

Excellence In Innovation: Rajoo Engineering

A report on the recent visit to the Rajkot plant of Rajoo Engineering.

Spread across an expansive 2.5 acres of land in the interiors of Rajkot, Gujarat, Rajoo Engineering has been building excellence in extrusion in India and globally for the last 37 years. Building a blend of expertise, excellence and experience, Rajoo Engineering's solutions today include the widest range of mono and multilayer blown film lines (up to nine layers), an impressive range of sheet lines (up to seven layers), water-quenched downward extrusion lines (up to seven layers), lines for PE and PS foamed film and sheets (for various standard and special applications) as well as end-to-end thermoforming solutions. Lines for cross-lamination films and extrusion coating &

lamination are the recent additions to the product portfolio. The extrusion lines cover the processing of a wide range of polymers like LOPE, LLOPE, MOPE, HOPE, PP, EVA Surlyn, elastomers, plastomers: barrier materials like Polyamide, EVOH: thermoformable materials like PET, PS, PP and including new generation bio-based & exotic polymers.

Because the company has persistently focused on blown film, sheet extrusion lines, and thermoformers, it currently controls the market in these areas. Technology-driven, Rajoo has developed a reputation for product innovation, high quality, cutting-edge workmanship, increasing

energy efficiency, and high levels of sophistication and automation over the past few decades, positioning the company's products on a global platform, and competing with world leaders. With representations in many countries of the world and customers in over 70 countries, the company's exports have multiplied after its debut in the international market in 1990.

Plant Set-up & More...

The 2.5-acre property in Gujarat employs nearly 1200-1400 staff spread across various activities. The company's state-of-the-art R&D department, with nearly 35 engineers, customises machines in-house based on customer



requirements. The engineers use the SAP backend to plan out everything right from designing a machine to material purchasing to the manufacturing of screws, dies, panels, etc.

The company is known for its customised machines based on European machine standards and the customer service attached to them. To provide beyond-par services, the company works extensively on the Make in India motto with its in-house extruder and winder assembly. The plant hosts India's biggest 5-axis die-making machine from DMG Mori – and not just one but three. Additionally, to manufacture its in-house screws, the company uses the Saporiti 400, which takes nearly 30-70 hours to manufacture screws depending on its size. Ultimately, depending on the machine size, Rajoo Engineering takes anywhere between three to six months to



build a machine and deliver it to its customers. To date, the company has sold over 4000 machines worldwide.

Launching Ahead And Updates

Constant innovation has what let Rajoo Engineering stay ahead in the Indian market. Their motto of 'excellence in engineering' has been a core driver of the Indian market. Recently, the company launched its new product – Pentafoil® - POD – 5-layer Blown Film Line. Pentafoil®- POD is the latest addition to the portfolio with several advanced features. It incorporates reLEX 4.0 Extruders, leading to 27 per cent increased output; CSD 3.0 with a 550 mm die delivering an output of 720 kg/hr; and Flexiwind 3.0 Surface-Center-Gap

Winder, with a maximum line speed of 150 MPM. It includes thickness control by air and temperature. It is Industry 4.0 compliant with remote diagnostics and support through Smart Glasses.

Pentafoil® - POD was introduced at Rajoo's open house event at Rajkot, on September 09, 2022, and was well attended by processors from all over the country and even neighbouring nations.

Speaking on the product and its launch, Khushboo Chandrakant Doshi, Managing Director, Rajoo Engineers Limited said:

"We are pleased to share with you all the launch of the latest addition to our portfolio, at our open-house event for 2022 that was in Rajkot today. We have introduced 'Pentafoil®-POD'; the new generation 5-layer blown film line."

She continued, "Pentafoil®-POD is an innovative, state-of-the-art product with 27 per cent higher output and enhanced features such as thickness control by air and heat, flatness enhancer for flat film, fully automatic surface-centre-gap winder and remote diagnostics and support, among others. This product exemplifies our relentless efforts towards product development offering the most 'appropriate technology', which is the core motto of Rajoo Engineers."

"I would like to take this opportunity to thank everyone in the Rajoo family that have worked relentlessly towards continual product development and innovation to enable us to offer not just new products but help us evaluate our customers' needs and endeavour to meet them and walk the extra mile ensuring customer satisfaction," she signed off. 📍

