

BEST PRACTICE

LOCATION:

ACTIVITY:

SUB ACTIVITY:

BEST PRACTICE No:

COUNTRY OF ORIGIN:

Manual handling and storage

Aggregates

BP2058

ARTICLE YEAR

COMPANY:

COMPANY LOCATION:

COMPANY TEL:

2019

GRS Bagging

Bagging plant

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TITLE

Bulk bag splitting hopper

ARTICLE

DESCRIPTION

At GRS Bagging, there was a frequent requirement to empty one bulk bag of material into another. This could be for a multitude of different reasons; the product was in the wrong bag, the bag was damaged, the wrong supplier bag had been used.

This activity traditionally involved the use of 2 forklift trucks and 3 operators. One forklift would be supporting an empty bag. The second forklift would raise the bulk bag of product to be emptied and manoeuvre until it was positioned directly above the empty bag. Once the two forklifts were in place, an operator would put his arm under the suspended top bag and slice the bottom open. This would allow the materials to flow directly into the empty bag below. This was a hazardous task and had resulted in cutting injuries from the use of knives, trapping of arms and fingers between the forks, the potential for the operator to be hit by falling product and the operator, who was on-foot, working in close proximity to the two forklifts.

To mitigate these risks, GRS Bagging introduced a specially design hopper. The operator suspends an empty bag on some forks which are located underneath the hopper. The forklift then picks up and raises the full bag which is to be discharged into this new bag.

He lowers the full bag into the top of the hopper onto a splitting device located on the inside. The blades on the splitter break open the bag allowing the material to fall freely into the bag waiting below. He can then pick up and remove the newly filled bag from the bottom of the hopper.

BENEFITS

- Eliminates injuries from cutting operation
- Eliminates risks of trapping on forks
- Operators no longer needs to work in close proximity to forklift
- Operation only requires 1 forklift and is now a 2 man job
- Hopper will be used on 19 other GRS Bagging sites across the UK

ARTICLE IMAGES

[Click image to enlarge](#)



Before - cutting bag

[Click image to enlarge](#)



After - bagging frame