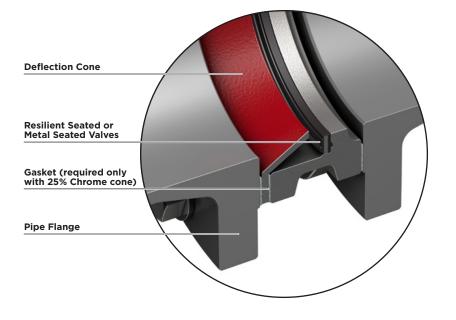
## EXTEND VALVE LIFE IN NORMALLY OPEN OPERATION

Bray deflection cones for knife gate valves extend valve life in especially demanding abrasive and corrosive services requiring normally open operation. Installed between the valve face and pipe flange, the cone redirects flow away from the seat — protecting the valve seat and internal sealing surfaces from wear.



## **FEATURES**

- > Applicable on both metal and resilient seated unidirectional valves.
- > Extends valve life by redirecting flow away from seat.
- > Easily replaced in field, at far less cost than valve repair or replacement.
- > Available in 25% Chrome Iron or Polyurethane, to fit application needs.
- > 25% Chrome Iron cone is less prone to cracks than Ni-Hard material.
- > Fits Bray Knife Gate Series 940, 941, and 950.

## **APPLICATIONS**

- > Slurry and dry solids service
- > Hopper/fly-ash hopper outlets
- > Cyclone isolation
- > Pump suction

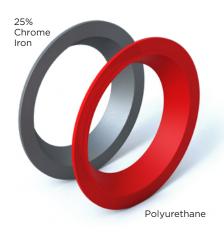
- > Pneumatic conveying
- > Mining slurries
- > Slurry tanks
- > Ore handling

## **SPECIFICATIONS**

Material	25% CHROME IRON	POLYURETHANE
Application	Abrasive flow applications	Abrasive and Corrosive flow applications
Approximate Hardness	450 HB	Shore 90
Maximum Temperature	1472°F (800°C)	194°F (90°C)
Gasket	Required on both sides of deflection cone	Not required
Size Range	NPS 2 to 24 (DN50 to 600)	







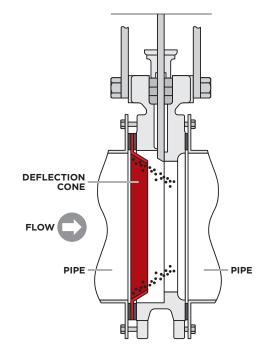




# **APPLICATION GUIDE**

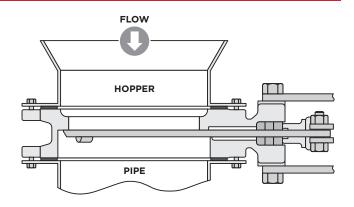
## PUMPED FLOW

- > Liquid flow is towards the seat.
- > Deflection cone recommended for abrasive slurry media, installed on the upstream side of the valve.



## **GRAVITY FLOW**

- Gravity flow of dry powder from silo; valve is inverted; seat faces down, away from flow.
- > Deflection cone is **not** used in this application.
- > Applies for sizes NPS 8 (DN 200) or smaller.
- > Backing rings are required for sizes NPS 10 (DN 250) and larger.



### PRESSURIZED FLOW

- > Pressurized flow of dry powder from silo; seat faces up, toward the flow.
- > Deflection cone should be used when the flow velocity is high and media is abrasive.
- Recommended for sizes NPS 10 (DN 250) and larger, if backing rings are **not** used.

#### NOTE

Pressurized flow can be upstream pressure or downstream vacuum.

