



Exceed™ Stiff+

Prepack Thailand uses Exceed™ Stiff+ performance polyethylene to help enhance stiffness and maintain attractiveness in frozen food packaging with sustainability benefits



Challenge

Address the market need for sturdy, recyclable* frozen food packing solutions

Started in 1973, Prepack Thailand Co., Ltd is one of the leading flexible packaging companies in Thailand. Prepack offers an extensive range of products to help meet growing needs. Their quality films are used in applications ranging from personal care and hygiene products to food products including frozen food, packaged food, snacks and rice to chemical, industrial and consumer products. An R&D center located at their manufacturing plant and headquarters also underscores their commitment to innovation as well as their continued focus on recyclable alternatives and solutions.

Prepack had been looking for a high performing monomaterial laminated solution to replace their current solutions, which incorporate multi-material laminates. While multi-material structures can provide excellent shelf appeal and machineability, they are typically more challenging to recycle.

At the same time, Prepack had commissioned a new 5L machine direction-oriented (MDO) line from Windmoller & Holscher (W&H) to enable them to penetrate the market for PE MDO substrate films. They experienced peeling and uneven stretching of the film (delamination) when they tested various MDO solutions in the market on this new line. It was crucial for Prepack to solve the inter-layer delamination issues, as they could adversely impact the integrity of the end-use application.

Finally, Prepack was dissatisfied with the quality of optics derived from current market solutions.



Solution

Utilize Exceed Stiff+ performance polyethylene to create full PE frozen food packaging with sustainability benefits

Collaborating with Prepack and W&H, ExxonMobil recommended a formulation incorporating Exceed Stiff+ performance polyethylene, which can:

- Solve the inter-layer delamination issues
- Offer excellent optical properties and high stiffness in full PE mono-material packaging
- Result in low gel occurrence

The ExxonMobil solution, together with advanced MDO technology and strong in-country technical support from W&H, helped to deliver excellent film quality.

"We were happy to supply our first MDO line in Thailand to an established flexible packaging manufacturer like Prepack," shared Henrik Schnellenberg, W&H Regional Manager Technical Sales, adding "And we are happy to have contributed to an MDO film solution for Prepack together with ExxonMobil. We look forward to more such collaborations in the future."

"Prepack is one of our most valued customers so we are pleased to be able to provide a solution that helps to solve the inter-layer delamination issue, and meets their low gel and good optics requirements as well. Exceed Stiff+ performance PE also helps boost bubble stability and helps provide ease of processing for trouble-free operations," added Yeo Wei Jian, South Asia market development manager for ExxonMobil.

Results

The new full PE MDO solution enabled Prepack to break into the MDO film market mainly in frozen food packaging, fabric and home care applications. Brand owners provided positive feedback, especially pertaining to advanced optics and increased visual appeal.

Karan Tejasen, Chief Operating Officer of SCG Packaging PLC, the parent company of Prepack said, "We appreciate the good support from ExxonMobil in supporting our MDO PE/PE development, providing a proven MDO PE solution, leading the trials and helping to solve technical challenges during the process."

He shared that Prepack is looking to extend the use of the full PE MDO solution into other primary packaging applications.



W&H 5L MDO line installed at Prepack's facility

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ExonMobil
Signature Polymers

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What's new: ExxonMobil Signature Polymers

All our polymers are now positioned under a single portfolio brand: Signature Polymers. The aim is to simplify our product architecture and naming to improve portfolio navigation for you. We would like to stress that our commitment to high quality products remains the same, it is the names that change. Everything else remains the same. We will be making these modifications over the next six months so you will see both old and new grade names highlighted during that time.

Here's a quick overview of brands and grade names that have changed in this document:

Legacy Commercial Name

New Commercial Name

Enable[™] 4002

Exceed[™] Stiff+ m 0238

Some of our existing Exceed, Achieve, Paxon and premium PP/HD grades have moved to Exceed brand; most existing Enable grades have moved to Exceed Flow[+]; most of our existing Exceed XP grades have moved to Exceed Tough[+]; most of our existing Exceed S grades have moved to Exceed Stiff[+]. More details here https://www.exxonmobilchemical.com/en/brands/signature-polymers/exceed_high_performance_polymers or contact your ExxonMobil representative to know more.

Want to see what's changed in our portfolio? Go to exxonmobilchemical.com/sptransform