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Specialised Extrusion Coating Machines **A Vibrant Future**

“This specialised extrusion coating machine is a versatile machine to meet advanced technological requirements of present and future end applications like synthetic roof underlayment, pond lining, road construction, special tarpaulin applications and much more”, emphasises P. K. Patkar in dialogue with POLYMERS Communiqué.



Q. What is the market of the large sized extrusion coating machine that you built? What were the biggest challenges that you faced in conceptualising and creating this solution?

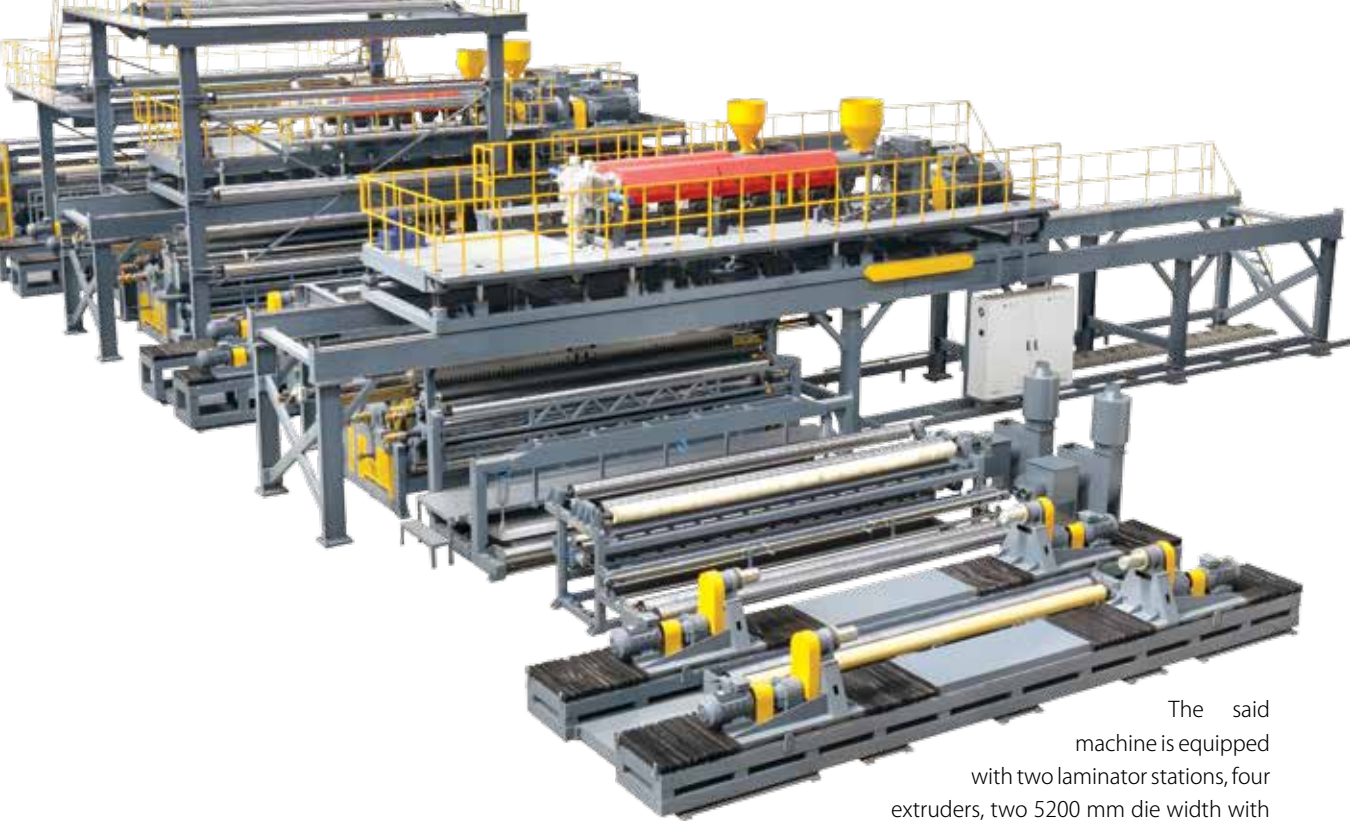
The main markets are wide width synthetic roofunderlayment, wide width pond lining, wide width road constructions and special purpose wide width tarpaulins applications.

The challenge is when I was trying to make this big dream come true, it actually wasn't easy at all; but with a great team like the one I have today, I was able to realise all I had expected and all was done excellently.

We faced numerous challenges to make such a large extrusion coating line for the first time. We planned things very carefully at every stage of the design, selection of the mother machinery to produce precision components of the machine, programming of PLC and synchronisation of all 36 drives and allocated the floor area to build the machine.

Q. How do you see the future of specialised extrusion coating machines?

This specialised extrusion coating machine is a versatile



machine to meet advanced technological requirements of present and future end applications like synthetic roof underlayment, pond lining, road construction, special tarpaulin applications and much more. I will say that these machines are expected to be perform well and become increasingly popularly across the world.

Earlier, industries were using welding to produce wide width substrates, as wide width lamination plants were not available. Now, in a single process, wide width products are available and this will be the first preference for any industry due to jointless and cost competence factor.

Q. Do you see new markets that you could tap with this technology in coming times?

Yes, I do. These innovations are going to play a greater role than we all have ever imagined and that is the reason why I am sure there will be new markets that I will tap with this technology even in coming times. We can make a variety of products out of this extrusion coating line by changing input raw material recipe as well as input substrates.

Q. Can you please highlight details of the recent extrusion coating machine that you have built for synthetic roof underlayment application?

J P Extrusiontech Ltd.'s forte is to find solutions that meet industry challenges by creating techno-economical machines.

The said machine is equipped with two laminator stations, four extruders, two 5200 mm die width with multilayer feedblock, one primary and two secondary shaftless unwinders for quick locking and unlocking of rolls, having seven-layer construction and it can go easily up to nine layers.

PLC controlled having 36 drives - all synchronised, fully automatic winder unit with auto splicing and finished roll auto unloading on ground. The machine is operator friendly as changeover of rolls are automatic and there is no need to stop the machine for the same.

The said machine has melt output upto 2000 kgs/hr.

Q. What new can processors expect from JP in the coming years?

While there are many more to come, a lot can even be done with those that are available. JP is always motivated to produce the latest technology-based plastic processing machinery and update the existing machine design so as to give its best to the industry. We make wide range of plastic extrusion machinery since the last 30 years. Our machines are user-friendly and at par with the international standards.

Q. What role has technology played in the success of J P Extrusiontech Ltd.? Would you like to highlight your technology firsts?

Definitely, technology has actually played very vital role in the success of JP. Until 1984, the plastic woven sack industry was running with blown film technology to produce HDPE raffia tapes upto

70 to 80 kgs/hr output. Technology changed and in the year 1985, some of the industries started importing flat film technology tapeline. However, many of them were not prepared to discard the blown film tapeline to install new technology flat film tapeline due to the high cost involved.

Sensing this benefit from the latest technology at an affordable cost, JP started manufacturing coat hanger T-die and supplied this flat die as a conversion kit to replace conventional blown film plant with the new technology flat film tape line to double the rated line production and provide the capability to run both, HDPE and PP material.

Within 4 to 5 years, JP supplied 300+ conversion kits. This way technology has played a vital role in the success of JP.

Q. Do you see it is common for manufacturers to produce different quality of machines for different markets?

JP never believes in dual quality standards. We produce machineries of the same standard and quality for our markets.

Q. Your take on Industry 4.0?

Yes, we do manufacture machine as per 'Industry 4.0' which is the current trend of automation and data exchange in manufacturing technologies. It includes cyber-physical systems, the Internet of Things and cloud computing.

Q. Do you see resistance of people to work on the shop floor in today's time? If yes, how do you address the issue?

Yes, sometimes we do observe the resistance of people on the shop floor, when new way of working or a new technology is introduced. In such cases, we conduct a common seminar to explain the new system / technology, its benefit and possibilities.

Q. Taking the initiative of 'Make in India' forward, what according to you should be the approach towards exports for any machine manufacturer in India?

My advice to machine producers in India, like myself, is that one needs to be original; don't sell the quality what you will not buy. Let's come together and make India proud. As regards technology, we can, of course, be the best in the world.

To forward the initiative of 'Make in India', every Indian machinery manufacturer should focus on latest technology, quality and performance of the machine. We must achieve world standards at reasonable costs.