusion for packaging alone, and enter into newer and potential markets.

"We are very excited as we have commissioned our first line. A lot of research has gone into conceptualising this machine. The EVA sheets used for encapsulation in solar cells are a crucial element in the manufacture of the solar panels and I am glad that we took this bold step that will make a difference to India's energy programme and India's journey towards energy independence by 2047," said Khushboo Chandrakant Doshi, managing director, Rajoo Engineers Limited.

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