# A-WARD: EVOLUTION IN THE 'NEW PLASTICS ECONOMY'





## RETHINKING CAPITAL OUTLAY IN BULK HANDLING TO BE MORE COMPETITIVE

Dramatic changes in the international environment, such as the emergence of Covid-19 effects, have seen firms prioritizing supply chains and rethinking efficiencies in their capital outlay. The Plastic resin industry in particular is experiencing shifts attributed to a range of factors, such as new demand curves driven by the social and regulatory environment. Consumerism has been growing in new directions, propelled by a range of factors. For example, population movement creating increased demand on products, such as food and beverage, through to new product opportunities, including the use of plastics in fabrics. Traditional methods of bulk handling and logistics are struggling to be more competitive within the current economic climate.

In addition, the industry is moving towards alignment with sustainability pacts. One of these is The US Plastics Pact, which joins seven other international agreements. The 2025 pact aims to encourage the plastics industry to seek new business opportunities that are more innovative, efficient and sustainable.

A range of resin types signify the importance of plastics producers showing agility in their ability to scale up or down on product lines. Therefore, there is value to be gained in having a supply chain that can quickly scale to fit sudden changes in the 'New Plastics Economy'. In light of changes in the regulatory environment, pro-active firms are acting to audit their supply chains to meet global conditions. Currently, this new agile thinking is being led by multinational enterprises over the traditional smaller firms.

Operations large and small need to look outward towards creating a focus on capital assets that meet ROI goals, while reducing labour and inceasing overall efficiencies and safety more than ever.













# WHAT IS THIS REVOLUTIONARY PRODUCT?

Since WWII companies across the globe have been filling and transporting their materials through 25KG or one ton bags loaded onto pellets. This method only utilized a maximum of 80%, meaning 20% was unutilized. In other words, out of 1000 containers, companies would usually transport 200 containers of air. Something needed to be done.

In 2006 A-Ward revolutionized the container loading and logistics industry by simply working in harmony with gravity. By developing equipment that would tilt containers 90°, companies across the globe were suddenly able to utilize between 95 - 98% of their containers. This resulted in tens of millions in savings and time. This original and revolutionary technology also greatly reduces workplace accidents and the risk of contamination.

Globally, manufacturers and companies alike are re-thinking and working in different ways. The risk of COVID-19 means that safety for staff and customers are forcing traditional models to be assessed. A-Ward's technology helps companies and organisations to comply with social distancing rules and maintain manufacturing deliveries.





## WHAT BENEFITS DOES A-WARD'S SOLUTION BRING TO THE PET/RESIN INDUSTRY?

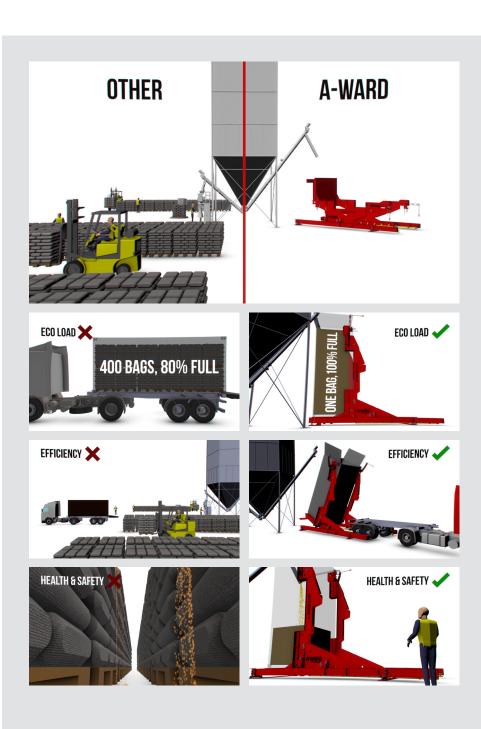
A-Ward has a massive commitment to the environment and the planet. Our unique packaging equipment is designed to minimize packaging and maximize container volumes. It is this revolutionary business innovation and environment consciousness that defines A-Ward's DNA and makes us a leader in the industry.

### A-Ward continues to work with industry leaders to increase:

- ROI
- Health and safety
- · Production capabilities
- Material processing & efficiencies
- Yield per container

Benefits of using A-Ward container loading technology, include plastics producers ensuring that their shipping loads are maximised and contamination-free. This is achieved through utilizing a single container liner bag, that replaces traditional loading methods, such as 25kg single bags.

Other benefits to resin users include significantly reduced labor, being able to unload resin directly from the container into the storage hopper and minimizing contamination associated with handling many small bags on wooden pallets.



# CASE STUDY: PLASTIC BOTTLING PLANT IN MEXICO

A-Ward has customers across various industries from agriculture, to food, chemical, pharmaceutical and minerals. An example of one of these satisfied customers that has experienced positive returns on overall operational efficiencies is a multinational bottling plant in Mexico.

#### **OBJECTIVES**

We identified the following opportunities for the bottling plant in Mexico:

- 1. Prepare the factory to receive Asian resin more efficiently.
  - The current unloading process using lift trucks generates several safety issues. In addition, storing the resin in individual bags requires a massive amount of valuable production shop floor. Unloading the resin with this process represents unnecessary additional handling.
- 2. Eliminate the risk of product contamination. The existing unloading procedure requires the individual bags to be opened one-by-one following a manual process. This increases the risk of contamination and inefficiencies with higher labour costs.
- 3. Eliminate the Health and
  Safety risks. Having multiple
  staff working in close
  proximity, whilst operating
  diesel engines, results in
  massive health issues.
  Stacking multiple 25kg bags
  beyond the capacity of the
  pellets also presents the risk
  of injury or fatalities.

#### PROPOSED SOLUTION

A-Ward supplied a high efficiency container unloader. This machine takes the container directly from the trailer without any additional equipment. The container was then tipped, allowing the resin to flow directly into the transferring system by gravity.

It's worth noting that the tilter complies with the highest international H&S standards, including noise levels (ISO certification). Once the container is empty, our machine safely places the container back into the trailer.

The operation of the tilter requires only one operator working with a remote control at a safe distance. The unloading capacity of the recently improved process is two containers per hour.

#### **COCA COLA'S EXPERIENCE**

In 2019, one of Coca Cola's bottling plants implemented A-Ward's technology to eliminate high external warehouse, operational and big bag handling costs, in addition to increasing the utilization of their PET resin silos.

They required a reliable solution and

A-Ward's wide range of tilters achieved all goals.

**RESULTS:** A reduction in operational costs by 35%, reducing unloading times by 50%, and an increase in health and safety for operators.



#### **RESULTS**

- ROI of 251%
- Paying back the cost of the Tilter in five months
- A significant reduction in noise pollution to under 80 decibels (down from 96)
- From 415 containers per year, to 368 containers with liners
- A reduction of 47 containers per year
- Annual freight cost reduction of \$70,000

### Other factors not included directly in the ROI calculation:

- Health & Safety Improvement:
   By reducing the personnel and eliminating the need of a lift truck working near people, the risks of accidents are reduced significantly.
- Improve Production Floor
   Utilization: With the elimination of single use bags, the current floor space utilized for storage, would be made available for additional production capacity.
- Ability to eventually replace tankers with containers: This benefit would eliminate the need to unload tankers from the public street space. Logistics costs would be reduced, due to transport of containers requiring standard basic trailers, instead of specialized tankers.
- Waste minimization: One ton bags would be eliminated, which results in greater sustainable outcomes.











A-Ward will conduct a free ROI assessment, which will analyse your current situation, costs and operation, to provide you with a clear idea on the possible savings and benefits. You will also receive a list of recommendations to take your current process to the next level.

Email <u>sales@a-ward.com</u> to get your free ROI assessment now.