

Wine Bottle Protection in an E-Commerce Model



An Industry-Focused Case Study
for Wineries and Wine Retailers

Redefining Packaging for a Changing World



The Problem

The recent shift in consumer behavior has necessitated that wineries and wine retailers establish an online sales channel to stay competitive. However, operating an e-commerce platform poses its own set of challenges, requiring companies to navigate issues such as breakage and sustainability.

Breakage:

The delicate composition of wine bottles makes them highly susceptible to breakage during transportation. Wine makers have reported that breakage occurs frequently and compromises the premium unboxing experience and customer satisfaction they strive to deliver. It's not only frustrating for customers—it's also costly for the company. It is estimated that breakage accounts for almost 20% in losses each year for wine producers.

Sustainability

Additionally, when establishing an e-commerce platform there are several sustainability concerns that must be addressed. From additional packaging waste, to transportation emissions and energy consumption, it is critical that companies integrate sustainable practices into their operations.

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The Need

Wine makers need a reliable, sustainable shipping solution that protects their bottles, addresses sustainability concerns, and allows for safe delivery to happy customers.

The challenges of doorstep delivery



Breakage

Delicate wine bottles are highly susceptible to breakage during transportation. This is incredibly costly for wine companies.



Loss in positive brand perception

The negative impact on brand perception when a customer experiences the disappointment of a failed delivery has major costs associated as well. In many cases those customers will never place another order with the company.



Problem pollution & plastic

E-commerce presents additional environmental concerns due to additional packaging, increased transportation emissions, and energy consumption from operations.

The Solution

DS Smith's team of design engineers tackled the wine packaging challenge, aiming to develop packaging that is both environmentally friendly and capable of effectively safeguarding wine bottles. To do this, they created a strong, protective, sustainable design solution: **Wine Box**



Wine Box Benefits:

- Superior Bottle Protection
- Reduced Breakage Losses
- 100% Recyclable

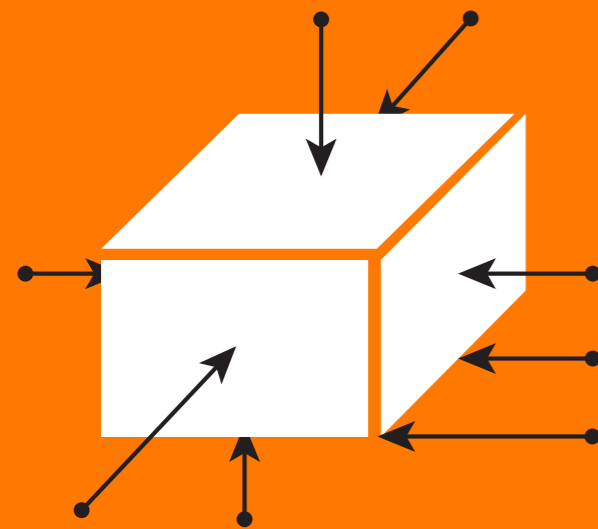


Wine Box: A Wine Packaging Breakthrough

DS Smith developed a revolutionary wine shipping box that provides superior protection to bottles, while helping retailers exceed sustainability targets.

Wine Box holds three standard size (750ml) bottles of wine. The bottles are surrounded by a 360°, protective, corrugated insert that safely cradles them. The inserts work in conjunction with the outer packaging to support and protect the product from any drops, impacts, and shocks. Wine Box also comes with inserts that make it customizable to fit a variety of bottles.

ISTA Testing



Product Weight: 3.2 lbs each x3
 Total Corrugate Weight: 2 lbs
 Total Weight: 11.6 pounds

To test the reliability and robustness of Wine Box, the International Safe Transit Association (ISTA) 3A test was conducted.

Test Procedure 3A is a general simulation test that replicates common parcel delivery system transport conditions to evaluate packaging effectiveness. This test includes shock and drop testing on the corners, edges and flat face sides of the box.

The testing indicated that DS Smith's Wine Box performed successfully. The bottle cradling system effectively protects the product from drops, impacts and shocks, and will virtually eliminate breakage during transit and delivery.

Test Results:

- Both tests showed similar impacts and internal crush
- No damage was shown on any product on either test



Drop Test:
 DS Smith's Wine Box performed successfully.

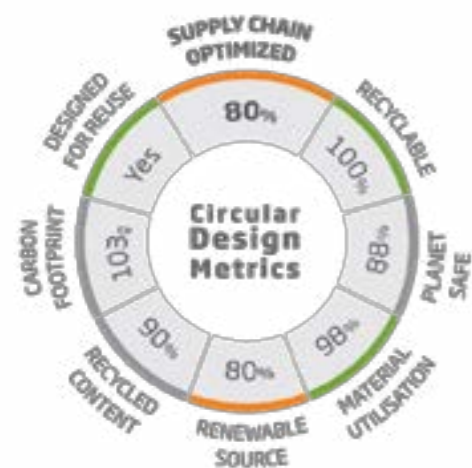


Testing indicated:
 DS Smith's Wine Box eliminates breakage.

Sustainably Designed

Another key benefit to DS Smith's Wine Box is its high marks in sustainability.

Other boxes in the marketplace utilize unrecyclable, foam molds, which are environmentally harmful and off-putting to customers. DS Smith's Wine Box is made from 100% recyclable corrugated materials and is rated 100% Planet Safe.



DS Smith also used the company's Circular Design Metrics software to analyze the carbon footprint of the box design.



Extended Life Cycle

The corrugated board we use in our packaging is already a fully circular material and on average it is recycled 25 times around the system.

Ready for wine packaging that eliminates breakage?

Our packaging designers and strategists are working hard to meet the challenges facing wineries and wine retailers today. We can develop and deliver sustainable solutions focused on increasing your sales, reducing your costs and managing your risks.

Contact us to speak with one of our design strategists:

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