

Maximizing efficiency with capsule banding technology.

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Abstract

Capsule Banding is defined as sealing of capsules filled with liquids, powders or other products. It is done to seal the joint between the capsule cap and body in order to prevent leakage of liquid products; reduce oxidation of the contents of the capsule; and to minimize the odor problems associated with both solid and liquid products. Once banded, the capsule is almost impossible to open and re-close without leaving evidence of tampering.

Keywords: Capsule banding technology, Capsule cap, Biodegradable materials, Shelf life.

Introduction

Efficiency is key in today's fast-paced and competitive business environment. Maximizing productivity and minimizing waste is essential to stay ahead of the game. One area where companies can increase efficiency is through the use of capsule banding technology [1].

Capsule banding technology is a process of bundling capsules together with a band to form a cohesive unit. The bands can be made of various materials such as paper, plastic, or even biodegradable materials. This technology is widely used in the pharmaceutical industry, but it can also be applied in other industries such as food, cosmetics, and supplements.

One of the main benefits of capsule banding technology is that it can increase efficiency in the production process. By bundling capsules together, companies can streamline the packaging process, which reduces the time and labor needed to package individual capsules. This process can lead to significant cost savings, especially for companies that produce a high volume of capsules [2].

Another advantage of capsule banding technology is that it can enhance the shelf life of the products. The banding process creates a protective layer around the capsules, which can prevent exposure to air and moisture. This can help to preserve the quality and potency of the products, which is especially important for pharmaceuticals and supplements [3].

Capsule banding technology can also help companies to reduce their environmental impact. The use of biodegradable materials for the bands can reduce waste and promote sustainability. Additionally, the bundling process can help to minimize packaging materials, which can reduce the amount of waste generated [4].

In addition to the above benefits, capsule banding technology can also improve the customer experience. Bundled capsules

are easier to handle and store, which can make it more convenient for customers to use and transport the products. The bands can also provide a platform for branding and product information, which can enhance the product's appeal and provide valuable information to customers [5].

Conclusion

Capsule banding technology is a valuable tool for companies looking to maximize efficiency in their production processes. By bundling capsules together, companies can reduce packaging time and labor, enhance shelf life, reduce waste, and improve the customer experience. As this technology continues to evolve, it is likely that we will see its adoption increase across a wide range of industries.

References

1. Waterman KC, Goeken GS, Konagurthu S, et al. Osmotic capsules: A universal oral, controlled-release drug delivery dosage form. *J Control Release*. 2011;152(2):264-9.
2. Bowtle WJ. Materials, process, and manufacturing considerations for lipid-based hard-capsule formats. *In Oral Lipid-Bas Formul*. 2007;101-128.
3. Cole ET. Liquid-filled and-sealed hard gelatin capsule technologies. *Mod-release Drug Del Technol*. 2002:201-14.
4. Vermillion BA, Hoppe Sr ML, Alfonso EL, et al. The production and characterization of banded gdp capsules for defect implosion experiments on omega. *Fusion Sci Technol*. 2011;59(1):94-8.
5. Cole ET, Cade D, Benameur H. Challenges and opportunities in the encapsulation of liquid and semi-solid formulations into capsules for oral administration. *Adv Drug Deliv Rev*. 2008;60(6):747-56.

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