

Objective : To identify a solution for unloading cement, alumina or fly ash bags (powdered materials) (PP/HDPE bags) from Trucks or Rail Wagons.

Description : In Cement or Metal plants, bags are unloaded manually from both wagons and trucks. The bags can be as heavy as 50 kg. The unloading activity with rods and multiple manual interventions has safety risks. We intend to identify a non-conveyor solution, which can be a robotic arm to unload the wagon or truck only, not the further movement, to reduce manual activity.

Challenge Scope :

1. **Current practices** – Manually unloaded using rods and scaffolds.
2. **Challenges faced** – Safety risks and higher TAT.
3. **Scope of implementation** – All Hindalco and UTCL units.