THE SOLSTER SYSTEM

Enhancing Solar Module Packaging

Background

A solar energy customer began purchasing traditional pallets from UFP Packaging in the late 2010s. When our account manager realized that traditional pallets were contributing to high damage rates, he recommended that the customer use UFP Packaging's testing and design services to optimize their packaging. When the customer agreed to the idea, our team got to work.

Opportunities

Exploration and Observation: Our team spent six months developing a comprehensive unit load solution. By visiting the company's manufacturing facilities, we identified the sources of damage and areas for improvement.

Concept Development: We brainstormed and created prototypes, refining concepts for assembly and functionality.

Engineering and Testing: Using our advanced testing facility, we ensured the unit load solution met industry standards. Biweekly virtual meetings to discuss testing, design and development updates with the customer kept the project on track.

Solution

The Solster is a reinforced pallet with added stringers and protective packaging components. This extra support minimizes the deflection that causes microcracks in solar modules during shipping and storage.

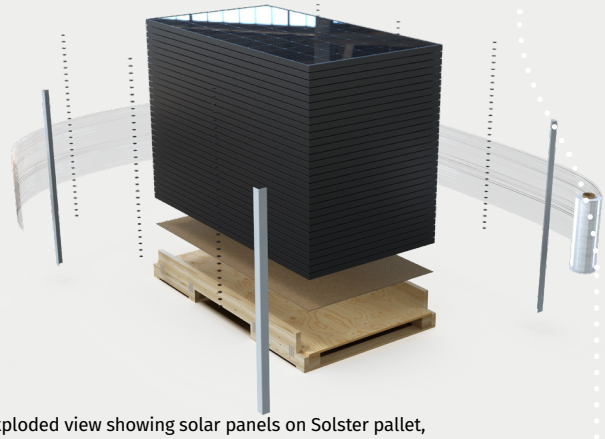
Key Benefits

Durability: Enhanced stiffness allows for 12% more load capacity, enabling the shipment of 29 modules instead of 26.

Cost Savings: Projected savings of $2.5 million at one location, with potential for similar savings if scaled to more locations.

Outcome

In six months, UFP Packaging's collaboration and consistent communication led to a custom solution that improves shipping logistics, reduces product damage and cuts costs for our solar customer.



Exploded view showing solar panels on Solster pallet, corrugated sheet, corner protectors, spacers & stretch film

RESULTS-BASED SOLUTIONS

12% **Higher Load Capacity!**

Before:	After:	Projected Savings:
26 Modules	**29** Modules	+ **$2.5 Million** at one location
Enhanced durability allows for the shipment of more modules.		with the potential for similar savings if scaled to more locations.

Are you facing packaging challenges or seeking optimization opportunities?

Explore our total packaging solutions, exemplified by our client's success story. Click below to schedule a personalized consultation and discover the transformative benefits of the Solster System.

SCHEDULE A CONSULTATION

UFP PACKAGING

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