



CASE STUDY

CUSTOMER REDUCED TOTAL COST BY ~20% WHILE MINIMIZING WASTE AND CARBON EMISSIONS USING IPG'S G7 ULTRA HIGH PERFORMANCE FILM



Customer Overview

The customer was using a wrapping program designed to work with a film originally specified by the equipment manufacturer during the program's development.



Landfill Savings Equivalent to 8,452 Pounds



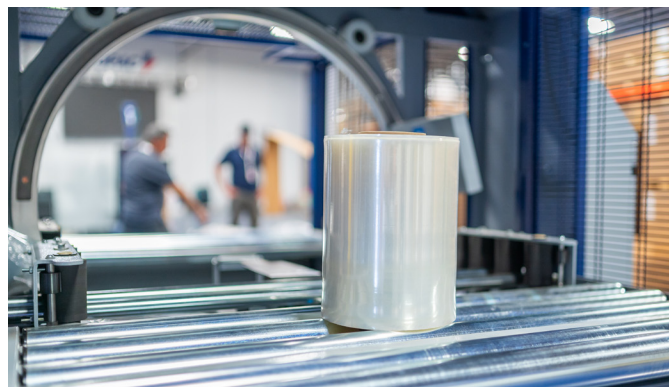
7 Acres of Forest Absorb the Same Amount of CO₂ Emissions Reduced

The Challenge

The customer faced the task of finding a new film to meet their application performance needs from within IPG's existing offerings. The goal was to reduce cost by providing an alternative material that could be used across multiple locations and changes required for the equipment.

Proposed Solutions

To evaluate a replacement film, two machines with slightly different setups were utilized. Considering the high pre-stretch and load retention requirements of the application, IPG's newly developed **G7 Ultra High Performance film**, in a thinner gauge than originally specified, was used. Machine 1, running at 270-280% on mixed carton types, employed IPG's G7 Ultra High Performance machine film in 45 gauge without making any adjustments to the equipment. Similarly, Machine 2, operating at 290% on mixed cartons with additional wraps at the top and bottom for securing heavier loads, also used IPG's G7 Ultra High Performance machine film in 45 gauge without any equipment modifications.



Results

The first machine's load retention went from 12.7 lbs. up to 15.0 lbs, a significant increase with a more secure pallet. Consumption was reduced by 51 rolls annually as a result of using the thinner gauge G7 ultra high performance film, allowing a cost savings of 14.2%. Additionally, the reduced use of plastic from the thinner gauge achieved a carbon emission reduction of 4,130 lbs annually.

The second machine provided even larger improvements due to the higher stretch rate and additional wrapping. Load Retention on these heavier products went from 18.3 lbs. up to 22.6 lbs. providing a much more stable pallet for shipping. This reduced consumption by 102 rolls, reduced 8,299lbs of Carbon emissions, and created an estimated cost savings of 22.4% annually.



“This is a much tighter, more secure load, and with no setup changes required.”

12.4K *Total lbs. Carbon Emission Reduction*

15% *Increased Load Retention*

19% *Average Annual Savings*

Conclusion

IPG was able to provide a direct replacement film that does not require equipment or setup modification. This customer saw both a performance gain through increased load retention and lowered their cost-per-pallet by utilizing our film in a reduce gauge thickness. They switched to Ultra High Performance Film G7 45 gauge in 10 different locations, and they will be adding additional locations in the future.