

the extruders, five-layer variable channel feedblock, flat sheet die with internal decking, in-line trim recycling and a dual-station winder." Sunil went on to say that the line is designed to produce barrier thermoforming sheets ranging in thickness from 0.4-1.8 mm with an output of 400 kg/hour.

The Rajkot-based company has also started work at another of India's leading film producers, *Alpha Polymers*, in Daman, Gujarat. It is installing its Multifoil RECF 2360/1600 IBC line that comes complete with three 60 mm extruders, UCD (stack die) and a dual-station automatic winder for *Alpha* to produce stretch film for the overseas market. *Alpha* is already producing 2,000 tonnes/year of tubular-quenched PP film on a number of *Rajoo* machines.

In yet another high profile project, Sunil says the company will install a new co-extrusion film plant for *Ess Dee Aluminum*, a supplier of foil-based packaging materials to the pharmaceutical industry. The three-layer blown film line will have a "never before seen level of automation." Capable of producing 350 kg/hour of lamination-grade films, the plant will be equipped with multi-component gravimetric dosing, automatic profile control and integrated supervisory process control. "The line holds its ground in terms of the competition, both price and technology wise, especially with leading European suppliers of similar lines," said Sunil, adding that this stands *Rajoo* in good stead as a couple of other projects are under active negotiation to allow for a 20% increase in sales turnover for the company, compared to last year.

Machinery maker bags flexible sector

In another case of local enterprise and drive, *Mamata Machinery* has also been making waves in the bag making industry. Said Executive Director CB Patel, "In converting, processors are now getting more into value-added applications like zipper bags, security and courier envelopes. Our universal bag makers are also getting more popular amongst converters as these machines are used as a basic platform to make

Vega W 800 wicketer with zipper machine



a variety of bags. With speciality films like biodegradable films coming into the market, we look forward to the conversion being done on our machines, too."

Besides the above range, *Mamata* offers pouch makers the ability to manufacture re-closeable pouches with slider zippers and flange zippers. The machine for the latter can produce up to 350 pouches/minute, a speed that is said to be the fastest for a pouch maker with zippers, according to the company. "This gives our customers a competitive edge in terms of costs and adds value to their end products," said Patel.

When asked about its sales in Asia, Patel said *Mamata* had made headway in Thailand, Malaysia, China, Sri Lanka, Bangladesh and Nepal. As for the local market, he said, "There is no doubt that we are a market leader in India and the domestic business has been growing in line with the growth of markets and products."



CB Patel says that Mamata, with its ability to customise equipment for bag and pouch making, is poised to cater to the demanding requirements of the market

A recent addition to the stable of companies in the group is *Mamata Span Flexopack*. "We set the company up to offer spout fixing and filling lines for preformed pouches," added Patel, explaining that *Mamata* wanted to expand its profile in the flexible packaging market further. Apart from *Mamata Span*, another new company, *Mamata Energy*, has been established to "bring together the latest renewable energy technologies available around the world and couple it with our technical expertise to provide affordable, quality solutions to help manage energy use better by complementing conventional power generation and distribution systems."

German alliance for line development

Working with German blown film machinery company *Kuhne*, Ahmedabad-based *Windsor Machines* is professing to be the first in the country to have manufactured a five-layer line using German technology. Displayed at the Plastindia exhibition last year, the line has a capacity to produce 250 kg/hour nylon-based film and 350 kg/hour of PE-based film, according to Deputy General Manager of Marketing and International Sales DR Shah. "It also features PLC control and ultrasonic bubble control systems from the US. The line has been sold to a key Indian processor and is waiting to be installed," he added. He went on to say, "We would like to state that this type of European technology is not being offered by any of our competitors in India."

As for the company's other achievements, Shah explained, "Following the successful installation of six 350 kg/hour and 550 kg/hour lines in about a span of two years at *Flex Group*, we were given another project to install a high output line with a capacity of 600 kg/hour. At