

# Quickly unloading and eliminating the risk of contamination and melting granulates requires pneumatic conveying solutions

## The challenge

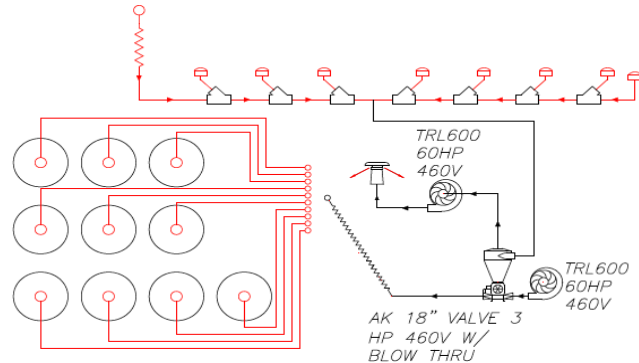
- The company in US is one of the biggest producers in the plastic bag industry
- They needed a flexible conveying solution that could provide a fast and reliable transport of PP and PE pellets from Rail Cars. The Rail Car siding has room for up to 5 Cars to be parked for unloading each having 4 ports to pull the pellets from. The pellets will then be blown into any one of 10 different 31 meter high silos in a tight time schedule
- The conveying solution had to be 100 % free of any kind of contamination, including moisture and or other materials. If moisture and or foreign particles did get into the silos it can have devastating economic results. The total cost of the ownership should be less than for their previously conveying system with PD pumps

## Facts

- Material: PP and PE Pellets
- Dimensions: pellets max Ø 3mm, grid max Ø 1mm
- Requested solution providing a flow of 15-20 metric tons of pellets per hours to the 31 meters high silos
- Bulk density: approx. 520 kg/m<sup>3</sup>
- Conveying distance: H: max 31 m. V: max 28 m

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## The solution



- The system consists of modular standard elements and ensures a conveying system that brings the pellets safely in the silos in time, no matter from which railcar the pellets are being vacuumed from
- The solution consists of 2 TRL 600 blowers to overcome the distance and the need to keep the air temperature as low as possible. This secures a high performance pneumatic solution that's 100 % free of contamination
- The Kongskilde conveying system is a cost effective investment with low operating / maintenance costs

## The advantages and benefits

- High flexibility and the modularity in Kongskilde conveying solutions means easy installation and the ability to meet special requirements
- Next time the customer builds a new silo, it's less costly to upgrade the system. Kongskilde just installs a new pipeline
- The high performance solution exceeds other conveying systems in terms of safe operation without the risk of contamination of the plastic pellets
- By utilizing 2 Blowers – one for the vacuum side and one for the pressure side we are able to minimize heat build up over ambient temperature in the convey line thereby reducing the risk of creating “streamers” in the pipeline
- Less need for maintenance of the Kongskilde pneumatic solution contributes to low operating costs

