

Hokie Packers

Westrock

48Hr Repack

02/04/2024

Accessible packaging has become increasingly prevalent in today's society, however, the battery industry has yet to introduce new solutions that satisfy this aspect of consumer well-being. The current state of battery packaging exhibits the use of paperboard and polyethylene materials. This formula has presented inefficiencies in not only production cost but also customer satisfaction due to the difficulties of product unpackaging. Most battery packages require strong and nimble hands to successfully open them. Not all customers possess such traits, and this leaves the door open for potential injuries and unhappy experiences. To combat this, the team developed a new and innovative design that eliminates the struggle of opening battery packages and makes its functionality easy to operate for consumers who may be physically impaired.

The primary focus of the team's design was to minimize the need for finger dexterity. The team explored ways to effectively store batteries in a structure that was easily accessible and eliminated the need for your hands or fingers if they are not high functioning or present. To achieve this, the team opted for an elliptical-shaped package that dispenses batteries through an Archimedean spiral passage. This offers more control for the user, where they can dispense one battery at a time with each full rotation of the package. The unique structure ensures that the package reaches a state of equilibrium following its full rotation and prevents it from continually rolling and dispensing beyond the user's needs. The team's design also encompasses the use of small mounds that are equidistantly placed throughout the spiral passage. This prevents multiple batteries from leaving the package at once and keeps the distribution of the batteries consistent

throughout the package's usage. The placement of the batteries within the spiral also helps to maintain the distribution intervals by keeping the dispense rate at one battery per full rotation. Moreover, the angle and size of the battery slot work to safely dispense the batteries regardless of the speed or force in which the package is rotated.

The team's new rendition of a traditional battery package works to bring new excitement and comfort to all customers no matter their physical capabilities. The elliptical dispenser makes limited mobility feel limitless and provides a positive customer experience with every spin! Further expansion upon the team's design can be seen providing easy use for everyday commercial use products, pharmaceutical products, and much more.