

VORTEX AGGREGATE DIVERTER HANDLING SAND & GRAVEL

Customer: Producer of high quality sand

and gravel

Application: Conveying screened, graded

sand from any of four sources to

any of five destinations,

simultaneously.

Challenge: Eliminate a problematic, manual

hose station and automate the

process.

Valve(s): 16 – BD08-4x5CS-SL-MG-45

Vortex Aggregate Diverters with connecting trunk chutes







Results:

For many years, this company's manual hose station has been an issue. Switching hoses is labor intensive (increasing production costs), causes production downtime, and creates waste when material is inadvertently switched to the wrong destination.

To remedy the situation, Vortex was contacted. A multi-port gravity diverter was proposed consisting of (16) Vortex Aggregate Diverter Valves with interconnecting trunk chutes. The chutes were fabricated of Hardox® material. Impact points within the diverter and connecting chutes were lined to address the abrasiveness of the material handled.

Design changes in the footprint of each diverter valve were made to allow the stack up to fit in the 99" available in height. The diverters and chutes were shipped separately and mounted on site due to the limited space availability.

Diversion of material is now a one-touch operation performed from a remote location. The customer immediately experienced financial benefits from this diverter that was installed in December of 2010.







Original Hose Station