# UFlex Rides High On Innovative Product Developments

*~ Launches a host of innovative products & solutions across the entire flexible packaging value chain in October - December 2021 ~*

In the quarter ending December 2021, UFlex unveiled a range of new products and solutions that meets various packaging needs of brands while aiding the consumers with added convenience and features. These developments affirms UFlex' 360 degree focus on brand needs, user experience, and commitment towards the environment.

## Flexible Packaging Business

**1) 3D Bags with Perforation to Give Kids an Easy-tear Experience**: Kids unboxing their gift packs is nothing less than a celebratory ritual where they seek an emotional experience in checking what's inside the pack. However, when opening the package becomes an arduous task, it dampens their spirit. UFlex' product development team responded to the brand's ask for convenience that children need to access the toys or goodies inside the pack easily and introduced a smart solution by adding one extra attachment with a perforation line on the 3D bag enabling easy tearing of the pack. This absolutely novel concept has added convenience to joy and enthusiasm of children opening the package, thus making the brand enjoy popularity amongst them.


**2) Standee Spout Pouches to Pour Out Chai:** Beverage cafes have been embracing innovations that helps them cover the last mile smoothly to deliver hot, piping tea in its most pristine state to chai-lovers. Fulfilling the need of beverage cafes to retain the temperature of tea for a long duration, UFlex has developed a special standee spout pouch that delivers the comfort of drinking brewed tea and enhances users' experience. The pouch structure is made with BON and special grade PE along with 21mm spout on the top for spill-free

pouring of the tea. With this pouch contained in a tea delivery box, the cafes are more confident of delivering the goodness of brewed tea at the doorstep of the consumers seamlessly.

**3) Paper-based Packaging Laminate for Tetley Tea Bags:** With rising concerns around packaging waste, Tata Consumer Products that wanted to make a switch to sustainable packaging for its brand 'Tetley Tea' collaborated with UFlex to supply its green tea bags in a paper-based packaging. For this, UFlex developed a packaging structure made of paper and aluminium foil with registered hot stamping feature using emerging high energy curing chemistries to deliver a high performance and low migration product system that supports cross-linking of inks and high gloss coatings. The advanced development process at UFlex besides being environment friendly with no $CO_2$ emissions, replaces the conventional process in which solvents were used. The paper-based packaging structure can be easily recycled thereby taking the brand a step closer to its green mission and giving consumers a sense of pride in using sustainable packaging format.


**Holography Business**

**1) Mirror Film for Safe & Appealing Toys:** Toys help children have fun along with catering to their developmental needs, and are often their best friend. But in a world that is crowded with different options, the toy manufacturers have a tough job of making them appealing for kids who are known to have a short attention span. To address this challenge, UFlex has introduced a mirror film for the toy segment under the 'Make in India' initiative to showcase its cutting-edge technology for toy segment applications. This new product made of soft polyester material, has been designed to incorporate various patterns to ensure learning without compromising on child safety. The mirror-like effect has been achieved with an acrylic coating on the film. Replacing the traditional glass, the toy's mirror is unbreakable, foldable and appropriate for a child's use without any worries of accidents. Due to its success in the toy segment, extending its use in fashion and accessories segment such as on handbags, wallets, shoes, etc. is being explored.

**Packaging Films Business**

**1) High-barrier Metallized Recyclable BOPP Film 'B-TUH-M' for Food Packaging Applications:** Low-unit packs (LUP) and Multi-unit packs (MUP) such as biscuits, bakery & snacks often witness quick consumption. These packs require a packaging structure that is made using a metallized film that offers superior oxygen (<10cc/m2/day) and moisture barrier (<0.10 gm/m2/day) with robust seal performance. B-TUH-M, a high barrier and robust seal metallized BOPP film has been developed by UFlex to replace the three-layered structure with two-layers in numerous seal packaging formats especially multi-unit packs. The film offers good optics, excellent printability, and consistent slip & anti-static properties. The high barrier film's structure imparts excellent high seal strength of 1500 gm/25 mm, hermetic seal, high & broad hot tack and low SIT. The film also offers good metal adhesion for brilliant metal appearance, good extrusion bond and excellent resistance to metal cracking. Due to its ability to be recyclable and reduced layers in the laminate, this sustainable film is greening our portfolio even further.


**2) Multi-layered Mono-material BOPP Film 'B-TGM' with Outstanding Oxygen, Aroma & Moisture Barrier for Pouches and Bags:** Some oxygen-sensitive foods like dry-fruits & nuts need to be packed such that it helps retain its freshness and quality for long while locking in its aroma. The newly developed B-TGM BOPP is made to address the barrier requirements for oxygen, moisture and atmosphere-sensitive products. B-TGM is a special effect coated BOPP film with the best oxygen barrier delivering the least OTR ever for a BOPP film (<0.28 cc/m2/day). It has excellent water barrier properties (<2.9 gm/m2/day) in duplex structure, exceptional moisture resistance and low heat seal initiation temperature (95°C). The recyclable film that offers excellent clarity and product visibility is an environment friendly solution; and has properties infused into the mono-material film through a unique step proprietary process onto a specially formulated coating and base film substrate. This multi-layered mono-material BOPP film substrate is specially designed with special polymers to achieve ease of processing for the converters that consequently enhances shelf life of the packed products.

**Chemicals Business**

**1) High-performance Sealing for Packaging with Flexbon 601A_Flexbon 601W Adhesive:** A high opacity and two-component solvent-free white adhesive, 'Flexbon 601A_Flexbon 601W' is best suited for food packaging such as snacks and staples that requires added strength in sealing. It is compatible with various films such as PET/MET PET, BOPP/MET BOPP, PET/MET CPP. Due to its excellent wettability that helps it maintain a firm contact with substrate, the product reduces the requirement of white ink coating substantially and delivers good optics. These factors add value to clients' products by offering optimum results that elevates the look of a printed pack considerably making them even more eye-catchy.


**2) Two Component Solvent-free Adhesive, Flexbon 702A_Flexbon 777C for Multiple Laminates:** It is a two-component solvent-free adhesive used for general to medium performance in snack packaging applications. It provides fast cure, high-run speeds with an excellent appearance to the laminates. This product offers excellent wetting on metallized substrates to give speckling-free performance on PET, BOPP, LDPE, MBOPP, MCPP and MPET based applications.


**3) Flexcure Super Glide Coating for Lustrous Looking Packs:** The attractive appearance of a clear, glossy coating is an important feature for many packaging applications. Flexcure Coating is a free-radical chemistry-based UV coating, that is applied in-line over wet or dry UV inks, or offline over dry conventional inks to impart excellent slip & scuff resistance properties. Flexcure Super Glide Coating is a great fit for fast curing in different types of food and non-food applications such as PVC sheet, mono-cartons and book titles.


**4) FlexFab HR Ink for Cement & Fertilizers Packaging:** Packaging for building materials and fertilizers require ink with sharp printability and impressions due to the intrinsic woven packaging structure. With its expertise in ink domain, the Chemicals business has addressed this challenge with FlexFab HR Ink, a solvent-based printing ink

designed for printing on HDPE/PP woven packaging structures. Due to its sharp printability, high strength, excellent adhesion on laminates and scratch resistance properties, FlexFab HR Ink is highly valued by its customers.

**Engineering Business**

**1) Registered Lamination Process led Machine for Clear Product Packaging:** Brands have always been exploring ways to earn consumer's trust and gain credibility for their product. One way to achieve this is to give consumers a clear view of what's packed inside via a see-through window. However, in achieving this, the aesthetic of a pack often tends to get compromised. To ensure a fine blend of giving a clear view as well as maintaining visual appeal, the Engineering business of UFlex has introduced registered lamination process. The automated process embedded in the machine combines two films into the process that keeps track of the pre-printed mark on film on both unwinders. This process detects any errors emanating which yields a precise registered lamination product with zero defect output. During the entire process, the products' visibility & packs' aesthetics remains the focal point. This process has already found acceptance by quite a few customers wanting to promote product visualisation.