FAST TRACK

Model No. MSCXX & MRCXX

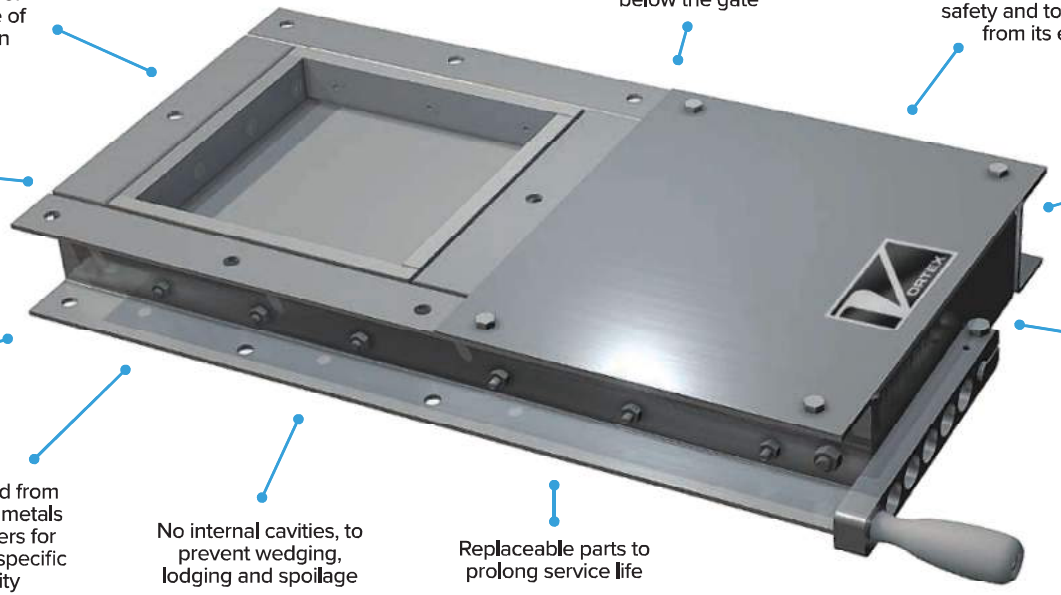
MAINTENANCE GATE

Ideal application: Shut off material flow when maintenance of downstream equipment is required or if an upset condition occurs.

Square

Round

OPTIONS



Designed to close through a standing column of material in the case of an upset condition

Flange options to match up with equipment above and below the gate

Bonnet cover constructed from clear polycarbonate, for operator safety and to protect the gate from its environment

Optional Special Service Inlet to protect the seals from abrasion and assist in closing through a standing column of material

No metal-on-metal contact

Positive seal to atmosphere

Lightweight construction for easy installation

Constructed from specialized metals and polymers for application-specific durability

No internal cavities, to prevent wedging, lodging and spoilage

Replaceable parts to prolong service life

Narrow profile for limited space installations

KEY FEATURES

PTFE-treated bonnet packing gland, for greater wear resistance and longer service life

Non-rising stem, for easier manual actuation

Hand crank actuation, as a standard

TECHNICAL SPECIFICATIONS

Conveyance Type	Gravity flow and dilute phase pneumatic conveying applications. Can handle differential pressures up to 15 psig | 1 barg | 0.1 MPa, depending on gate size. Can be used in pressure or vacuum systems.
Materials Handled	Non-abrasive to moderately abrasive powders, pellets and granules. Well-suited for handling corrosive materials and/or for wash-down.
Standard Sizes	6 – 18 in | 150 – 455 mm ID & OD diameters are available. Also available in schedule 10, 20 or 40 pipe sizes. Contact us for custom sizes.
Opening	Available in square or rectangular sizes. Round transition options are available (see page 67)
Overall Height	5 – 6 in | 115 – 140 mm
Weight	15 – 200 lb | 5 – 90 kg
Flange Options	Standard stud bolt pattern, DIN PN10, ANSI #125/150 Custom flanges are available
Material Temperatures	180° F | 80° C for standard gate, with modifications that allow up to 400° F | 205° C
Body/Frame Options	6061-T6 aluminum, painted carbon steel
Material Contact Options	304 or 316L stainless steel, carbon steel
End & Side Seal Options	Nylon, PET, UHMW-PE, 25% glass-filled PTFE
Bonnet Seal Construction	Bonnet seal cartridge with PTFE-treated packing gland
Clevis Construction	Ratio 5:1 ACME threaded rod
Drive/Actuation	Hand wheel/crank, chain wheel (see pages 61 & 62)
Position Confirmation	Clear bonnet cover for visual indication and/or proximity switches (see page 63)
Other Options	Special Service Inlet (see page 67)
Compliance	ATEX Zone 20 (internal), ATEX Zone 21 (external), FDA

THE POWER OF COMPARISON

Vortex Maintenance Gate vs. Alternatives
The design and construction of the Vortex® Maintenance Gate offers significant advantages over traditional carbon steel maintenance gates.

- The Maintenance Gate's aluminum body and frame make it lightweight and corrosion-resistant. The gate's stainless steel material contact areas provide additional resistance to corrosion and wear. This provides the Vortex Maintenance Gate with long-term and reliable service.

- Many alternative maintenance gates allow metal-on-metal sliding, which creates galling. This causes a gate to seize and bind, and can create foreign metal fragment contamination. The Maintenance Gate's hard polymer liners eliminate metal-on-metal contact to resolve each of these concerns.

- Many alternative maintenance gates rely on soft rubber seals which are directly exposed to the material flow stream. These seals rapidly erode or tear away in service. This deficiency promotes leakage of materials and dusts past the gate and to atmosphere, in addition to actuation issues and several other maintenance concerns. The Maintenance Gate addresses these issues by incorporating a bonnet seal cartridge, which houses a PTFE-treated packing gland. PTFE-treated packing gland provides greater wear resistance and longer service life than alternative sealing materials. Within the bonnet seal cartridge, the packing gland expands to create a dust-tight seal around the vertical perimeter of the blade. The bonnet seal cartridge shields the packing gland from the material flow stream, to protect it from abrasion. This design maintains the gate's positive seal with infrequent maintenance intervention. Once the packing gland has experienced significant frictional wear, it can be removed and replaced to restore the gate's dust-tight seal. This maintenance process can be performed while the gate remains in-line.

- The Maintenance Gate's stainless steel blade and hard polymer liners are FDA-compliant. This makes it an excellent choice in food handling applications and other applications where carbon steel and aluminum are not acceptable for material contact.

For more information & technical resources, please visit: **www.vortexglobal.com**