CASE STUDY

LOGISTICAL CHALLENGE

FULFILMENT AND DISTRIBUTION

HOW ANTALIS' STRETCHCONSULT SERVICE REDUCED A CUSTOMER'S STRETCH FILM USE - AND CARBON FOOTPRINT - BY 35%

THE CLIENT
A manufacturer of plastic products.

PROJECT CLASSIFICATION
- Environmental
- Efficiency

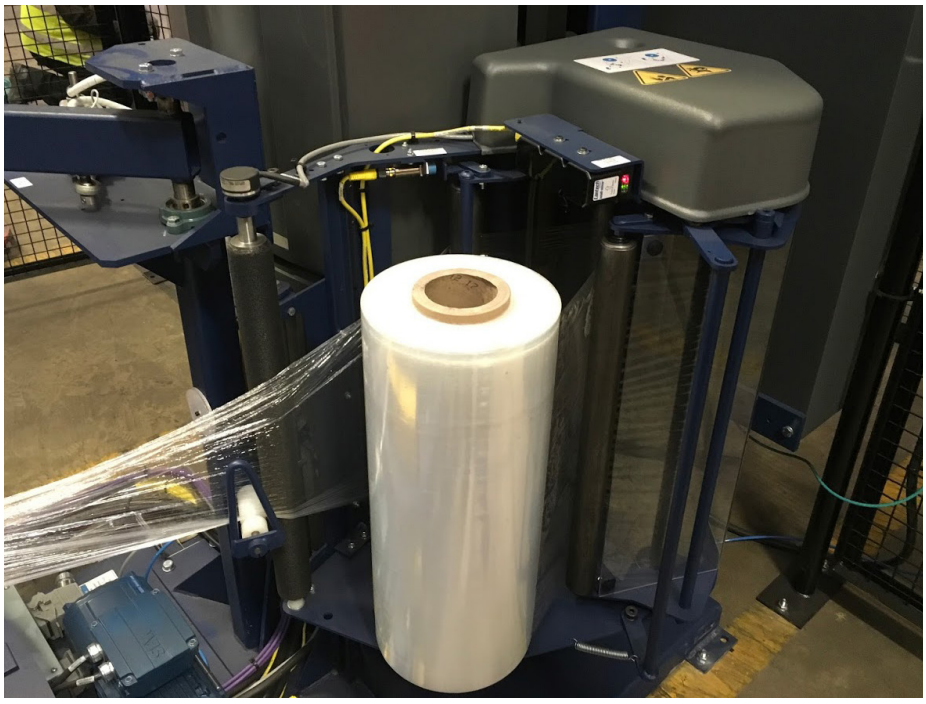
PROJECT OVERVIEW
Minimising stretch film use through correct machine calibration and optimum film selection.

THE CHALLENGE

With the Plastic Packaging Tax on the horizon, the client was considering the introduction of recycled plastics into both the products it manufactures and its transit packaging. Stretch film is one of the most heavily consumed forms of plastic packaging by manufacturers and logistics companies, and very often more film than necessary is used as a result of poor machine calibration and/or film choice.

The client wraps 60 1200 x 800 x 1200mm pallets per day using a 23 micron stretch film on their Robopac Masterplat pallet wrapper; however, they were keen to switch to a 20 micron film containing 30% recycled plastic, which would be exempt from the Plastic Packaging Tax.

To help identify the best solution for their requirements, Antalis Packaging recommended the client take advantage of its free stretch film assessment.



SMART PACKAGING SOLUTIONS

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THE STRETCHCONSULT ASSESSMENT

The stretchCONSULT assessment is a four-step process:

1. **ANALYSIS.** This forms the starting point of the audit and includes an analysis of:
   - Products
   - Intralogistics
   - Existing stretching technology, its condition and configuration
   - Film qualities
   - Film consumption/consumption point and load unit
   - Logistical requirements/distribution channels
2. **TESTING.** This step includes the auditing and testing of:
   - Stretch films
   - System technology
   - System configuration
   - Storage
   - Transport
   - Documentation, proof of the actual saving volumes
   - Possible proof of quality and certification by independent Institute BFSV
3. **DOCUMENTATION.** This includes:
   - Documentation of the analysis of the current situation
   - Detection of "weak points"
   - Proposals for possible solutions
   - Examination of cost and material savings
   - Conception, discussions re. implementation and approach
   - Definition of the targets
4. **IMPLEMENTATION.** This final stage puts into practice the recommendations of the audit, including:
   - Use of the correct film
   - Possible purchase of new stretch technology
   - Continuous monitoring of the result
   - Tracking of needs
   - Just-in-time deliveries

THE FINDINGS

To create a baseline for the assessment a Stretch Film Expert from Antalis Packaging ran an initial test using the client's existing set-up. He discovered that the machine wasn't calibrated correctly, resulting in the film not being tensioned which, in turn, was leading to poor load stability and the use of more film than necessary.

After optimising the machine calibration for the current film, Tom ran the test again. The improvement was visible immediately, while measurements confirmed that load containment force had increased from 2kg to over 4kg. Tom repeated the exercise using two alternative films; one the recycled stretch film the client was hoping to switch to, the other a high performance film proposed by Tom.

	Film Weight	Number of pallets wrapped per tonne of film	Financial saving (%)	Plastic reduction (approx.) (%)	CO_2 footprint reduction (approx.) (%)
CLIENT'S CURRENT FILM (23 micron)	140	7,143	0	0	0
PROPOSED RECYCLED CONTENT FILM (20 micron)	122	8,197	3.96	12.86	12.86
PROPOSED HIGH PERFORMANCE FILM (15 micron)	**91**	**10,989**	**23.67**	**35**	**35**

Top Performer

David Hicklin, Stretch Film Expert at Antalis Packaging

"Each time we perform a stretchCONSULT assessment, clients are amazed by the results and savings to be made. Naturally, many businesses are looking for ways to mitigate the impact of the Plastic Packaging Tax, with many considering switching to a film with 30% recycled content, which is exempt from the tax. While this may work for some, for the majority it won't, particularly high volume users. Because high performance films are easier for machines to stretch than cheaper films, less film, and therefore plastic, is required overall, and load containment is far superior, too, all of which contributes to financial and environmental savings."

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