Woven Polypropylene FIBC's and their lifespan / recyclability.

At Smartlift we supply in excess of 2 million FIBC's every year. Many of which are single use (5:1) and some are multi use (6:1). Made from Woven Polypropylene these bags in most cases are designed to carry over 1000 times their own weight with some bags capable of carrying 2000kg of product. This is a remarkable statistic considering a ridged alternative like a 1000Ltr IBC that can weigh in excess of 60kg.

Because of their strength and durability FIBC's have become the preferred method of storing and delivering bulky products for many companies. Benefits include;

- A 1000kg bulk bag can hold the same amount of product as FORTY 25kg sacks, making the filling process much, much quicker thus reducing massive energy costs related to plant and manpower.
- We can send up to 1000 FIBC's on just one pallet to our clients making the product very emission friendly.
- Companies can send one bag via a pallet network instead of running an artic for such a small load.
- In most cases, as bags have lifting loops there is no need for pallets which eliminates a major cost and more importantly removes a wooden product which is unfriendly to the environment as it has a poor carbon footprint.
- When empty, FIBC's due to their flexible nature can be folded down taking up a fraction of space on return loads compared to the ridged alternative.
- Even a single trip bag is tested to hold 5 times its safe working load. So, a bag designed to hold 1000kg of product is tested to 5000kg before it is issued a certificate giving fillers the peace of mind needed for the safe transportation of often valuable products.
- The bag is made up of 99% polypropylene making it easy to recycle in terms of separation. Most paper packaging is made up of different components (often plastic) making them very difficult to recycle.
- FIBC's can be customised to suit material, plant and distribution systems.
- FIBC's can be printed turning them into a good source of advertising.

Single trip bags

The term 'single use packaging' has become a frequently used phrase to describe 'throw away' packaging mainly aiming at the retail industry with supermarkets in particular under the spot light.

Single trip bulk bags often live a long eventful life, often used as an intermediate storage container before delivering finished product to end users such as aggregates, minerals, powders and food ingredients. In some cases, single trip bags offer temporary storage for up to 2 years before being sent out and once discharged the bag can be folded or bale crushed to a very small size and sent off for recycling.

Multi trip bags

Offering the same benefits of a single trip bag, multi trip bags are designed with reuse in mind. When handled correctly and when checked over thoroughly, a multi trip bag can be reused several times. No definitive amount of uses can be guaranteed but like most products, the more they are looked after the more they can be reused. Like single trip bags, when they come the end of there life they then can be recycled.

Can FIBC's really be recycled and for what use?

Unlike other recyclable waste, companies may need to arrange for the bags to be collected, as recycling FIBCs needs to be done by larger recycling plants or ones that can store the bags until they have enough to process

Most FIBC's can be recycled, even the most contaminated bags can be graded. The product is split into A, B or C categories depending on the cleanliness and ground down into small pellets or flakes then sent on for further reuse. Although only a small percent of the recycled PP can be used to make FIBC's again due to the loss of tensile strength when recycled, items including brushes, brooms, bins, and parts for the automotive industry contain recycled polypropylene. These items then in turn can be recycled again.

Packaging Waste

As importers of polypropylene we have seen significant increases in the cost of our packaging waste obligations. The world is focusing heavily on plastic and as a distributer we have to pay the lions share of this levy on our products with the manufacturer and then end user contributing also. This has a significant effect on prices which impedes on our ability to be competitive in some case against companies who perhaps do not disclose their true volumes or indeed any.

However, at Smartlift we do recognise our responsibilities and are constantly looking at ways to reduce our waste. We have already condensed the amount of outer packaging we use and are trying to persuade end users to consider 6:1 multi trip bags. But above all we are working hard with producers to incorporate more recycled polymer into our product. This is challenging because polypropylene loses at lot of its tensile strength when recycled and we cannot compromise the quality of the product. The government have suggested they want 30% of the product to contain recycled material which is near impossible for FIBC's. We are looking at ways to use alternative polymers such as PET to produce the bags but high costs are putting off end users therefore demand is low.

Summary

Whatever the outcome, whether its through tax or alternative polymers with higher cost, the result will be the same. End users will pay more for packaging and in our case, against the alternatives, we have a very eco-friendly product that will go punished until the world is ready to listen to the benefits of plastic.

Plastic is perhaps one of the best inventions in the past 100 years but it's the way we all treat it after its shelf life that is the main issue. This is what has caused it to be so negatively highlighted in recent years. So, maybe it's not the product which is the problem but more the people who don't know what to do with it.

Tax won't solve this, education will.

Source: Trevor Bland – Managing Director of Smartlift Bulk Packaging Ltd – 18th September 2019