VORTEX AGGREGATE DIVERTER HANDLING GRAVEL AND SAND

Customer: A manufacturer of

masonry repair products

Material: Gravel, dryer fines and sand

Product: Concrete products

Application: Route different aggregates from

a belt conveyor into individual

product bins.

Challenge: Locate a diverter valve that will

offer solutions to current problems.

Valve: Vortex Aggregate Diverter

BD14-2CS-40-DP-HL-HB



Results:

The primary diverter valve in this facility handles an average of 60 tons of material an hour, 24 hours a day, five days a week, plus two 12 hour shifts during the weekend. This diverter experiences a variety of problems including: extreme wear to internal parts, leakage of material to the off leg, and difficulty actuating the bucket. The diverter was removed and serviced on a monthly basis (sometimes in the middle of a product run). The wear was so severe that the diverter had to be replaced every 3-4 months.

A model BD14-2CS-40-DP-HL-HB Vortex Aggregate Diverter solved the problem. The diverter was equipped with many features to address product wear and abrasion:

- Dead pocket deflector to minimize wear through the inlet.
- Honeycomb Bucket and Leg Liners applied in extremely abrasive applications where cross-contamination of material is not an issue.
- Durable rubber bucket seals (standard) placed out of the path of the material flow stream. This feature aids in sealing material across the closed bucket chute.

In addition, the Vortex Aggregate Diverter includes a removable access panel that facilitates diverter inspection or maintenance.

Eighteen months after installation, the original Aggregate Diverter is still in service at the facility. Only minor maintenance has been performed. The company has replaced additional diverters within the operation, as well as at sister facilities.