

Tanker Filling and Emptying - Solids

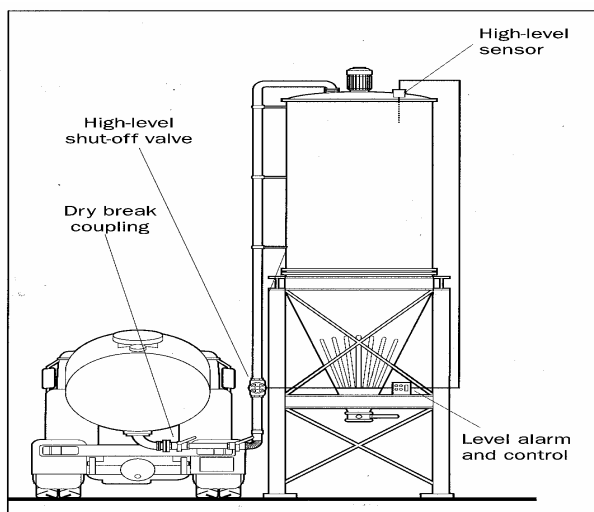
SCOPE

This control sheet is part of the ILO Chemical Control Toolkit and should be used when the toolkit identifies that a control approach 3 solution is needed. The sheet gives good practice advice on tanker transfer and bulk storage of solids and describes the key points you have to follow to reduce exposure to an adequate level. It is important that all the points are followed. Some chemicals are flammable or corrosive and your controls must be suitable for those hazards too. Look at the safety data sheet for more information. This sheet identifies the minimum standards you need to apply to protect your health. It should not be used to justify a lower standard of control than that which may be required for process control or control of other risks.

ACCESS

- Keep unnecessary people away from the work area. Ensure that no one is working close by downwind.

DESIGN AND EQUIPMENT



filled. Either back vent to the delivery vessel or discharge to a safe place away from doors, windows, air inlets and walkways. Consider providing dust filtration for displaced air.

- Note trucks can also emit excessive dust levels.
- Provide arrangements to allow clean, preferably dry air to enter the silo as material is drawn off.
- Consider means of dealing with blockages without entering the silo. E.g. vibrating pads or air jets.
- Provide barriers to prevent accidental damage to the silo from vehicles.
- Consider the need for explosion relief for combustible solids and ensure equipment is appropriately bonded and earthed.

- Ensure the silo is designed and constructed for the material it will contain.
- Provide seal on access hatches and ensure that all hatches are closed when the silo is being filled or emptied.
- Take precautions to prevent overfilling, use load cells or high level indicators.
- Use dust tight couplings between the tanker and silo, provide valves to control the rate of discharge from silos.
- Provide venting to the container being

EXAMINATION, TESTING AND MAINTENANCE

- ➡ Don't enter a silo until it is safe to do so. Check for hazardous or flammable substances and sufficient oxygen (between 19.5% and 22%). Note that entry or the work may give rise to a hazardous situation, e. g. disturbing sludge, welding may deplete oxygen. Wear a fall protection harness to prevent drowning in the silo contents.