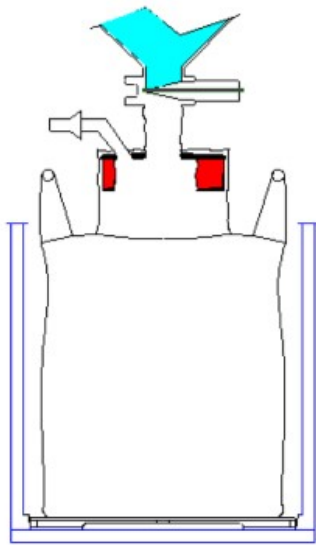


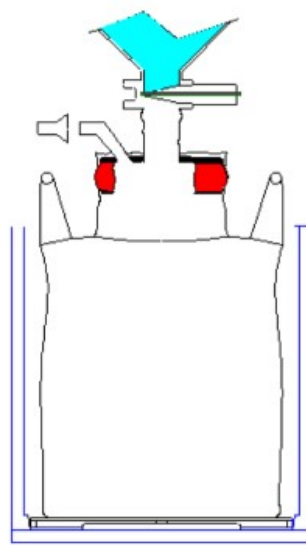
**Annex 1—Additional information related to the automated handling and dust extraction**

**A. Loading of flexible IBC's with refined cobalt dihydroxide**

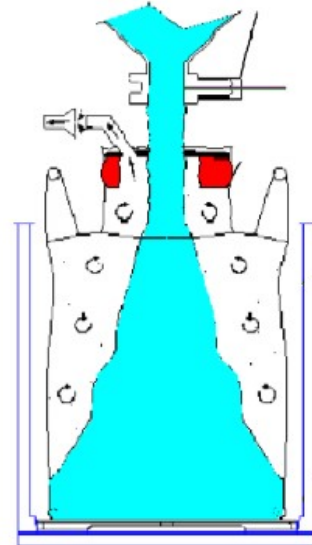
**1. General explanation and some technical drawings**



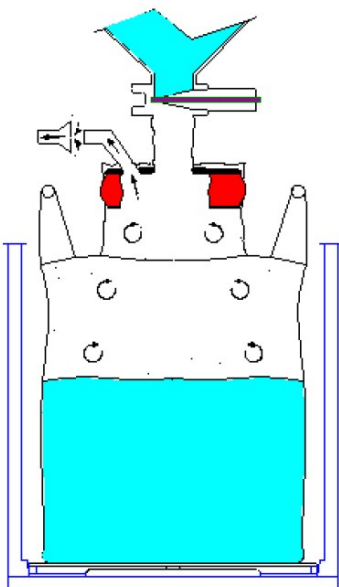
1) Operator loads the FIBC and places inlet of FIBC over the seal.



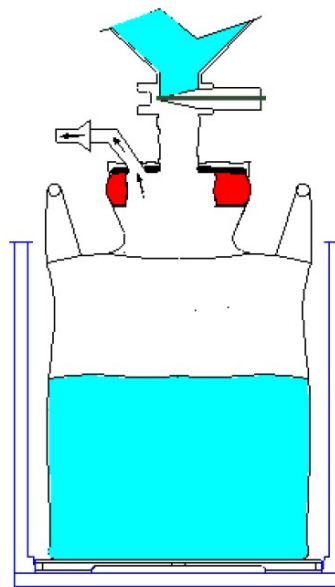
2) Operator inflates 'tyre' seal which expands radially ensuring no wrinkles in the neck of the FIBC giving a dust tight seal.



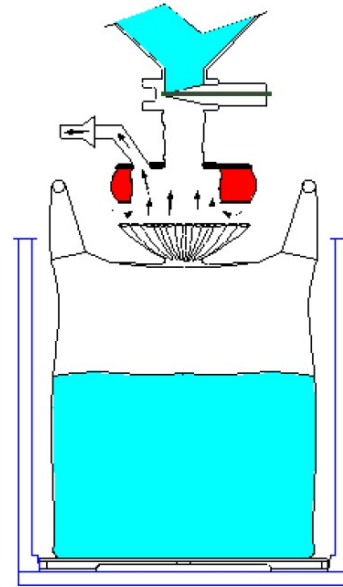
3) During filling - material control valve is opened to allow material to flow and the extraction funnel is retracted away from the vent to take displaced powder laden air only, without affecting weighing.



4) Fill Complete - material control valve is closed. Dust free filling has been achieved but dust cloud remains inside FIBC. If the seal was deflated dust would escape.



5) Removal of dust cloud is achieved by re-positioning the extraction funnel to extract retained air. FIBC will automatically neck in making tying off easy whilst system is still sealed.



6) Once the bag is filled and tied off the operator can take the bag away.

2. Pictures of loading station



Material control valve

Filling pipe

The 4 loops attached to the filling station

'Tyre' inflates inside neck of big bag to create air tight seal

Bag and frame are weighed together with high accuracy



Material control valve

Dust extraction system

'Tyre' inflates inside neck of big bag to create air tight seal

B. Unloading of flexible IBC's with refined cobalthydroxide

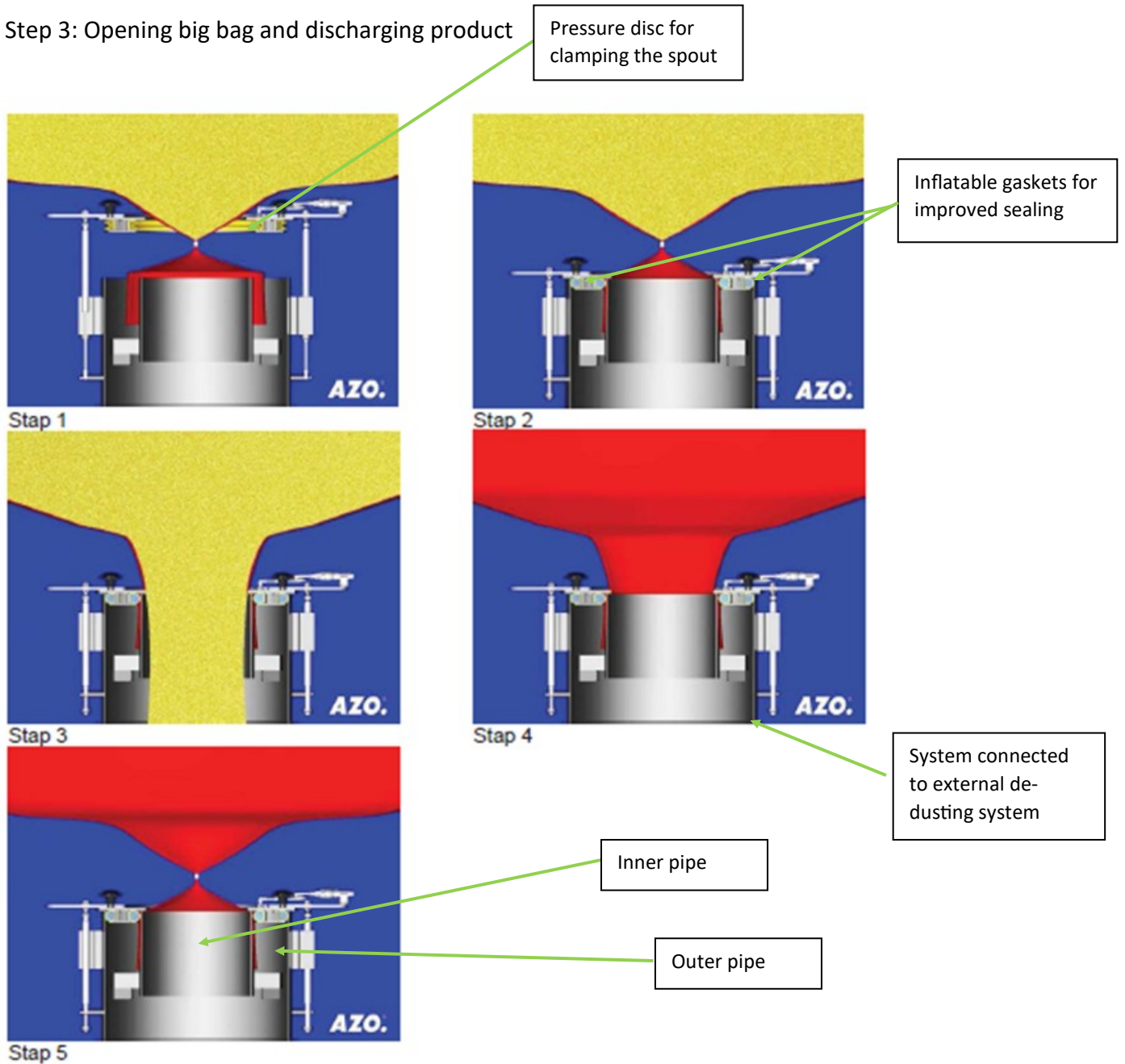
1. General explanation and some technical drawings

The big bags are hung on lifting frame and transported to the big bag discharge station, where they are set down on a support plate. The big bag outlet spout, which is still tied closed, is pulled over the inner pipe of the connection to process and clamped firmly in place by manually lowering the pressure disc. If wrinkles form in the outlet when the big bag is connected, the double-pipe design provides additional protection against escaping dust. Any product that escapes is returned to the process via an annular gap between the outer and inner pipes. The system is sealed using two inflatable gaskets which seal off both the outer and the inner pipe in the inflated state. This presses the big bag outlet against the inner pipe in a low-dust manner. The big bag closure cord is then opened and discharge into the subsequent process begins. The entrained air and any dust which arises are drawn off at the extraction connection. This nozzle is connected to an external dedusting system which extracts and filters the dust.

Step 1: connecting the outlet spout

Step 2: Clamping and sealing with inflatable seal

Step 3: Opening big bag and discharging product



2. Pictures of discharge station

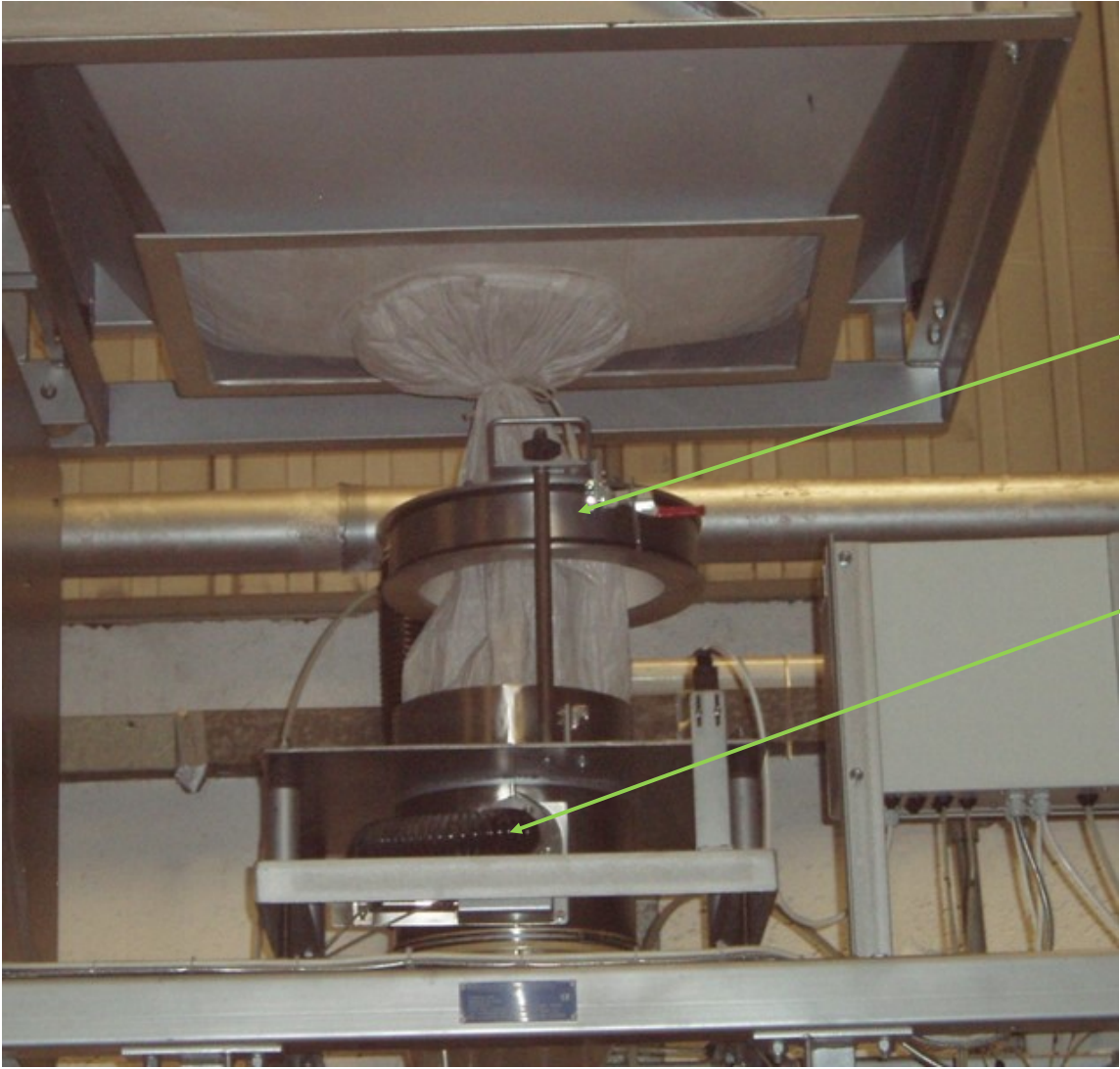


Big bag is placed in a frame and lifted into position

Support plate

Dust extraction

Sealed connection to process, explained below



Pneumatic synch  
controls flow of  
material

Dust extraction