



# Making The Switch To Bulk Bags: A Great Investment!

## Application:

### *Unloading Bulk Bags*

**Overview:** A manufacturer has traditionally received ingredient in boxes. Suppliers are now offering the ingredient in bulk bags and, in some cases, at a discounted price per pound. In addition to **ingredient cost savings, safety and productivity** must be taken into



account.

**Situation:** Control and Metering analyzed the plant's current ingredient handling process focusing on package handling logistics, safety and product and package waste.

**Ingredient:** Resin beads, 5 pcf. Current price is \$0.50 per lb.; discount for receiving in bulk bags is \$0.01 per lb.

**Annual usage:** 3,000,000 lbs.

**Boxes:** 1,000 lb. and 1,500 lb. rigid, corrugated containers.

**Product Waste:** Typically, 2 lbs. of product is either spilled during the tipping procedure or left in the box when using a vacuum wand.

**Package waste:** Boxes have to be broken and placed in a waste disposal container.

**Proposed bulk bag:** 2,200 lb. capacity. Can be either reused or folded and placed in a waste disposal container.

**Operation:** Boxes are placed in a storage warehouse prior to being taken to the production area. They are emptied using either a tipper or a vacuum wand system and conveyed to the process.

## Solution:

### *Economical Discharger*

#### Features:

- 40° sloped hopper to shape the bag and promote ingredient flow;
- Hopper mounted vibrator to ensure 100% discharge;
- Robust frame designed for fork lift loading of the bag;
- Frame designed to straddle existing box tipper; or,
- Shoulder height access for untying bulk bag; and,
- Bulk bag is fully supported by the Flo 40 hopper ensuring completely safe discharging.

#### Benefits:

- ✓ Less package handling;
- ✓ Existing conveying systems are reused;

Less labor	=	\$1,000
Less package waste	=	\$8,444
Less product waste	=	\$4,500
Ingredient savings	=	\$30,000
<b>Annual savings</b>	=	<b>\$43,944</b>
<b>Pay back</b>	=	<b>3 months</b>
<b>1<sup>st</sup> year ROI</b>	=	<b>440%</b>

- ✓ No ingredient waste;
- ✓ Less package waste disposal;
- ✓ Safe package handling.

## Conclusion:

### *Safe, Efficient Ingredient Handling.*

The Flo 40 discharger is an economical means of safely and completely discharging the resin beads.

The 40° sloped hopper and vibrator promotes ingredient flow resulting in **100% discharge and zero product waste.**

Because of the higher payload per package using bulk bags, **package handling and package waste is reduced.**



Unlike other bulk bag dischargers the Flo 40 completely supports the bulk bag and allows the operator easy access to the bottom of the bag through a **shoulder height hopper access door**. This ensures that the operator does not have to reach under a suspended load.

Switching to bulk bags is **saving money, reducing waste and improving productivity**. And, the capital investment required to make it happen was **paid back in less than 3 months!**

Analyze your own situation by downloading our economic analysis spreadsheet at:

[www.controlandmetering.com/bulkbagsavings](http://www.controlandmetering.com/bulkbagsavings)