



# Indian manufacturer gets fillip in world market

Rajoo Engineers has commissioned its ninth five-layer 'Fully Loaded' blown film line, for barrier films used in lamination and liquid packaging.

**INNOVATIONS in technology have always been a hallmark of Rajoo Engineers and the commissioning of its ninth five-layer blown film line at Polypet, Nagpur, goes down as a landmark in the history of Indian manufacturing of extrusion machinery.**

Until now, five-layer blown film lines with nylon and EVOH have been the domain of European and Canadian manufacturers. However, after a thorough evaluation of all options (including those from Canadian and European manufacturers), Polypet chose the Rajoo line, bearing in mind the quality and service satisfaction it had enjoyed with a previous plant supplied by Rajoo.

Rajoo Engineers has raised the bar for the production of barrier films used in lamination and liquid packaging in the Indian market and globally.

The five-layer plant with two 60mm grooved feed extruders for the inner and outer layers, and three 55mm smooth bore extruders, is equipped with a 400mm UCD die (stack type with horizontal melt flow paths) and IBC system. 'To ensure precise and accurate blend and gauge control for each material, we have successfully integrated a 14 component integrated conveying, gravimetric blending and dosing system from Germany,' says Sunil Jain, president of Rajoo Engineers. 'Thickness profile, another critical parameter in blown film applications is also well controlled with the state-of-the-art automatic profile control system,' he adds.

The thickness is measured using two solid state high-definition capacitive sensors with 0,1µm resolution especially designed for nylon and EVOH. They're mounted on a rigid O-frame scanner which in turn is mounted after the nip rollers, where the film is substantially cooler. The film is wound on a back-to-back dual station load cell controlled surface winder with taper tension control producing 1m diameter rolls.

The machine is operated through an integrated touch-screen supervisory control system for all the machine parameters such as processing temperatures, extruder

speeds, melt temperature and pressure, IBC, calibrating basket diameter and height, oscillating haul-off speed, material recipes, historical data recall, etc.

The machine effortlessly produces 75µm barrier film with 15µm nylon and 1 010mm layflat width, providing an output of 240kg/hour, thickness variation less than ± 4% on 2 sigma and width variation of less than ±3mm.

This commissioning has endorsed Rajoo's leadership status in the industry. The trust placed by customers in Rajoo's products and service back-up is borne out by the fact that Polypet, which earlier operated a three-layer blown film plant, has ordered yet another three-layer blown film plant scheduled to be supplied early in 2010.

## About Rajoo

**FROM modest beginnings in 1986, Rajoo Engineers, based in Rajkot, India, has emerged as a global player in blown film and sheet extrusion lines, and enjoys a premium market position in this segment.**

Innovation, world-class quality, state-of-the-art workmanship, improved energy efficiency and high levels of sophistication and automation have become the hallmark of this technology-driven company, positioning its products on a global platform, competing with established world leaders.

With customers in over 40 countries, Rajoo's exports have multiplied after its debut on the international market in 1990.

[www.rajoo.com](http://www.rajoo.com)

