

Lifting FIBCs

Before any FIBCs is lifted it should be checked that it is safe to do so. Personnel should be aware that although FIBCs may have been dispatched in a safe condition, it could be that some units have sustained damage in transit. When a filled FIBC is raised by its top lifting device, the resultant forces may be absorbed by the body and the base of the unit, where the body fabric is extended to form the lifting loops or where other devices are attached to the upper part of the body, or partially absorbed by separate or integral lifting devices which pass under the body of the container as a form of support. In any case FIBCs should be raised and lowered smoothly avoiding sudden jerks. Cranes and hoists are the most common cause of shock load damage to FIBCs.

Handling with cranes or hoists

FIBCs should be lifted according to the manufacturer's instructions as shown on the label.

When the FIBC is suspended the loops must be vertical without any twists or knots. If a suitable spreader is not available a four legged sling should be used. Each leg to measure at least 6 meters. Other lifting methods should only be used if the manufacturer's instructions, as shown on the label, indicate that it is safe to do so. For single point FIBCs one hook is permissible whether hooked directly to the pre-formed loop or to an intermediate collar. In this case particularly, the correct size of the hook must be checked.

FIBCs should not be lifted by putting steel wires, fiber ropes, belt slings or similar materials through one or more lifting loops. Hoisting in that way could produce friction, even frictional heating, could damage the loops. Several FIBCs may be lifted together if safe and if the loops are vertical (90 degrees with the top of the bag). Any pendular motion, sideways pulling of the FIBC or bags rubbing together during lifting should be avoided.

a) Lifting

Care should be taken to ensure that the forks are spaced correctly. FIBCs should be suspended from forks in such a manner that no lateral forces can be created in the FIBC as a result. It should be ensured that lifting loops are not twisted. It is recommended that the projection of fork lift tines beyond the FIBC being handled be kept to a minimum. This will reduce the possibility of accidental damage particularly to other stacked FIBCs. It should be achieved by the use of fork lift tines of the appropriate length and NOT by carrying the FIBC away from the mast of the lift truck.

Puncturing of the main body of the bag either by the forks or by obstacles in the handling area can be avoided by ensuring personnel are aware of the vulnerability of FIBCs to this type of damage.

To avoid severing or damaging the loops, rounded forks, conventional forks that are free of burrs and sharp edges or, if necessary, forks that have been wrapped in a suitable material should be used. When four loops are provided these should always be used and a vertical lift should be applied. Where any doubt exists regarding the width of tine to be used (i.e. Greater than 150mm) the FIBC manufacturer or supplier should be consulted.

Before handling FIBCs mounted on pallets, it should be checked that the pallets are in good condition and that the load is stable. Apart from occasions when pallets are employed, lifting of FIBCs should always be by the lifting arrangements provided; no other method of lifting should be attempted (i.e. using bale clamps, lifting by the filling or emptying spouts, putting slings or strops around the body of the bag, etc.)

b) Horizontal Carrying with FLT's

The truck should be suitable for the load to be carried. When travelling with a FIBC hanging from the forks there is a danger of the truck becoming unstable. The FIBC should be held close to the mast as low as possible with the mast tilted slightly backwards making sure that the FIBC body will not be damaged by the wheels of the truck. The load should not restrict the view of driver.

FIBCs should not be dragged. Trucks should be brought to a standstill before FIBCs are raised or lowered. FIBCs suspended from fork lift tines during transit can be subjected to severe stresses. This occurs when excessive speed is used while cornering or driving over uneven surfaces. The following should therefore be

avoided harsh acceleration and braking, excessive speed while cornering, and excessive speed over uneven surfaces.

c) Transport on trailers and trucks

When FIBCs are carried on trucks and trailers. Particular attention should be paid to the stability of the load which should be securely lashed and sheeted. Attention should also be given to the load carrying capacity of the vehicle. The FIBCs should be evenly distributed, stowed compactly and should not be allowed to project over the side of the trailer.

d) Ship loading

Where possible, fork lift trucks should be used to stow FIBCs into the wings of holds. Inducing a swing into the load of a crane and dropping it into place when over the desired position is an uncontrolled operation. A slack crane wire is developed causing a hazard and the body of the FIBC may be damaged against the ships side. In addition the FIBC being stowed, as well as those immediately to the side of or below it, are subjected to unnecessary shock loading. If FIBCs are to be placed temporarily on the dockside to await transport it should be ensured that the area is clear of obstacles such as stones, pieces of wood, scrap metal etc. to avoid damage to the base of the containers. FIBCs should be stowed away from cargoes with sharp edged packing or presenting an abrasive surface. Care should be taken with the use of dunnage in the vicinity of FIBCs.

Stowage in freight containers

When FIBCs are packed into freight containers, care should be taken to ensure that the load is evenly distributed and properly secured, spaces between FIBCs should be taken up by air bags or other suitable means. Labelling on units nearest to the doors should be visible.

Fallen FIBCs

To raise an FIBC that has fallen on its side, an endless fabric sling wound through all the loops should be used. Any attempt to lift using fewer loops than those provided may result in loops being torn off.

Work Safety

- Do read the instruction on the label.
- Do check all FIBC's for transport damage before filling.
- Do check that the discharge spout is closed properly before filling.
- Do blow up the FIBC and the liner before filling.
- Do adjust forklift-tines to the correct width for the FIBC being handled.
- Do use lifting gear of sufficient capacity to take the suspended load.
- Do close the FIBC safe after filling.
- Do consider the possibility of static electric hazards.
- Do protect the FIBC's from rain and / or prolonged sunlight.
- Do insure that filled FIBC's stable.
- Do not use sharp-edged forklift-tines or hooks, they should be round shaped.
- Do not exceed the SWL (Safe Working Load) under any circumstances.
- Do not bang filled bags against forklift mast.
- Do not stack FIBC's more than 3 Layers high unless they are especially made for this purpose. - Do not drag FIBC's on the ground.
- Do not lift on one or two lifting loops. If bag has fallen over, lift them up by using a rope through four loops.
- Do not subject FIBC's to snatch lifts or jerk stops.
- Do not withdraw forklift tines prior to relieving the entire load on the lifting devices.
- Do not allow personnel under suspended bags.
- Do not use second hand FIBC's, as the producers refuse any guarantee.
- Do not reuse FIBC's unless they are made and labelled for multi-trip-use.