

Model No. PCXX

PIVOTING CHUTE DIVERTER

Ideal application: Used to divert heavy-duty and/or abrasive dry bulk solid materials from one source toward two or three destinations in gravity-fed applications.

Purpose: The Vortex® Pivoting Chute Diverter™ offers in-line maintenance features, durable materials of construction, reduced downtime, prolonged service life and many other significant advantages over flap diverters and bucket diverters.



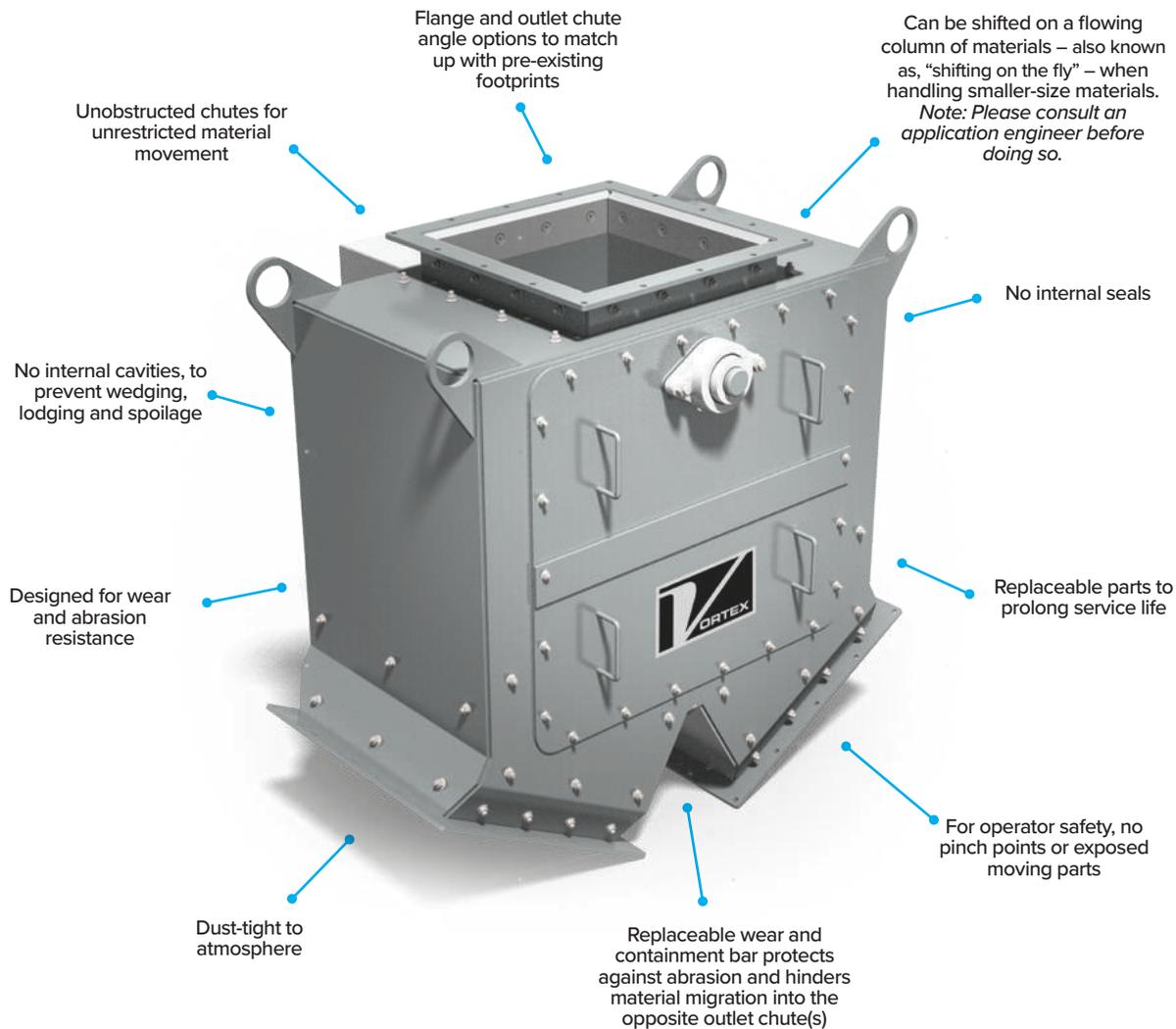
Two-Way



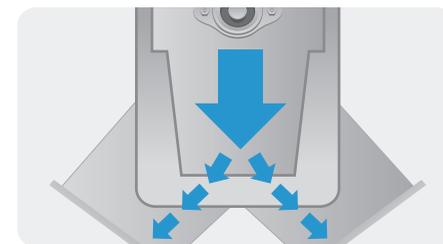
Straight Leg



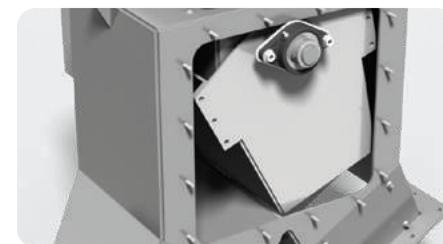
Three-Way



KEY FEATURES



Can be used to split flow



Removable access panel for in-line inspection and maintenance



Inlet chute to better direct material flow through the pivoting chute

TECHNICAL SPECIFICATIONS

Conveyance Type	Gravity flow only
Materials Handled	Heavy-duty and/or abrasive dry bulk solid materials
Standard Sizes	6 – 24 in 150 – 600 mm Contact us for custom sizes
Inlet & Outlets	Available in square or rectangular sizes. Round transition options are available (see page 67)
Overall Height	29 1/2 – 80 in 750 – 2,030 mm
Weight	425 – 3,600 lb 195 – 1,635 kg
Outlet Angle Options	30° or 45° from center Contact us for custom angles
Flange Options	Standard flange, ANSI #125/150, DIN PN10 Custom flanges are available
Material Temperatures	Up to 400°F 205°C
Body/Frame Construction	Carbon steel
Chute Options	400 BHN abrasion-resistant steel, chromium carbide
Material Contact Options	400 BHN abrasion-resistant steel, chromium carbide
Liner Options	400 BHN abrasion-resistant steel, chromium carbide
Drive/Actuation	Double-acting air cylinder, electric actuator (see pages 61 & 62)
Position Confirmation	Magnetic reed or proximity switches (see page 63)
Other Options	Spin knobs (see page 68)
Compliance	ATEX Zone 20 (internal), ATEX Zone 21 (external), FDA 

KEY FEATURE: Wear & Containment Bar

- The wear and containment bar is exclusive to the Vortex® Pivoting Chute Diverter™. Because the Pivoting Chute Diverter does not have any internal seals, material migration and dusting into the opposite chute(s) is possible. To reduce this risk, the Pivoting Chute Diverter is designed with a replaceable wear and containment bar at the interior juncture between the diverter's outlet chutes. This aids in directing errant materials through the desired outlet, rather than migrating into the opposite chute(s). Its chromium carbide construction also protects against wear and abrasion from the material handled.

THE POWER OF COMPARISON

Vortex Pivoting Chute Diverter vs. Alternatives

- Many alternative gravity-fed diverters have sealed bodies, which limits interior access. In order to perform inspection and/or maintenance, the diverter must be removed from the process line so that its internal mechanisms can be accessed. This can lead to expensive and extensive production downtime. To allow in-line inspection and/or maintenance, the Vortex® Pivoting Chute Diverter™ is designed with a removable access panel that can be removed using simple tools. This feature is especially beneficial in abrasive applications where frequent interior access is required for wear part maintenance. The removable access panel feature significantly reduces downtime by accelerating the maintenance process.
- Many alternative gravity-fed diverters are constructed from less durable metal materials of construction. When handling heavy-duty and/or abrasive dry bulk solid materials, rapid wear and abrasion will result in frequent maintenance and diverter replacement. To address this concern, the body of the Pivoting Chute Diverter is constructed from carbon steel. For added protection, the Pivoting Chute Diverter features replaceable abrasion-resistant wetted parts. By using abrasion-resistant wetted parts, it ensures materials are abrading upon replaceable parts, rather than wearing the underlying material contact areas. The addition of abrasion-resistant wetted parts significantly prolongs a diverter's service life.
- Many alternative gravity-fed diverters are designed with irreplaceable wetted parts. Once a primary wetted part is worn significantly, the entire diverter must be replaced. To resolve this cost-effectiveness issue, the Pivoting Chute Diverter is designed with replaceable wetted parts that can be accessed in-line. This includes actuator, pivoting chute, inlet chute, wear and containment bar, and the abrasion-resistant liners, among others. If maintained and operated as recommended, these should be the diverter's only wear parts. In several cases, this has allowed a Pivoting Chute Diverter to remain in service for many years – and sometimes, even decades.
- Flap diverters should not be shifted through a flowing column of material. Doing so can damage the blade and blade shaft. Instead, it is recommended to shut off material flow before shifting the flapper blade. To do so often requires an additional isolation gate above the diverter valve. Oppositely, the Pivoting Chute Diverter is designed to “pivot” so that it can direct materials toward many destinations without significantly altering the flow path. When handling smaller-size materials, this allows the Pivoting Chute Diverter to be shifted through a flowing column of material. When handling larger-size materials, an isolation gate would still be necessary – or the diverter must be between runs – before shifting the Pivoting Chute Diverter's “pivoting” chute. Contact us to discuss further recommendations.
- Because the flapper blade and seals would be directly exposed to wear and abrasion from the material flow stream, flap diverters should not be used to split flow. The Pivoting Chute Diverter is compatible with Vortex's many material flow control assemblies, to accommodate blade actuation into several intermediate positions. This allows total flow control toward a single destination, or split flow toward two destinations.
- For larger valve sizes, the Pivoting Chute Diverter can be modified to accommodate optional chute removal assist rods. These allow the heavy chutes to be slid out of the valve for easier handling during inspection, maintenance or replacement. If this option is selected, the chute removal assist rods will come factory supplied.

For more information and technical resources please visit: www.vortexglobal.com