

PLASTICS – TOO MUCH OF A GOOD THING!

Modern science has yet to produce a suitable replacement for plastic to provide a transparent and strong protective cover in packaging. Over the last 50 years, many different grades of plastics have been invented to provide for the various necessities of the modern world. Necessities from the basic water-resistance of simple raincoats to hygienically sealed medical tools. Plastic is at the forefront of choice, due to its ease of pliability and its clear transparency; it is easy to use and aesthetically sound. Nonetheless, it is also clear (pun intended), “there can be TOO MUCH of a GOOD THING”.

Plastic is also at the forefront of being overused and carelessly discarded. Its strong hydrocarbon structure requires a large amount of energy to breakdown, and if allowed to rest in nature; a single piece of plastic will outlast several generations of a human lifetime.

Hence (until science finds an alternative), we must work diligently to REDUCE our plastic footprint in our course of work and life.

Ship suppliers must protect products and supplies from water damage and be ready for inspections by the authorities and regulators. Our packages must also be secure and stable to be lifted onboard the ships in challenging open sea conditions and in busy container ports. Clear, transparent, strong plastic wrapped packages is the norm for this industry for a long time.

Nonetheless, the first action in AMOS has been to measure the use of such plastic wraps. Next, using simple but innovative tools, we increased the efficiency of every length of plastic that is employed (and discarded). With this, we reduced plastic usages and waste. In mid-2019, we started our effort to measure the weight of plastic wraps used per pallet of products shipped. Within 3 months, we have reduced **the weight used and discarded by more than 1/3**. We are proceeding to reduce it further, **without compromising the waterproofing and security of our packaging** (refer to table below).

Width of Plastic Wrap		Jul-19	Aug-19	Sep-19	Oct-19
0.5m	Usage in kg/month (2.7kg)	1782.0	1231.2	1431.0	1296
1.5m	Usage in kg/month (47kg)	-	-	-	59
1.8m	Usage in kg/month (54kg)	-	-	-	40
	Total Usage in kg/month (2.7+47+54kg)	-	-	-	1395
	Est. per pallet usage (kg)	0.770	0.560	0.563	0.486
	Improvement in reduction usage per pallet (kg)		-0.210	0.003	-0.077

Our second action identified a business partner that would take our waste plastic (internally generated and those collected after each delivery) for complete RECYCLING. As such, we continue to reduce our plastic footprint in the industry.

The third action pushed our key suppliers to adopt plastic reduction upstream. Our suppliers do not use secondary plastic wrappings of products in transit to our AMOS warehouses in Singapore, Shanghai and Busan. Furthermore, where appropriate, plastics are replaced with waxed paper to separate individual products that are bundled together.

Our single use plastic reduction challenge is an ongoing action plan. We call all to join us and share your ideas for the benefit of all. Working together, it is certain that further new ideas and technology shall be brought forth to move us away from our dependency on plastics. The benefit is for all in the long run.