Five Ways FusePack Improves On Legacy Food Packaging Formats
FusePack is a new hybrid packaging format that combines the best features of rigid and flexible packaging. The rigid interior frame defines the shape and provides structural integrity while the in-mold label (IML) panels or paper side walls enclose and protect the product.

Why Food Brands Need a New Packaging Format

Today, when a food brand refreshes or launches a product, they are still faced with the same solutions they had access to 10 years ago: rigid plastic tubs and containers, flexible pouches, paperboard, metal cans and glass jars. At Jabil, we believe that this limited menu of formats no longer meets the needs of modern consumers who seamlessly switch between in-store and online shopping. But omnichannel performance with reduced sustainability is rightfully a non-starter. Forward thinking brands require as packaging format that prioritizes both omnichannel and sustainability.
Omnichannel Concessions

Consumer expectations have been elevated to new heights through e-commerce innovations like shorter shipping times, frictionless checkout and algorithmic recommendations that know us better than we know ourselves. As more shoppers order fresh groceries and pantry staples online, many find that the quality and utility of food packaging has not kept pace with their buying habits. A package that stands out on the shelf, but breaks in transit, or requires a wasteful amount of extra protective packaging is no longer a viable option. Conversely, when packaging is designed strictly for e-commerce, the shelf presentation and desired brand presence may be lacking.

Sustainability Challenges

Most sustainable packaging solutions still require significant tradeoffs. For example, a move from rigid to flexible packaging may reduce material usage on the primary package but hamper recyclability and require additional secondary packaging for fulfillment and merchandising. On the other hand, a move from flexible to rigid packaging may improve the recyclability of the package but increase the weight of the product, damaging carbon footprint. And many paper-based solutions contain wax and plastic coatings that make recyclability next to impossible.

FusePack’s hybrid structure addresses both pain points, providing a package that can flex through transit while still standing tall on the shelf. The strength provided by the inner frame gives structure to flexible packaging, allowing material recovery facilities to process the package as if it was completely rigid.
#1 - Optimized Supply Chain Efficiency

The relatively recent rise of lifecycle assessments, primarily driven by sustainability reporting requirements, has not only illustrated how much carbon we burn shipping air, but has also laid bare to how much room there is for improvement in inefficient transportation. The majority of packages simply were not designed to improve the efficiency of shipping unfilled packages to fillers and filled packages to retail. Major consumer packaged goods brands must address this blind spot to meet their ambitious goals of zero or significantly reduced greenhouse-gas (GHG) emissions.

FusePack’s unique design enables significant operational efficiencies across the entire supply chain:

- The tapered design allows FusePack to be nested in transit from Jabil manufacturing sites to customer filling sites.
- Non-round shapes provide enhanced volumetric efficiency, meaning less air shipped, more units on shelf with faster, more effective merchandising.
- A flat, stable bottom improves filling speeds when compared to flexible packaging; in fact, best-in-class rotary lines can fill 800-1,000 FusePack units per minute.
- FusePack’s strong rigid frame simplifies pack-out while standing up to the palletization requirements of food packaging, all at a fraction of the weight of legacy alternatives.

What starts as a trickle of efficiency, snowballs into significant bottom-line improvement.
Jabil’s 2022 Sustainable Packaging Trends survey of 186 packaging decision-makers, reported that nearly every food & beverage brand is evaluating alternative resin types as a key component of their sustainable packaging strategy. Sixty-five percent of respondents cited compostable resins as having a significant role to play, with bio-resins claiming 51% and food grade PCR claiming 43%.1

Download the full report: 2022 Sustainable Packaging Trends

Which of the following resin types are playing a significant role in your sustainable packaging strategy for food and beverage?

<table>
<thead>
<tr>
<th>Resin Type</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Compostable</td>
<td>65%</td>
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<tr>
<td>Bio-based</td>
<td>51%</td>
</tr>
<tr>
<td>Food grade PCR</td>
<td>43%</td>
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<tr>
<td>Commodity</td>
<td>22%</td>
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<tr>
<td>Non-food grade PCR</td>
<td>7%</td>
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<tr>
<td>None of these</td>
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Despite the increased desire to incorporate alternative resins, many formats and stock products do not yet leverage compostable, biodegradable or post-consumer recycled materials. However, FusePack eliminates mutually exclusive attributes, with flexible material combinations. Need a hyper-styled, mono-material, recyclable FusePack package for almonds? FusePack can do it. Need something with an industrial compostable frame and fiber sidewall for pretzels? FusePack can do that too. The following material combinations illustrate how FusePack can be tailored to address an individual brand's unique sustainability goals:

- **Industrial Compostable FusePack** – Leverage materials such as PLA and PLA coated paperboard to create industrial compostable formats.
- **Recyclable FusePack** – Monomaterial PE and PP formats create lightweight, recyclable packaging.
- **PCR FusePack** – Increase your PCR usage rates with recycled resin embedded within FusePack’s rigid frame through Jabil’s advanced co-injection capabilities.

Figure 1 – Fiber based FusePack formats, leveraging recycled cardboard and newspaper, allow brands to create entirely plastic free packaging.
A July 2021 survey from First Insight and Wharton's Baker Retailing Center of more than 1,000 U.S. consumers found 68% of respondents were willing to pay more for sustainable products, up from 58% in 2019. As consumers become more aware of the limitations and realities of mechanical recycling, products remaining in non-recyclable formats will become untenable.

FusePack’s unique combination of both flexible and rigid packaging solves recyclability for food products that currently reside in flexible packaging. FusePack’s hybrid design provides the benefits of flexible packaging while maintaining processability within material recovery facilities (MRFs).

The rigid frame of FusePack also allows for a dramatic reduction in plastic, keeping food fresh and safe using only what’s needed. FusePack’s significant weight reduction and improved volumetric efficiency, further reduce environmental impact across billions of units sold. For example, an extrusion blow-molded infant nutrition tub, that can’t be nested in transit, may weigh as much as 90g while a FusePack alternative only weighs 25g. A non-recyclable composite coffee can may weigh up to 65g while a recyclable FusePack format weights only 25g.

### Sustainability Without Sacrificing Performance

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<th>Rigid Packaging</th>
<th>Flexible Packaging</th>
<th>FusePack</th>
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<tbody>
<tr>
<td>Recyclable in MRF’s</td>
<td>●</td>
<td></td>
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<tr>
<td>Lightweight</td>
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<td>Optimized for E-commerce</td>
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<tr>
<td>Fiber Molding</td>
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E-commerce packaged food experienced 54% global growth in 2020. And according to Euromonitor’s Voice of the Industry Covid-19 Survey conducted in April 2021, 73% of industry professionals feel that online shopping for packaged foods represents a permanent change, up from 60% the previous year. While many food products struggle with the rigors of e-commerce delivery, channel specific packaging formats are a non-starter for a variety of reasons including cost, added complexity, capital constraints and brand equity dilution. The need for omnichannel food packaging will continue to become more acute as consumers ramp up adoption of home delivery and curbside pick-up services. FusePack is designed to excel in both retail and e-commerce environments, resulting in a future-proof food packaging format.

FusePack’s inner rigid frame and flexible side walls have been designed to withstand the shocks, vibrations and bumps associated with e-commerce delivery. Where other packages may crack or deform, spoiling product or diminishing the unboxing experience, FusePack walls and lidding simply flex to accommodate impact forces, pressure changes and temperature fluctuations. It achieves the key benefits of flexible packaging in e-commerce (light weight & low chance of breaking) but retains the recyclability of rigid packaging.

The strength provided by this unique design also reduces reliance on secondary packaging for protection in transit. This reduces the use of additional plastic and eliminates the task of breaking down boxes and discarding air pillows and foam — enhancing the consumer experience and further improving the sustainability profile of e-commerce fulfillment.

FusePack also shines in retail environments where a rigid frame and a stable, flat bottom ensure a tall posture and clean shelf appearance. Non-round shapes improve the likelihood that product branding always faces forward. The rigid frame also allows product to be stacked, something that is not feasible with flexible packaging formats.
According to Global Data and IRI, large incumbents in the food segment lost more than $12b in sales to smaller brands in 2020. In that same year, those challenger brands secured nearly one-third of total growth across the consumer packaged goods market. This environment of heightened competition requires packaging that stands out, whether that be on a shelf or when scrolling through a delivery app. FusePack’s hybrid structure allows for exciting improvements in brand presentation.

IML panels are the perfect canvas for high definition, 360-degree graphics that stretch from edge to edge. Printing flat allows for highly detailed imagery with a color range and clarity that isn’t possible across the majority of existing food packaging as the same level of graphical fidelity cannot be economically achieved with direct printing.

IML technology provides further opportunities to delight the consumer such as:

- Transparent label sections that reveal the product inside.
- Interior printing for additional branding, contests and promotions, hidden messages, recycling instructions and more.
- Peelable labels for additional instructions or brand messaging.
- High gloss finishes for a premium look and feel.

A 2015 study by Flexible Packaging Magazine found that consumers considered resealability as the second-most important feature of flexible packaging. FusePack’s rigid frame enables exciting customization possibilities for intuitive snap closures that are easier to open and close and more satisfying to use. FusePack’s give and flexibility also results in a product that is easier to hold and manipulate for those with reduced mobility.

#5 - Powerful Brand Equity Benefits
Conclusion

Nearly all food packaging requires brands to make tradeoffs. Whether its inefficient filling, a heavy carbon footprint, poor recyclability or inconsistent e-commerce performance, few packages can do it all. At Jabil, we believe FusePack addresses these challenges head-on, and provides brands with the next iconic food format that consumers will grow to love. FusePack’s hybrid structure allows for limitless combinations of materials, sizes (from 2oz to 95oz), shapes and closure styles. To learn more about why FusePack is the future of packaging and to connect with our experts, please visit jabil.com/FusePack.

Sources

3 Euromonitor Passport: The Future of Food Retail, Nov 2021.