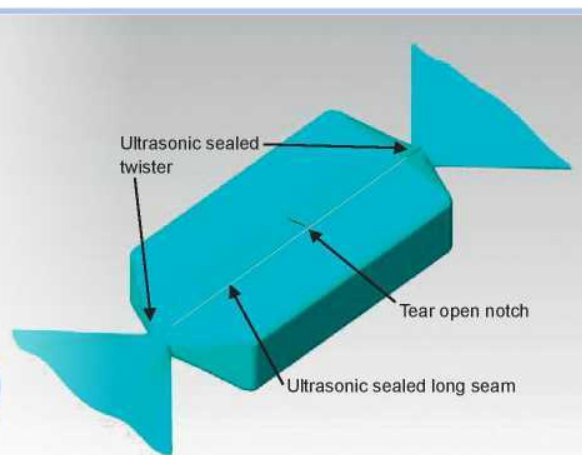


It's A Wrap

Chocolate manufacturers can now boost food safety standards as new packaging technologies are equipped with hermetic sealing functions.

By **Martial Menoud**, Head of Technical and Commercial Sales Support Center, Sapal SA, a Bosch Packaging Technology company



Wrapping machines that use ultrasonic sealing technology provide tight seals for a high degree of product protection.

Challenges in Packaging Chocolate

Chocolate is a common snack that consumers indulge in and packaging functions as the gateway to this luxurious treat. For chocolate manufacturers looking to give their products the competitive edge, die-fold packaging has traditionally been the wrapping style of choice thanks to its premium look. It enhances a product's overall appearance and helps provide shelf differentiation. With all folds and tucks on the bottom side of the chocolate tablet, it conveys an element of elegance and class worthy of the product's premium taste. Like a gift, die-fold packaging lets consumers unwrap the sweets, making packaging an integral part of the overall brand experience.

While long praised for its visually pleasing presentation, die-fold packages have nonetheless been avoided for use in certain market segments until recently as it

was difficult to achieve airtight sealing. If a single layer is used, external influences such as dust, aromas or insects could penetrate the packaging and affect product quality, especially in countries with hot and humid climates.

Prioritising Product Integrity, Safety and Quality

After a number of highly-publicised food safety incidents, occurring in several central European countries and China, maintaining product integrity and safety has become more vital than ever. As media outlets, consumer rights organisations and governmental institutions continue to keep a close eye on food security issues, manufacturers are rightly making product safety one of their main priorities. For chocolate manufacturers, packaging is a vital tool they use to protect their products and brands.

Gaps between what manufacturers wish to achieve and what machines of today can offer still exist, although they are growing smaller thanks to technology advancements. Chocolate manufacturers, for one, have always desired for die-fold packaging to be available in hermetically sealed single-wrap. It is only recently that this has been made possible with current technologies offering this premium look and airtight sealing on the same die-fold wrapping machine.

Solution: Hermetic Sealing

Hermetic sealing solutions offer chocolate manufacturers packaging that is airtight and tamper-proof, able to safeguard products from moisture, dust and insects. More specifically, ultrasonic sealing technology is used by current wrapping machines to provide tight seals for a high degree of product protection. This is especially important in warm temperatures



Manufacturers can now produce single-wrap die-fold packaged chocolates with maximum product integrity. Bosch's DSD 0600 H offers hermetic sealing

where heat can cause significant damage to the product's quality. This also means chocolate manufacturers will be better able to access new markets in countries affected by hot weather and high humidity.

Additionally, with this new wrapping technology, manufacturers will be able to accommodate the packaging of chocolate products in all sizes. To achieve protection for chocolate products, manufacturers previously relied on either aluminum foil or paper-backed aluminum foil, which was suitable for large chocolate tablets, but not for small bars. Now, new wrapping technologies are polypropylene-compatible, allowing for hermetically sealed single-wrap die-fold packaging for small- and medium-sized chocolates. As a result, manufacturers of various chocolate treats can create an attractive shelf presentation for their brands, achieve superior product protection without high costs and ensure that consumers enjoy the taste of the chocolate just as they intended.

Keeping Up with Changing Retailer and Consumer Demands

To stay afloat in a highly competitive market, manufacturers often have to expand their product portfolio with the addition of flavours aligned with seasonal or promotional campaigns, for example. Naturally, this would require the support of a versatile production process as chocolate manufacturers must regularly switch between different products.

To package their various products, new packaging technologies enable manufacturers to choose between different refined wrapping styles such as a flow



With Bosch's BVK 1300 PT chocolate manufacturers can produce flow wrap and two end-fold wrapping styles – double-twist and hermetical double-twist – all on one machine.

wrap and two end-fold wrapping styles – double-twist and hermetical double-twist – on the same machine. Another flexible packaging option allows manufacturers to switch hermetic sealing on and off, further enhancing flexibility and allowing manufacturers to keep up with changing retailer and consumer demands while optimising production. Coupled with quick changeovers, the new technology not only reduces downtime but also boosts operational efficiency.

Saving Resources

While meeting market demands for product safety and flexibility, chocolate producers often struggle to maintain a healthy bottom line. As a result, they actively seek packaging equipment with a lower total cost of ownership (TCO) enabled by material and energy savings. Ultrasonic sealing is one example of technology that fits this profile. It allows manufacturers to employ a number of materials without patent constraints, ultimately reducing costs. Moreover, the wrapping material used for ultrasonic sealing is less sensitive to storage

and transport conditions. This helps reduce wastage, providing potential for additional savings.

By switching between conventional die-fold wrapping and hermetic sealing on the same machine, chocolate producers can also avoid unnecessary spending. For the conventional single-wrap die-fold packaging, paper material

is folded around the product and retained in place by a drop of glue. Whenever die-fold hermetic sealing is applied, oriented polypropylene (OPP) is heat-sealed. The option to switch hermetic sealing on and off allows manufacturers to use eco-friendly and cost-effective materials whenever possible.

Choosing Wisely

Selecting and purchasing packaging equipment best suited for specific production line needs is not an easy process. While consumers can rely on their impulses and cravings to choose their favourite chocolate, manufacturers must consider a variety of factors and balance production efficiency with market and regulatory demands. Working with a trusted supplier who understands the chocolate market as well as the producer's unique needs can make this task a lot easier. The right partner will consult manufacturers throughout the purchasing process and help determine the ideal packaging solution to reach production goals. A brand's success starts with its delectable product and it is up to packaging to safely and attractively deliver it to consumers. **FBA**



for small- and medium-sized die-fold-packaged chocolates.