

One Source

KREBS® Technequip™ TGW wafer style slurry valves



TGW series valves for slurry applications

FLSMIDTH
KREBS

Technequip™ wafer style knife gate valves

Applications

- Mining and mineral processing
- Mineral sands
- Cement
- Sand and gravel
- Coal
- Phosphate
- Ash
- Alumina
- Power
- Pulp and paper
- Chemical
- General industrial

Building on over 40 years of valve manufacturing experience, FLSmidth Krebs has been successfully manufacturing and supplying the Technequip™ (formerly Technegate™) knife gate valve since 1999.

Technequip Ltd was founded in Toronto, Canada in 1957 and acquired by FLSmidth in 1993. Technequip was integrated into FLSmidth Krebs in 2007.

The Technequip valve was designed specifically for the harsh and abrasive slurries encountered in the mineral processing and power industries. Technequip valves are found in installations throughout the world.

Global support

Through a network of global offices and representative alliances, we are able to maintain valve inventory, spare parts, and provide service and technical expertise around the world.

FLSmidth Krebs manufactures both imperial and metric wafer style knife gate valves, ranging from 2 in. (50 mm) to 24 in. (600mm).

The valves are available with manual handwheel, bevel gear, pneumatic, hydraulic and electric actuators. Numerous accessories and options are available, including but not limited to, solenoids, limit switches, junction boxes and alternate gate and elastomer materials.

Wafer Style

Imperial flange patterns	ANSI B16.5 Class 150
Metric flange patterns	DIN 2501, PN10 & PN16 AS2129 TABLE D, E, F & H SANS 1123: 1000/3 & 1600/3
Pressure rating of 150psi	2" (50mm) 3" (80mm) 4" (100mm) 6" (150mm) 8" (200mm) 10" (250mm) 12" (300mm) 14" (350mm) 16" (400mm)
Pressure rating of 90psi	18" (450mm) 20" (500mm) 24" (600mm)
Actuator options	Air cylinder, hydraulic cylinder, manual hand wheel, manual bevel gear, electro-mechanical and more
Gate material options	Standard Material: 17-4 PH Stainless Steel Other options: Duplex 2205, Hastelloy C-276, and more
Sleeve material options	Standard Material: Pure Gum Rubber Other options: Chlorobutyl, EPDM, Nitrile, Neoprene, and more
Optional accessories	Instrumentation and controls, safety options, accessories customized to any application

Design benefits

Proven design

FLSmidth Krebs's Technequip™ TGW series wafer style knife gate valve has been specifically designed as a space-saving option for heavy duty applications. The long-lasting replaceable elastomer sleeves offer a reliable sealing solution using the latest technology.

Reliable operation

The full port design allows the gate to be fully isolated by the sleeves from the process in the open position. As the gate closes, it pushes between the two sleeves, discharging a small amount of material out of the bottom of the valve. This serves to prevent material buildup in the seat area to ensure a full gate closure, as well as to prevent damage to the gate. When the gate is in the open or closed position, there is a 100% bi-directional bubble tight seal and zero downstream leakage.

Long life

All valves are supplied with dust boots (bellows) as standard to protect valve stems and actuators. All manual and electro-mechanical valves are also supplied with stem covers as standard for additional stem and actuator protection.

All valves are fully lined ensuring no metal comes in contact with slurry flow.

All valves are supplied with zinc-plated hardware (nuts, bolts, and washers) for corrosion protection.

Each component is individually epoxy painted prior to assembly.

All gates are coated in fluorocarbon to reduce friction between the gate and the sleeves. Alternate gate coating options available.



Features

- Manual or automated actuators available
- Factory-installed instrumentation and controls options available
- Two-coat epoxy paint
- Dust boots supplied as standard to protect stem and actuators
- High strength stainless steel gate clevis
- Fluorocarbon gate coating as standard for reduced friction
- Wiper blade assembly to keep gate clean
- No packing gland, which can jam gate
- Full port, bi-directional design
- Long-wearing, field replaceable sleeves, create sealing surface
- Metric or imperial flange patterns
- Machined gate guides. No spacer bars required
- Open body prevents gate damage during actuation
- Zinc-plated hardware for corrosion resistance
- Manual lockout option available

Valve Specification

www.flsmidthkrebs.com

Wafer style valve specification

Technequip TGW Series Knife Gate Valve: narrow body, slurry knife gate valves are designed specifically for slurry applications. The valve are bi-directional with a full port design.

The valve body is designed such that the gate passes between two inserted elastomer sleeves which allows solids in the path of the gate to be expelled through the opening in the bottom of the valve.

The valve design is packing-less. The valve provides 100% bubble-tight seal in the open and closed position.

The valve is constructed of two-coat epoxy-painted steel or ductile iron. Valve bodies are designed with machined gate guides; spacer bars are not used. Valve components, including actuators, are individually epoxy coated. All hardware is zinc-plated.

Standard valve gate material is 17-4 PH stainless steel. Gates are coated with a fluorocarbon coating to prevent buildup of material and to decrease friction between the gate and the sleeves. When open, the gate is fully removed from the flow.

Valve gate is attached to actuators with a high-strength stainless steel gate clevis. The valve is equipped with dust boots (bellows) and all manual and electric valves are equipped with stem covers. The valve gate and body are designed with a wiper/seal to prevent leakage out the top of the gate valve during actuation. The wiper blade is easily maintained. It is replaceable in the field, without removing the valve from its installed location.

All valves with pneumatic actuators are supplied with internal ring magnet integral to the piston head so that reed limit switches can be used for proximity indication.

World-class Service Hydrocyclone & Valve Test Facilities

FLSmidth Krebs has provided superior classification and separation solutions using hydrocyclone technology since 1952. Our unparalleled technical staff of experienced engineers will quickly and thoroughly evaluate your potential applications and provide detailed recommendations and performance estimates. In the event you have an application that requires testing for validation, our hydrocyclone test lab is equipped and staffed to provide prompt testing at low cost. Arrangements can be also be made to run test cyclones at your site.



For more information on any of our products please contact one of our **Regional Sales Offices** below.

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