

Aerosol Transportation – A Case Study

A leading manufacturer and distributor of aerosols was referred to Samson Pallet Stability by colleagues at Samuel Grant Packaging, who spotted an opportunity to help them improve their pallet wrapping process and test the stability of their heavy and valuable shipments, some of which are headed to the Middle East.

Given the value of the products and their weight, pallet stability is of the utmost importance, not only for health and safety reasons, but also because the cost to replace damaged shipments would be significant.

The company had outdated pallet wrapping machines which they had purchased. Unfortunately, the manufacturer had subsequently gone out of business, and so they were struggling to service the machines. In addition, it was unclear to them how much film they should be using to ensure load security and get the goods to their destination in perfect condition.

Furthermore, they were conscious of the 2022 Plastic Tax, and wanted to introduce stretch film with at least 30% recycled content. They didn't want to use excess film and negate the environmental benefits of the recycled film in the process.

Our team at Samson Pallet Stability, led by Dan Hirst, was only too happy to help.

"The team conducted a full analysis of their operation," says Dan, Samson Nano Specialist. "We tested their pallets for stability on the Samson Slingshot, which replicates the inertia of a vehicle and evaluates whether the load will potentially displace during transit. The machine can initially test at 0.1G and work up to the EUMOS (The European Safe Logistics Association) standard of 0.8G. From the pallet data entered, the maximum deformation of the load is calculated to create a pass or fail."

Based on all our EUMOS testing of five different pallet types, we worked out the average film consumption of their existing operation, and compared like for like with the Samson Nano.

By calculating the film used vs the number of pallets that the company wraps per year, the Samson Nano saved them 7.45 tonnes of stretch film per year!







7.45 tonnes of stretch film saved per year

Equivalent to 44.7 tonnes of CO2 saved per year*

Improvements in service, maintenance and support

Improvements in load stability and safety



"We've worked with the Samuel Grant Group, and Rob, our Account Manager, introduced us to the Samson Pallet Stability team.

We're shipping big pallets for a bluechip company, including sending them overseas, and it's massively important to us that they arrive safely and in good condition. We had old pallet wrapping machines which were no longer in production, and it was challenging to keep them maintained as a result. It seemed obvious for us to trial something new.

We do a variety of pallet sizes: some standard and some double height which we're sending to the Middle East. We were not only trialling the Samson Nano, but also using a new film which has 30% recycled content, to negate the 2022 plastic tax.

The Samson Slingshot testing facility based in Sheffield allows the Samson Pallet Stability team to justify what they're saying about the load containment offered by the Samson Nano. We asked them to test our loads, and tested multiple pallets until we were happy with the results, making sure they complied with EUMOS standards of Health and Safety (0.8G inertia, equivalent to a vehicle's hard brake).

We enjoyed dealing with the team. The installation of the machine on our site was smooth, and any teething issues were met with a swift response from the team. Whatever we asked for, we got, and we are installing two further machines as a result later this month, taking us to three in total.

The machines are easy to use, reliable, and a significant improvement on our previous solution. I would definitely recommend Samson Pallet Stability.