

Plastics in Packaging

A portrait of Amit Shah, a middle-aged man with grey hair, wearing a dark suit, white shirt, and patterned tie. He is smiling slightly and has his hands clasped in front of him.

Issue 231: January 2021

PROJECT PLASTIC FIX

Why UFlex's Amit Shah believes three waste recovery methods will remove any potential roadblocks to flexible packaging prosperity

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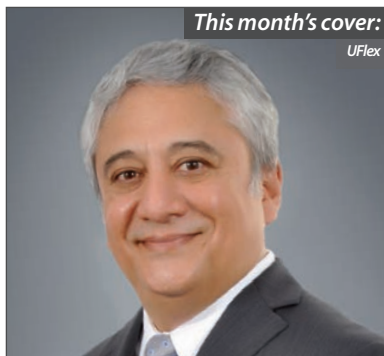
Caps and closures

Healthcare packaging

Blow moulding systems

Packaging waste regulations (North America)

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This month's cover:

UFlex

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The latest paper bottles come with a dose of rhetoric, but are they all they're cracked up to be?

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Machinery: Gneuss Kunststofftechnik, Husky Injection Molding Systems, Markem-Imaje
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The first of the first with lots of firsts

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Flex appeal

UFlex's rapid growth as a business has mirrored a wider boom in the flexible packaging market – and, according to the Indian firm's divisional joint president, there is much more to come. **Noli Dinkovski** reports

When, in November, UFlex published a buoyant set of second quarter figures for 2020-21, it was striking to note just how much innovation the company has recently been involved in.

On revealing a year-on-year net profit increase of 136 per cent to INR 221.8 crore (\$29.8 million), India's largest flexible packaging company wasn't shy in detailing its new product development throughout the quarter. And, among the new foils, inks, labels and adhesives, a number of unfamiliar flexible packaging formats took centre stage.

"What stands out with these flexible packaging products is our ability to offer differentiation to our customers, and their ability to take that differentiation forward to the end consumer," explains Amit Shah, joint president of flexible packaging at UFlex.

For Shah, who joined the company 12 months ago after more than 25 years' experience in packaging and fast-moving consumer goods (FMCG), flexible packaging has been pivotal in helping brand-owners meet the ever more complex demands of shoppers. And he believes that more than any other type of packaging, the flexible format will be the central driver of growth in the industry for years to come.

Throughout his career, which includes spells at India Foils, Huhtamaki and ITC, Shah claims to have seen how flexible packaging has revolutionised the FMCG market by allowing brand owners to create products at different price-points. He says that, as a result, they have been able to achieve a higher degree of market penetration in previously underdeveloped markets – something pertinent to India and its neighbours – and been able to offer the consumer greater choice.

"If you go back in time and look at, say, a leading tea brand – it would have only had one or two variants in one or two pack formats," says Shah. "Today, flexible packaging has meant that same brand is available at various price-points, making it available to a much larger consumer base."

Founded in 1985, UFlex operates a vertical model where it can supply all the necessary components of flexible packaging manufacture, including machinery and consumables. Headquartered in Noida, near Delhi, the business, which posted a net revenue of INR 7,431.62 crore (\$1.1bn) for 2019-20, has six other manufacturing facilities in India, as well as sites in the US, Mexico, Poland, Russia, Egypt and the UAE. Further units are nearing completion in Hungary and Nigeria.

"I would say we are the only company around that operates a flexible packaging business that is totally integrated, from the inks to the machines," says Shah. "Our aspirations are very clear – we would like to be the market leader in the segment that we operate in. From the gamut of products and services we offer, I think there is a huge amount of opportunity available to us."

That product offer was boosted in the second quarter by the addition of new packaging formats for three global FMCG companies. For Nestlé's launch of a new Maggi instant spice mix, UFlex designed a structure that comprises a 10-micron polyester pack with 6.35-micron aluminium foil and a 50-micron ethylene vinyl alcohol layer. The company says it provides an excellent moisture and oxygen barrier, allowing the spice aroma to be retained until its consumption.

Also during the quarter, a 23-micron twist-grade metallised polyester pack was created for Agro Tech Foods' Sundrop Duo Twist Wrap. As well as allowing surface printing, the pack has anti-static coating for smoother running through the machine. The combination of matt and gloss printing is said to stand out on retail shelves.

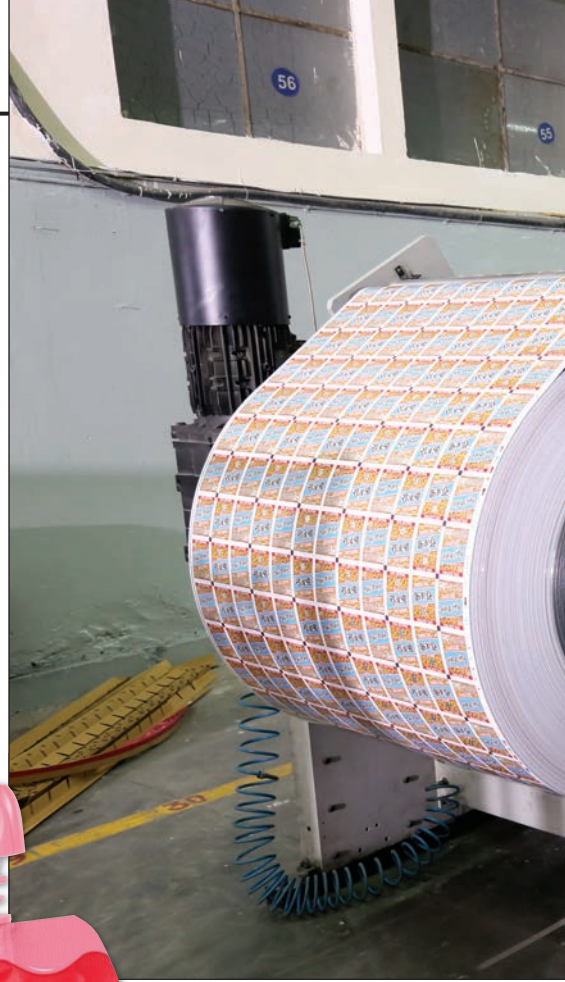


Left/right: Groovy Fruit Drink's novel-shaped squeezable packaging for the budget segment has proved to be a hit with the kids

Meanwhile, for Olam Agro, UFlex created laminates and pouches with a structure of 12-micron PET, 12-micron windowed, metallised PET, and 90-micron PE, for pack contents that require a strong barrier to retain aroma, nutrients and taste within the shelf-life. UFlex also worked on giving these packs distinctive shelf appeal by using white ink separation with lacquer that it says results in a fusion look of metallic and matt on the pouch.

"As a company, we base our value proposition on three platforms – sustainability, brand protection, and innovation – and I think the products highlighted demonstrate each of these," says Shah.

UFlex has also been very active in helping to develop still alternatives to carbonated soft drinks (CSDs) in India. It recently started working with two brands that it claims have taken northern India by storm – Groovy Fruit Drink and Xpress Fruit Juice – to create novel-shaped squeezable packaging for the budget segment.





With manufacturing sites across the world, UFlex operates an integrated flexible packaging business that includes machinery and consumables



Spotting a shift away from CSDs, Shah believes younger generations in particular are finding the new juice pouches appealing. “Without wishing to categorise any brand as harmful, I would say these juices have more perceived value than CSDs. Therefore, the introduction of this pack format is something that I think over the next couple of years is going to attract a lot of attention.”

While suggesting that these types of products are “experimental”, Shah refers back to differentiation as the pouches’ key asset. “Their shape – it’s for the kids. Aesthetically, these pouches are so good to look at, and children love to get their hands on these sorts of packs. It’s hats off to the brand-owners that were brave enough to use that format, as well as to our own ability to fulfil their requirements.”

Shah highlights aseptic packaging as another

market with considerable growth potential. Towards the end of 2019, UFlex launched the Asepto Eye – a ripple concave single-lens technology that gives a 3D-effect on aseptic packs. It backed it up with the unveiling of a new aseptic packaging filling line – the Asepto Flexpress 10000 – for dairy products, juices and alcohol. According to the company, the machine offers high flexibility for all-in-one portion packs, from 90ml to 200ml.

“For us, aseptic packaging is a segment where we see a lot of excitement,” says Shah. “We are the only alternative to Tetra Pak in India in this area, and we have our own filling machines – therefore, we are as well-positioned as any other player in this market.”

“Ultimately though, where we see the non-CSD market and other dairy products exploding in India is where the opportunity lies for us.

Legislation looms large

India is estimated to generate 9.46 million tonnes of plastics waste annually, of which 40 per cent is uncollected, according to the country’s Ministry of Environment, Forest and Climate Change.

Prime Minister Narendra Modi’s declaration – made in October 2019 – that India is to move away entirely from single-use plastics by 2022 may seem a little optimistic, but it’s clear that the central Government is intent on implementing an Extended Producer Responsibility (EPR) scheme in some shape or form within a similar timeframe.

According to Amit Shah, joint president of flexible packaging at UFlex, the framework set out on EPR by the Government is a much-needed “welcome step” in the direction of managing plastics waste. He adds that the proposed schemes listed in the framework “would certainly ensure reduction of plastics waste in the long run”.

“What UFlex advocates is sustainable packaging and the minimisation of plastics waste,” he says. “Our biodegradability initiative, which will be launched soon, is a step in that direction.”

UFlex’s new pilot plant in Noida recycles post-consumer plastics waste such as PET bottles and multilayer packs, collected from producer responsibility organisations, before they are recycled into granules.

“We also recycle all multilayered plastics waste that gets generated in our plant during production,” says Shah. “Furthermore, UFlex has lent its technology to ensure the sorting and segregation of plastics recoverable from municipal waste and recycled plastics waste to produce granules in Bangalore. Not only this, but in our US plant we manufacture PET films with up to 100 per cent post-consumer recycled content.”

That’s how we are able to make a success of aseptic packaging.”

It may be one of UFlex’s three ‘value proposition’ platforms, but sustainability is without doubt a potential roadblock to the future success of flexible packaging. To address this, in September 2019 the company unveiled Project Plastic Fix, which it describes as its ‘solution to the revolution’ against plastics waste.

The project is centred on three waste recovery methods that UFlex already practices. The first is to recycle multilayer plastics or laminate waste into granules, which are then used to make new household and industrial plastics products. Secondly, it plans to ramp up the reprocessing of multilayer plastics waste into fuel through pyrolysis. This, UFlex says, can be achieved by employing an anaerobic system that ensures zero carbon emissions.



Finally, UFlex is focusing on the continued conversion of PET bottle waste into green plastics packaging film. UFlex is already known for its Asclepius range of biaxially-oriented PET (BOPET) films, which are based on 90 per cent post-consumer resin polymer content. The films have been shown to represent a 75 per cent reduction in carbon footprint versus virgin BOPET grades.

Project Plastic Fix is being implemented in India, Mexico and Poland to begin with, before moving to the other locations. UFlex also recently set up a pilot plant in Noida for the recycling of post-consumer plastics waste such as PET bottles and multilayer packs (see box, p21).

Meanwhile, as part of a biodegradability initiative due to be launched soon, the company is currently testing a packaging product that will be both recyclable and biodegradable. While unable to go into any further detail at this stage, Shah says the proprietary technology could be a game-changer for flexible packaging.

“Even in advanced countries like Sweden, more than 30 per cent of packaging is still not collected,” he notes. “So, in a country like India it’s an even bigger challenge, made worse by the fact that we have such a high consumption of low unit-volume packs.”

Having a product that is recyclable as well as biodegradable is the Holy Grail when it comes to sustainability, Shah suggests. “No matter how effective or how efficient you are with processing post-consumer recycle (PCR), the fact remains that for a country like India, collection will always be difficult – therefore, biodegradability has to be the alternative option.”

According to Shah, initiatives such as those laid out by UFlex are vital to the future health of



Amit Shah believes the global pandemic, and the increased focus on health and hygiene, has accelerated the demand for flexible packaging

the flexible packaging sector, because as long as collection and recycling continue to be mishandled, the current negative public perception of plastics will only remain in place. But while he recognises that manufacturers should shoulder some of the burden, he feels that perceptions cannot be changed by individual companies acting alone. “The entire industry has to come together to take part in this particular drive,” Shah states.

More positively, he is pleased that the pandemic has helped showcase the vital role plastics packaging plays in society. He suggests flexible packaging in particular has “risen to the

challenge” in delivering products safely and securely to consumers over the past few months.

Shah has seen consumer markets shaken up by Covid-19, but believes this is a short-term effect. “The global pandemic probably caused an upsurge in demand in certain categories and products – but in the long-term, my guess is that these are very minor changes that probably will not stay for long before the regular demand and normalcy come back,” Shah says.

“I think the main differentiator that has come as a result of the pandemic is that consumers will be more focused on safety. So, they will choose brands that deliver on their expectations in terms of health and hygiene.”

This presents a further opportunity for flexible packaging, Shah says, as products that were previously typically sold loose – for example, many food items – will move to more packaged formats. “If anything, I think the global pandemic has accelerated the usage of flexible packaging,” he adds. “There will be a movement from unpackaged commodities to packaged products and, therefore, the food segment is where the primary growth for flexible packaging is going to come from.”

But whether it’s in meeting changing market dynamics brought about by the pandemic or ever-evolving consumer needs, Shah feels flexible packaging will ultimately continue to rise to the occasion. “There is no other packaging format that will enable brand-owners to sell more in the way that flexible packaging can – that’s very clear.”

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