Bulk Bag Handling & Safety

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Discussion Topics

- Bulk Bag Construction/Features
- Trailer Unloading
- Visual Bag Inspection
- Safe Patching/Repair
- Forklift Safety
- Storage and Fire Safety Guidelines
- Bulk Bag Emptying
- Additional Resources
Flexible Intermediate Bulk Containers

Bulk Bags

Super Sacks
So, what is an FIBC?

A container constructed of flexible fabric, which...

- Cannot be handled manually when filled
- Is intended for shipping solid materials in particulate form
- Does not require further packaging
- Is designed to be lifted from the top via integral, permanently attached loops or straps
Bag Construction/Features

- Durable fabric and stitching
- Variety of top (fill) and bottom (discharge) spout designs
- Reinforced loops (or sleeves) at each top corner
- Dirt flap
- Pentane-resistant liner
Trailer Unloading

- Allow trailer to ventilate for at least 15 minutes prior to unloading
- Watch for debris on trailer floor

Scrap metal

Nails, screws, nuts, bolts

Broken pallets
Trailer Unloading

- Avoid contact with trailer walls and floors

Framing supports

Damaged walls
Not all trailers are built alike...

- **Ramp down to trailer**
  - Mast contacts trailer roof

- **Ramp up to trailer**
  - Bag contacts trailer floor, ramp, or dock
Visual Bag Inspection

Loops:

- Inspect for torn seams on stitching that connects loops to bag
- Check for fraying or excessive wear on loops themselves
Corners:

- Ensure that all corner seams are intact.
Inspection of the Bags — cont.

- Dirt Flap
  - Ensure that it is fastened securely closed (to avoid dragging)
Inspection of the Bags – cont.

Overall Bag

- Check for any leaking material due to punctures
- Ensure bag is upright and not leaning to any particular side
Bulk Bag Repair

- Repair **only** when:
  - Bottom of bulk bag is resting on solid floor
  - There is no load (e.g., another bag) on top of it
  - The risk of instability is at a minimum
- Clean-up all spills immediately
Additional Considerations

- Use a sling to right a fallen container
  - Through EACH loop

- Avoid “swaying”

- Patched bulk bags may be less stable than those that are intact
  - Patches are not permanent

- Single stacking ONLY for patched bulk bags
Forklift Safety

- Ensure fork truck is rated for the load

- Ensure proper fork length
  - Some bulk bags require 48” forks
  - Consider fork extensions

- Check condition of the forks
  - Inspect blades for sharp edges
Forklift Safety — cont.

- Caution when entering the loops
  - Don’t drag forks along loops

- Loads should be moved in reverse
  - Even though you may be able to see over the top when driving in forward

- Always ensure that the fork truck has come to a complete stop before raising/lowering forks
Forklift Safety — cont.
Always consult with your forklift truck vendor before making modifications to the forks or mast.
Forklift Safety – cont.

Make sure all four loops are securely resting on the forks.
Forklift Safety — cont.

- Check dirt flap before moving
- It should only be unfastened when the bag is to be unloaded
Forklift Safety — cont.

- Use extra care when stacking in the warehouse
- Stack second course squarely
- Avoid leaning
Storage and Fire Safety

- Cool, dry, well-ventilated area
- Protect from UV exposure
- Away from ignition sources
- Strict “No Smoking” policy
Storage and Fire Safety

- Proper bonding/grounding of process equipment
- Fire protection in accordance with applicable codes
- Do not block means of egress
Unloading Bags for Processing

- Lift waist high to detach the dirt flap
- Make sure flap swings away from forklift
Unloading Bags for Processing - cont.

- Position bag over unloading bin before untying discharge spout
- Prop forklift rack with brace
- **Never** stand directly under bag
For Additional Information

- [www.fibca.com](http://www.fibca.com)
- [www.efibca.com](http://www.efibca.com)
- Bulk bag vendor literature
- Bulk bag handling equipment vendor literature
- Resin supplier literature
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