

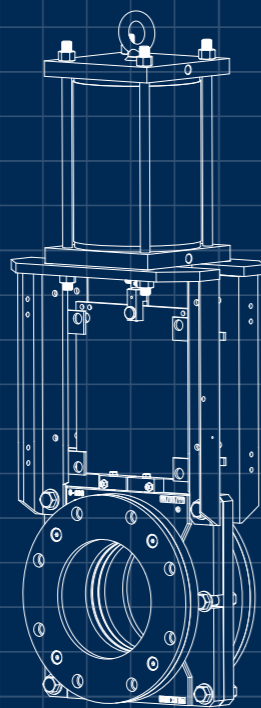
**KREBS®**  
PUMPS, CYCLONES AND VALVES

**TECHNEQUIP®**  
Knife Gate Valves



# Reliable performance for the most demanding abrasive slurries

Unparalleled performance and service life.  
Whoever said you can't have it all never met our premium valves.



## Key benefits

- Enhanced safety features on every model
- Proven quality materials and reliability
- Decreased downtime and faster maintenance
- Interchangeable components reduce your inventory
- Premium materials are supplied standard on all valves

## Design advantages

Our gate design focuses on safety and productivity. When open, the gate is fully out of the pipeline, minimising pressure drop across the valve.



### Advantages of the KREBS® Technequip® Valves

- Self-flushing eliminates the need for a packing gland
- The gate fully leaves the pipeline when open, minimising pressure drop across the valve
- Material is ejected out of the bottom during actuation, ensuring full gate closure and providing a reliable seal
- Heavy duty wear sleeves provide bi-directional flow and 100% bubble-tight seal with zero downstream leakage
- Fully lined valves ensure all metal components remain clear of process material
- Heavy-duty construction supports easy spare-parts replacement
- Industry standard dimensions allows for easy drop-in replacement
- Universal frame (yoke) design allows for change of actuation without removing the valve from service
- Optimised secondary seal offers ease of maintenance and prolonged valve life

### Designed for your safety and productivity

Field-replaceable wear sleeves and universal frame design reduce downtime, keeping the valve in service by allowing faster maintenance.

### Design features

- Long-lasting, field-replaceable sleeves constructed of a dense-moulded elastomer, with an integral stiffener ring moulded into the sleeve
- Premium materials are supplied standard on all valves
- Multiple flange drill patterns available
- Customisable options are available to meet the service requirements of any application

# Technequip® Knife Gate Slurry Valve (TG)



Our Technequip knife gate valve is a true bi-directional slurry knife gate valve with a self-flushing design, and full port flow. Replaceable rubber sleeves to seal to protect the vital components and withstand the harsh, abrasive conditions inherent in mining and milling applications.

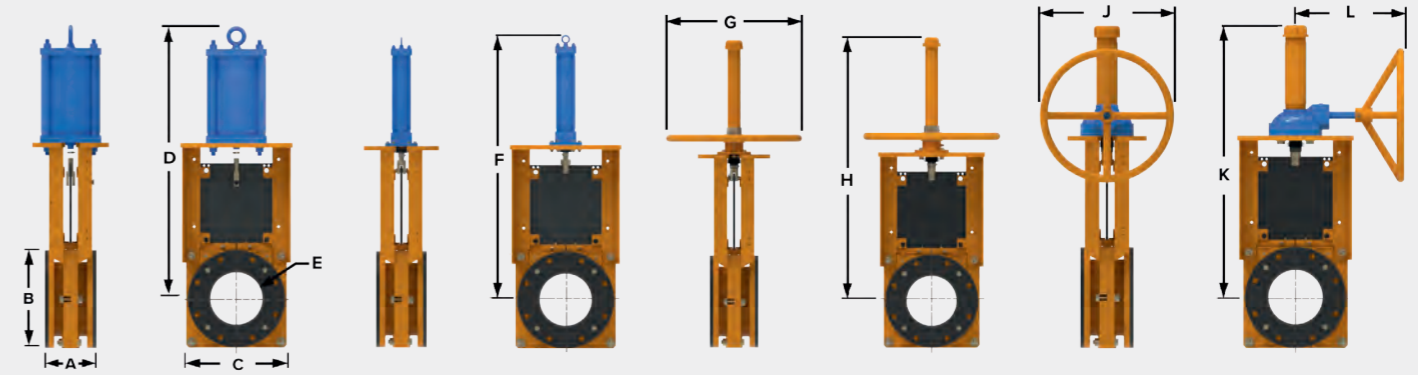
The TG Next Generation valve offers many upgraded design features for even better performance and easier maintenance.

## Specifications

<b>Size range</b>	2" - 48" (50 mm - 1,200 mm) (54" - 1,350 mm also available)
<b>Valve type</b>	Slurry knife gate
<b>Body style</b>	Full flanged
<b>Temperature range</b>	-60F to 300F (-51C to 149C)
<b>Pressure rating</b>	Up to 150 psi
<b>Body material</b>	Cast ductile iron / 2 coat epoxy painted
<b>Gate material</b>	17-4PH stainless steel, 316L stainless steel, 2205 duplex stainless steel, 2507 duplex stainless steel, C276 HASTELLOY®
<b>Seat material</b>	Gum rubber, high temp EPDM, neoprene, nitrile, chlorobutyl
<b>Duty</b>	Heavy duty abrasive applications

Pressure and temperature ratings depend on valve size and material selection. Please consult your local representative for more information.

## TG Series: Technequip® Knife Gate Valve



### Imperial units (in)

Valve size	A	B	C	D	E	F	G	H	J	K	L
2	6 1/2	7	6 5/8	20 1/16	1 3/4	19	8	16 1/16	-	-	-
3	6 3/4	8 3/8	8 1/8	23 1/2	2 13/16	22 9/16	12	22	-	-	-
4	6 3/4	9 3/8	9 5/8	26 3/8	3 7/8	25 7/16	12	23 11/16	-	-	-
6	6 7/8	11 1/8	11 1/2	33 1/8	5 3/4	31 7/16	16	29 7/8	18	30 7/8	14 1/16
8	7 1/8	13 5/8	14	38 11/16	7 3/4	37	20	33 7/8	18	36 5/16	14 1/16
10	8 3/4	16 1/8	16 1/4	43 11/16	9 3/4	47 1/16	20	39 5/8	18	42 7/8	14 1/16
12	10	19 1/8	19	51 15/16	11 1/2	51 15/16	-	-	24	49 5/16	18 3/4
14	10	21 1/8	21	55 9/16	13 1/4	55 9/16	-	-	24	52 5/8	18 3/4
16	10 7/8	23 3/4	23 1/2	62 1/2	14 3/4	62 1/2	-	-	24	60 3/16	18 3/4
18	12 1/8	25 1/2	25 1/2	68 15/16	16 3/4	69 3/16	-	-	24	67 5/16	17 1/4
20	14 1/8	28	27 1/2	75 1/16	18 1/2	75 11/16	-	-	24	73 1/8	17 1/4
24	14 5/8	32 1/4	32	86 13/16	23	87 15/16	-	-	30	84 1/8	17 1/4
26	14 3/8	34 1/4	37	92 5/16	25	91 13/16	-	-	-	-	-
30	15 1/2	38 1/4	41 1/2	-	29	104 11/16	-	-	-	-	-
32	15 1/2	41 3/4	43 7/8	-	29	113 1/8	-	-	-	-	-
36	18 3/8	45 1/4	46	-	35	120 9/16	-	-	-	-	-
42	21 1/8	53	56 3/4	-	41 1/2	147 1/4	-	-	-	-	-
48	21 1/8	59 1/2	62 1/2	-	46 7/8	161 3/16	-	-	-	-	-

- Denotes not available for size or actuator.

### Metric units (mm)

Valve size	A	B	C	D	E	F	G	H	J	K	L
50	165	178	162	510	44	483	305	484	-	-	-
80	171	213	229	597	71	573	305	568	-	-	-
100	171	238	254	670	98	646	305	624	-	-	-
150	175	283	324	841	146	799	406	787	457	785	357
200	181	346	381	983	197	940	508	919	457	923	357
250	221	410	426	1110	248	1145	508	1072	457	1089	357
300	254	486	508	1319	292	1319	-	-	610	1253	476
350	254	537	567	1411	337	1411	-	-	610	1337	476
400	276	603	635	1588	375	1588	-	-	610	1529	476
450	308	648	673	1751	425	1757	-	-	610	1710	438
500	359	711	721	1907	470	1922	-	-	610	1842	438
600	370	826	857	2205	584	2230	-	-	610	2137	438
650	365	870	940	2345	635	2332	-	-	-	-	-
750	394	984	1054	-	737	2659	-	-	-	-	-
800	394	1060	1114	-	737	2873	-	-	-	-	-
900	467	1168	1232	-	889	3062	-	-	-	-	-
1050	537	1346	1441	-	1054	-	-	-	-	-	-
1200	537	1511	1588	-	1191	4094	-	-	-	-	-

- Denotes not available for size or actuator.

# Technequip® Wafer Style Knife Gate Slurry Valve (TGW)



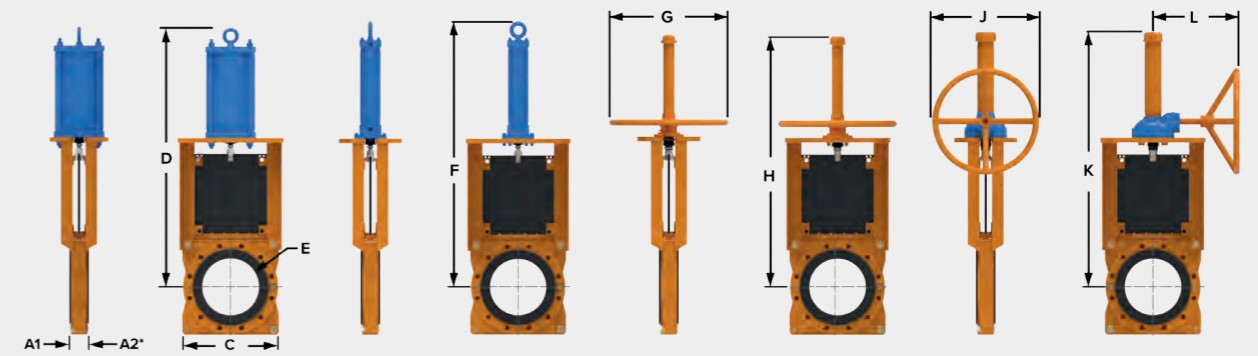
Our wafer knife gate valve is a space-saving option for medium to heavy duty applications. We designed it in response to the industry's need for valves that are able to isolate flow in demanding conditions requiring smaller face-to-face flange dimensions.

## Specifications

<b>Size range</b>	2" - 24" (50 mm - 600 mm)
<b>Valve type</b>	Slurry knife gate
<b>Body style</b>	Narrow body
<b>Temperature range</b>	-60F to 300F (-51C to 149C)
<b>Pressure rating</b>	Up to 150 psi
<b>Body material</b>	Cast ductile iron / 2 coat epoxy painted
<b>Gate material</b>	17-4PH stainless steel, 316L stainless steel, 2205 duplex stainless steel, 2507 duplex stainless steel, C276 HASTELLOY®
<b>Seat material</b>	Gum rubber, high temp EPDM, neoprene, nitrile, chlorobutyl
<b>Duty</b>	Medium to heavy duty abrasive applications

Pressure and temperature ratings depend on valve size and material selection. Please consult your local representative for more information.

## TGW Series: Technequip® Wafer Knife Gate Valve



### Imperial units (in)

Valve size	A1	A2	C	D	E	F	G	H	J	K	L
2	2 5/16	2 1/8	7 3/4	20 1/8	1 3/4	19 1/4	8	19	-	-	-
3	2 1/2	2 1/4	9 1/8	23 3/8	2 7/8	22 3/8	12	22	12	22 3/16	12 3/4
4	2 1/2	2 1/4	10 3/4	26 1/16	3 7/8	25 3/8	12	24 9/16	12	25 9/16	12 3/4
6	2 3/4	2 1/2	13 3/8	32 1/4	5 7/8	31 1/4	16	31	18	31 7/8	14 5/8
8	3 1/4	3	15 5/8	37 13/16	7 13/16	37	20	36 1/16	18	37 1/4	14 5/8
10	3 5/16	3	17 3/4	43 9/16	9 3/4	45	20	42 1/16	18	44	14 5/8
12	3 9/16	3 1/4	21	51 1/4	11 3/4	52 1/2	-	-	24	52	16 3/4
14	3 9/16	3 1/4	22 7/8	55	13	55 5/8	-	-	24	55 1/4	16 3/4
16	4 1/16	3 3/4	25	61 1/2	15	61 1/2	-	-	24	61	16 3/4
18	4 1/8	3 3/4	27	68 11/16	17	69	-	-	24	68 3/4	19 3/8
20	5 3/16	4 3/4	28 7/8	76	19	76	-	-	24	75 7/8	19 3/8
24	5 1/4	4 3/4	33 3/8	86 9/16	23 1/8	87 3/16	-	-	24	87 1/8	19 3/8

- Denotes not available for size or actuator.

### Metric units (mm)

Valve size	A1	A2	C	D	E	F	G	H	J	K	L
50	59	54	197	511	44	489	203	483	-	-	-
80	64	57	232	593	73	568	305	559	304	564	324
100	64	57	273	661	98	645	305	620	304	649	324
150	70	64	340	818	149	940	406	777	457	810	371
200	83	76	397	960	198	1143	508	916	457	946	371
250	84	76	451	1106	248	1334	508	1068	457	1118	371
300	90	83	533	1302	299	1413	-	-	610	1321	425
350	90	83	581	1397	330	1562	-	-	610	1403	425
400	103	95	635	1562	381	1753	-	-	610	1549	425
450	105	95	686	1745	432	1753	-	-	610	1746	492
500	132	121	733	1930	483	1930	-	-	610	1927	492
600	133	121	848	2199	587	2215	-	-	610	2213	492

- Denotes not available for size or actuator.

# Technequip® High-Pressure Knife Gate Slurry Valve (TGH)



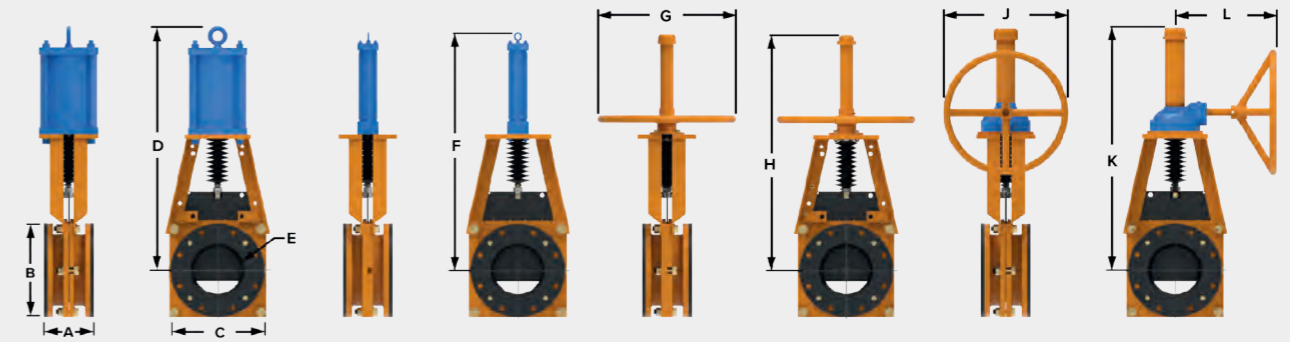
Our Technequip High-Pressure Knife Gate Valve is specifically designed for demanding applications. It can handle higher pressures of up to 300 psi. All our high pressure valves are constructed with an integrated splash guard for safety.

## Specifications

<b>Size range</b>	2" - 36" (50 mm - 900 mm)
<b>Valve type</b>	Slurry knife gate
<b>Body style</b>	Full flanged
<b>Temperature range</b>	-60F to 300F (-51C to 149C)
<b>Pressure rating</b>	Up to 300 psi
<b>Body material</b>	Cast ductile iron / 2 coat epoxy painted
<b>Gate material</b>	17-4PH stainless steel, 2205 duplex stainless steel, 2507 duplex stainless steel, C276 HASTELLOY®
<b>Seat material</b>	Gum rubber, high temp EPDM, neoprene, nitrile, chlorobutyl
<b>Duty</b>	Heavy duty abrasive applications for high pressures

Pressure and temperature ratings depend on valve size and material selection. Please consult your local representative for more information.

## TGH Series: Technequip® High Pressure Knife Gate Valve



### Imperial units (in)

Valve size	A	B	C	D	E	F	G	H	J	K	L
2	*	*	*	*	*	*	*	*	-	-	-
3	6 7/8	8 1/4	8 1/4	23 1/8	2 13/16	23 3/4	16	23 1/2	12	24 1/8	14 1/2
4	6 7/8	10	10	27	3 7/8	28 1/2	16	26 3/8	12	28 1/4	14 1/2
6	7 1/4	12 1/2	12 1/2	33 3/4	5 7/8	34 3/4	20	32	12	34 1/2	14 1/2
8	7 1/4	15	15	40	7 7/8	44	20	40 1/2	18	41 1/2	14 1/2
10	8 15/16	17 1/2	17 1/2	47 5/8	9 13/16	51 1/4	-	-	18	48	14 1/2
12	9 9/16	20 1/2	21 1/2	53 7/8	11 1/2	56 3/8	-	-	24	53 1/4	14 1/2
14	10	23	24 1/2	60 3/8	13 1/4	60 3/4	-	-	24	57 1/2	14 1/2
16	11 1/4	25 1/2	26 5/8	63 1/2	14 3/4	64	-	-	24	63 1/8	19 3/8
18	12 9/16	28	30	68 1/4	16 3/4	69 1/8	-	-	30	66 1/2	19 3/8
20	14 3/8	30 1/2	32 1/4	74 7/8	18 1/2	76 1/2	-	-	30	74	19 3/8
24	14 1/2	36	38	-	23	91 1/2	-	-	30	89 1/2	19 3/8
26	*	*	*	-	*	*	-	-	-	-	-
30	16 1/4	43	47	-	29	113 7/8	-	-	-	-	-
36	18 1/2	50	54 1/2	-	35	134 5/8	-	-	-	-	-

\* Consult with your FLSmith representative.

- Denotes not available for size or actuator.

### Metric units (mm)

Valve size	A	B	C	D	E	F	G	H	J	K	L
50	*	*	*	*	*	*	*	*	-	-	-
80	175	210	210	587	71	603	406	597	305	613	368
100	175	254	254	686	98	724	406	670	305	718	368
150	184	318	318	857	149	883	508	813	305	876	368
200	184	381	381	1016	200	1118	508	1029	457	1054	368
250	227	445	445	1210	249	1302	-	-	457	1219	368
300	243	521	546	1368	292	1432	-	-	610	1353	368
350	254	584	622	1534	337	1543	-	-	610	1461	368
400	286	648	676	1613	375	1626	-	-	610	1603	492
450	319	711	762	1734	425	1756	-	-	762	1689	492
500	365	775	819	1902	470	1943	-	-	762	1880	492
600	368	914	965	-	584	2324	-	-	762	2273	492
650	*	*	*	-	*	*	-	-	-	-	-
750	413	1092	1194	-	737	2892	-	-	-	-	-
900	470	1270	1384	-	889	3419	-	-	-	-	-

\* Consult with your FLSmith representative.

- Denotes not available for size or actuator.

# Technequip® Extra-High Pressure Knife Gate Slurry Valve (TGHP)



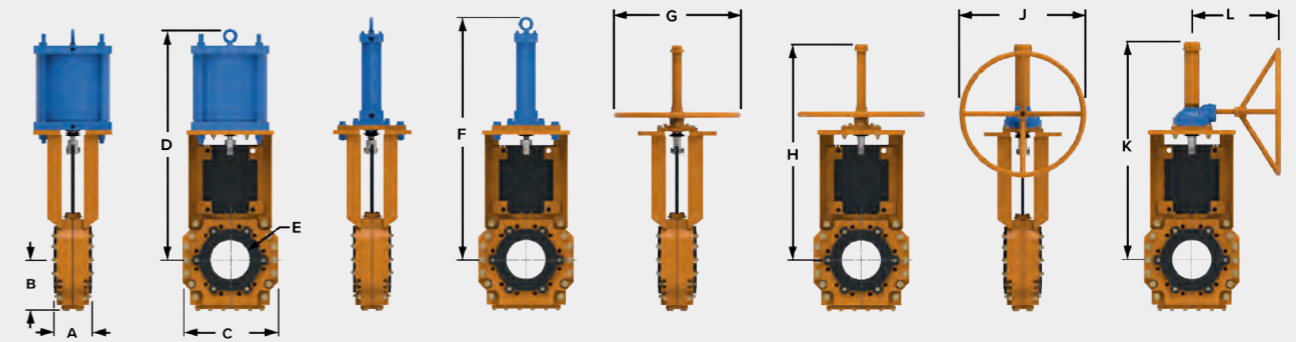
Our Extra-High Pressure Knife Gate Valves are designed for the most demanding of high pressure slurry applications. The heavy duty, extra-high-pressure valve is bi-directional with a full port design. All our high pressure valves are constructed with an integrated splash guard for safety.

## Specifications

<b>Size range</b>	2" - 36" (50 mm - 900 mm)
<b>Valve type</b>	Slurry knife gate
<b>Body style</b>	Full flanged
<b>Temperature range</b>	-60F to 300F (-51C to 149C)
<b>Pressure rating</b>	Up to 740 psi
<b>Body material</b>	Fabricated Steel / 2 coat epoxy painted
<b>Gate material</b>	17-4PH stainless steel, 2205 duplex stainless steel, 2507 duplex stainless steel, C276 HASTELLOY®
<b>Seat material</b>	Gum rubber, high temp EPDM, neoprene, nitrile, chlorobutyl
<b>Duty</b>	Heavy duty abrasive applications for extra high pressures

Pressure and temperature ratings depend on valve size and material selection. Please consult your local representative for more information.

## TGHP Series: Technequip® Extra High Pressure Knife Gate Valve



### Imperial units (in)

Valve size	A	B	C	D	E	F	G	H	J	K	L
2	*	*	*	*	*	*	*	*	-	-	-
3	6 15/16	6 1/8	10 3/4	25 11/16	2 13/16	26 1/4	16	24 9/16	12	24 1/2	14 1/2
4	6 15/16	7 1/8	12 1/2	28 7/16	3 3/4	28 1/8	16	26 7/8	12	27	14 1/2
6	7 1/4	8 1/4	15	37 5/16	5 13/16	38 1/8	20	35	18	35 5/8	14 1/2
8	7 1/4	9 5/8	18	43 1/4	7 3/4	44	20	40 1/2	24	40 13/16	16 11/16
10	8 15/16	11 9/16	20 1/2	51 3/4	9 3/4	52 1/2	-	-	24	49 5/8	19 3/8
12	10 3/16	13	24 1/4	58 1/2	11 3/4	59 1/8	-	-	24	57 1/8	19 3/8
14	10 1/4	14 7/8	27 1/2	64 7/8	13	66 3/8	-	-	24	64	19 3/8
16	11	15 3/4	30	75 1/2	15	77 1/2	-	-	24	70 7/8	22
18	12 5/8	*	*	-	*	*	-	-	*	*	*
20	14 1/2	*	*	-	*	*	-	-	*	*	*
24	14 1/2	*	*	-	*	*	-	-	*	*	*
26	14 1/2	*	*	-	*	*	-	-	-	-	-
30	16 1/4	26 7/8	53 1/2	-	29	125 3/8	-	-	-	-	-
36	18 1/2	31	62	-	35	149 1/2	-	-	-	-	-

\* Consult with your FLSmidth representative.

- Denotes not available for size or actuator.

### Metric units (mm)

Valve size	A	B	C	D	E	F	G	H	J	K	L
50	*	*	*	*	*	*	*	*	-	-	-
80	176	156	273	652	71	667	406	624	305	622	368
100	176	181	318	722	95	714	406	683	305	686	368
150	184	210	381	948	148	968	508	889	457	905	368
200	184	244	457	1099	197	1118	508	1029	610	1037	424
250	227	294	521	1314	248	1334	-	-	610	1260	492
300	259	330	616	1485	298	1502	-	-	610	1451	492
350	260	378	699	1648	330	1686	-	-	610	1626	492
400	279	400	762	1918	381	1968	-	-	610	1800	559
450	321	*	*	-	*	*	-	-	*	*	*
500	368	*	*	-	*	*	-	-	*	*	*
600	368	*	*	-	*	*	-	-	*	*	*
650	368	*	*	-	*	*	-	-	*	*	-
750	413	683	1359	-	737	3185	-	-	-	-	-
900	470	787	1575	-	889	3797	-	-	-	-	-

\* Consult with your FLSmidth representative.

- Denotes not available for size or actuator.

# Actuation options



## Pneumatic (AC)

Our standard pneumatic actuator is a double acting cylinder supplied with many upgraded features for superior wear and reliability. This includes painted steel end caps, chrome-plated steel piston rod, machined 17-4PH SS gate clevis and a housing constructed of composite FRP material. Every pneumatic actuator is supplied with an internal magnetic ring attached to the piston. This allows the cylinder to be easily adapted with externally mounted reed limit switches.

We can supply over-sized pneumatic actuators when low pressure air supply is a concern. Our AC60 actuators are suitable for a minimum of 60 psi (4.1 bar) air.

For mechanical fail safety, we have our single-acting, spring-return pneumatic actuators that are built for either fail open or fail close configurations as required.

## Hydraulic (HYD)

Our standard hydraulic actuator is a double acting cylinder available in either standard or high pressure configurations. Each cylinder is supplied with painted steel end caps, chrome-plated steel piston rod, bronze gland rod, and a machined 17-4PH SS gate clevis.

\* Optional hydraulic power units, portable power units or hydraulic hand pumps can be supplied.



## Bevel gear (BG)

All bevel gear operators are manufactured with 3:1 or 4:1 ratios, dependent on size. Each valve is supplied with a 304 SS stem, protected by a painted steel stem cover and dust boots.



## Electric (ELEC)

All Technequip valves can be fitted with electric actuators of many different makes and models to meet numerous voltage requirements. Each valve is supplied with a 304 SS stem, protected by a painted steel stem cover and dust boots.



## Handwheel (HW)

Our Technequip valves are available with hand wheel operators in sizes 2" (50mm) to 10" (250mm). For sizes larger than 10" (250mm), the rim pull force to operate a hand wheel becomes too large and a bevel gear operator is recommended. Each valve is supplied with a 304 SS stem, protected by a painted steel stem cover and dust boots.

# Optional safety features

## Plate splash guard

This is a flat plate with a gasket mounted to the bottom of the valve with two NPT fittings for either a slurry discharge pipe or a water flush pipe. It is optional for TG and TGW valves.

## Pipe splash guard

This guard is mounted to the bottom of the valve and consists of a machined pipe with a gasket to collect and drain discharge. It comes standard in TGH and TGHP valves and is optional in TG and TGW valves.

## Gate guards

Expanded metal gate guards prevent access to the gate, while allowing for a washout of the gate area.

## Gate maintenance pin

Tabs allow a pin to be placed through the gate for maintenance purposes.

## Air lockout

A lockable air valve is installed between the air supply and actuator, preventing valve actuation.

### Industries

- Mining and mineral processing
- Mineral sands
- Oil sands
- Cement
- Aggregates
- Coal
- Phosphate
- Ash
- Alumina
- Power (FGD)
- Pulp and paper
- Chemical
- Automotive
- Manufacturing



## Quality as a standard

- Manual or automated actuators
- Two-coat epoxy-painted for corrosion resistance
- High-strength 17-4 PH stainless steel gate clevis
- Dust boots supplied to protect stem and actuators
- Fluorocarbon gate coating to reduce friction
- No packing gland necessary
- Full port, bi-directional design
- Metric or imperial flange patterns
- Retainer flanges supplied on TG, TGH, TGHP models
- Long-wearing, field-replaceable sleeves create sealing surface
- Machined gate guides to control gate opening and closing
- Lubrication ports easily accessible for maintenance
- Flush ports in valve housing help keep gate area free of debris
- Optional factory-installed instrumentation and controls available

## Quality – keep the valve that works for you

Our Technequip valves are designed with the operator in mind, using premium quality materials and providing reliable performance.

## Inventory – keep your costs low

Our interchangeable component design reduces the amount of inventory you need to keep on hand.

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FLSMIDTH

# Mission Zero

TOWARDS ZERO EMISSIONS IN MINING



Zero water  
waste



Zero  
emissions



Zero energy  
waste

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