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COMMITMENT TO QUALITY

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Service Applications



Sewage Treatment Industry



Chemical **Plants**



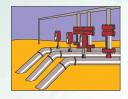
Food Processing Facilities



Mining **Operations**



Cement Manufacturing



Petrochemical



Steel Mills



Pulp and Paper

Commitment to Quality

Sure Flow Equipment Inc. features complete custom engineered design and fabrication expertise within a quality focused state-of-the-art manufacturing facility. Commitment to quality, customer satisfaction and continual improvement is integral to our manufacturing processes and ensures custom engineered strainers meet your design specifications and stringent quality requirements. We've made it easy for you to place your order with confidence.

Sure Flow Equipment Inc. provides industry with Custom Engineered Fabricated Strainers to many design codes. Custom products are designed and manufactured to ASME SECTION VIII, DIV 1, Current Edition. ASME "U" Code Stamp and ASME "UM" Code Stamp are available on certain products as specified in this brochure.

The Sure Flow Equipment Inc. list of Certifications includes:

ISO 9001:2008 Certificate of Registration

ASME "U" Code Stamp Certificate of

Authorization and ASME "UM" Code Stamp Certificate of **Authorization**

(ASME Boiler and Pressure Vessel Code; ASME Section VIII, Div 1, Current Edition);

National Board Certified and authorized to apply the "NB" Mark for pressure vessels and/or pressure retaining items manufactured in accordance with ASME "U" Code Stamp and ASME "UM" Code Stamp:

TSSA (Technical Standards & Safety Authority) Certificate of Authorization for the manufacture of pressure vessels in accordance with ASME Boilers and Pressure Vessel Code, Section VIII, Division 1 and CSA Standard B51, Boiler, Pressure Vessel and Pressure Piping

TSSA (Technical Standards & Safety Authority) Certificate of Authorization for the repair and alteration of boilers, pressure vessels, piping, and Category A, B, E & H fittings in accordance with CSA Standard B51, Boiler, Pressure Vessel and Pressure Piping Code.

CE Mark is available

Certified (Customs-Trade Partnership Against Terrorism)

Recognized by PIP (Partners Protection) for our C-TPAT status

Member of FCI (Fluid Controls Institute) and Vice Chairman of Pipeline Strainer Section



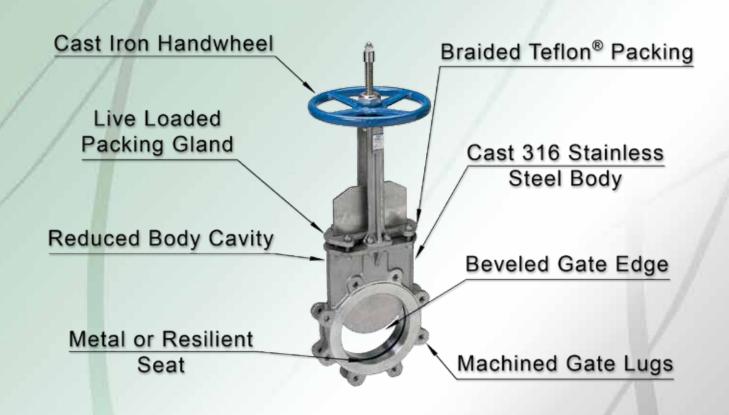






FEATURES

- Conform to TAPPI TIS 405.8 face-to-face.
- Tested to MSS SP-81.
- Full Port.
- Full lug body drilled and tapped to ASME Class 150.
- Bi-Directional shut-off resilient seated design.
- Viton® and EPDM seats available.







ACCESSORIES

Sure Flow Equipment Knife Gate Valves can be automated with Gear, Electric or Pneumatic Actuators for remote operation. Chainwheels or Floor **Stands** can be used for inaccessible areas. When needed, Lock-Out Devices can be provided to prevent accidental opening or closing of the valve. Limit switches and other accessories can also be provided.



PNEUMATIC ACTUATOR



CHAINWHEEL



FLOOR STAND



PROXIMITY LIMIT SWITCHES



GEAR ACTUATOR



LOCK-OUT DEVICES



ELECTRIC ACTUATOR



SCAVENGER KNIFE GATE VALVE

Features

- Full port bi-directional shutoff
- ▲ Hardened beveled gate and hardened seat for shearing and sealing
- Close tolerance machining between bodies
- Precision ground gate chrome plated
- Removable insert ring for ease of repair
- Two piece cavity free body eliminates jamming
- Four post stainless steel stanchions
- Live loaded Teflon® packing
- Adjustable stainless steel packing gland
- High performance cylinder with safety lock-out system and limit switch brackets
- ▲ Sizes range from 3" to 24" (inquire for larger sizes)
- ▲ Typical applications: OCC recycle, lime mud, liquors, plastics, polymers, cement powder and other slurry and abrasive services



Full port conforms to TAPPI

Face to Face conforms to **TAPPI TIS 405.8**

Flange ends meet ASME B16.5

Full flange drilled and tapped to ASME Class 150 flanges.

Part Name	Material				
Body	CG8M (317 S.S.)				
Hardened Insert Ring	Stainless Steel				
Hardened Gate	Stainless Steel				
Packing Gland	CG8M (317 S.S.)				
Packing	Teflon [®] TFE				
Stanchions	303 S.S.				
Nuts, Bolts and Studs	18.8 S.S.				
O-Ring	Buna				
Coupling	CG8M (317 S.S.)				
Limit Switch Bracket	N/A				
Pneumatic Air Cylinder	N/A				









ORDERING INFORMATION

Model KG150SS

Example: 0600 / KG150SS / VIR

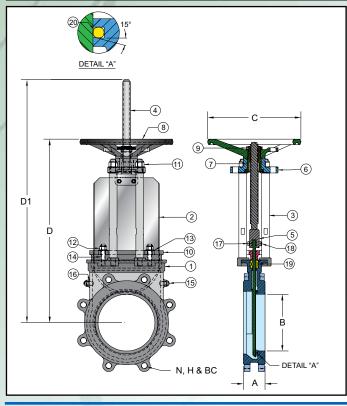
6" Stainless Steel Knife Gate Valve, Class 150 with Viton® Seat

Size	0200 - 2" 0300 - 3" 1400 - 14" 1600 - 16"	0400 - 4" 1800 - 18"	0600 - 6" 2000 - 20"	0800 - 8" 2400 - 24"	1000 - 10" 3000 - 30"	1200 - 12"			
Seat Material		: - 316SS - EPDM			IR - Viton [®] - Silicone				
Actuation	G - Gear	Р	P - Pneumatic E - Electric						
Accessories	Solenoid, Limit Switch, Chainwheel, Lock-Out Device, Extension Stem, Deflector Cone								

Note: For Scavenger Knife Gate Valve, consult factory with your specifications.

RESILIENT & METAL SEATED

	Dimensions (Inches)														
Size	2	3	4	5	6	8	10	12	14	16	18	20	24	30	36
А	1 7/8	2	2	2 1/4	2 1/4	2 3/4	2 3/4	3	3	3 1/2	3 1/2	4 1/2	4 1/2	4 1/2	5
В	2	3	3 3/4	4 7/8	5 3/4	7 5/8	9 1/2	11 1/8	13 3/16	15 9/16	17 7/16	19 3/8	23	28 5/16	33 1/2
N (Holes)	4	4	8	8	8	8	12	12	12	16	16	20	20	28	32
Н (Тар)	5/8-11	5/8-11	5/8-11	3/4-10	3/4-10	3/4-10	7/8-9	7/8-9	1-8	1-8	1 1/8-7	1 1/8-7	1 1/4-7	1 1/4-7	1 1/2-7
ВС	4 3/4	6	7 1/2	8 1/2	9 1/2	11 3/4	14 1/4	17	18 3/4	21 1/4	22 3/4	25	29 1/2	36	42 3/4
С	8	8	8	9	12	12	16	16	18	18	20	24	24	26 3/4	31 1/2
D	11 5/8	13 1/2	15	17	18 1/4	23	28	31 7/8	36 7/8	44 1/2	48 1/4	53 7/8	61	72 1/2	90
D1	13 3/4	17 1/8	20 5/16	22 3/8	25 3/4	32 3/4	40 1/16	46 1/8	52 5/16	60 1/4	67 5/16	75 1/4	85 1/2	106	129



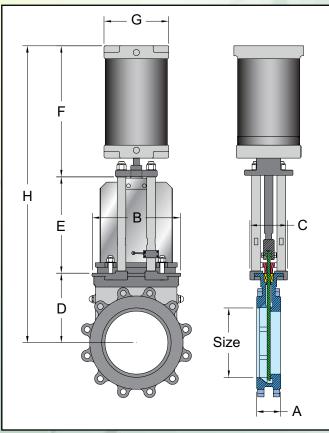
No.	PART NAME	SPECIFICATIONS			
1	BODY	SA351 CG8M 317 STAINLESS STEEL			
2	GATE	316L STAINLESS STEEL			
3	STANCHION	303 STAINLESS STEEL			
4	STEM	303 STAINLESS STEEL			
5	COUPLING	SA351 CG8M 317 STAINLESS STEEL			
6	BRIDGE	ALUMINUM 356			
7	YOKE SLEEVE	660 BRONZE			
8	HANDWHEEL	ALUMINUM			
9	HANDWHEEL NUT	C46400 NAVAL BRASS			
10	GLAND	SA351 CG8M 317 STAINLESS STEEL			
11	BRIDGE NYLOCK NUT	18.8 STAINLESS STEEL			
12	GLAND NYLOCK NUT	18.8 STAINLESS STEEL			
13	GLAND WASHER	18.8 STAINLESS STEEL			
14	GLAND STUD	18.8 STAINLESS STEEL			
15	ACORN NUT	BRASS			
16	ALIGNMENT STUD	18.8 STAINLESS STEEL			
17	COUPLING BOLT	18.8 STAINLESS STEEL			
18	COUPLING NYLOCK NUT	18.8 STAINLESS STEEL			
19	PACKING	TEFLON [®]			
20	O-RING	VITON®			







PNEUMATIC ACTUATOR



The standard pneumatic actuator (double acting on-off cylinder) consists of: Aluminum jacket and covers Stainless steel (AISI 304) piston rod Nitrile coated steel piston

- Available from 2" to 40"
- ▲ Supply Pressure: minimum 50 psi maximum 142 psi
- ▲ For valves installed in a horizontal position, we recommend U-type support plates and/or actuator support.
- ▲ Options: Hard anodized jacket and covers

Travel stops

Over / Undersized cylinder Stainless steel jacket and covers

Manual override Fail safe system

▲ Instrumentation (on request):

Positioners
Solenoid valves
Flow regulators
Air preparation units

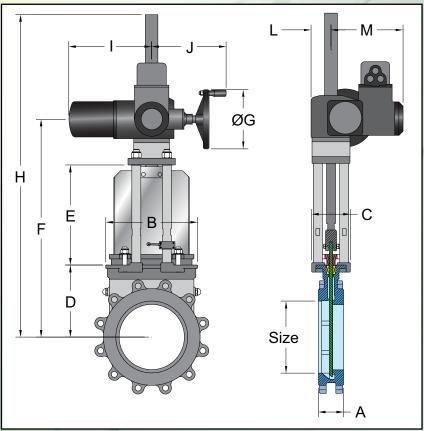
Ę												
						Dime	nsions (Ir					
	Size	Α	В	С	D	Ш	F	G	Н	Weight (lb.)	Standard Cylinder	Air Connection
	2	1 37/64	4 11/16	3 15/16	4 1/8	5 5/64	7	4 17/32	16 7/32	20	C100/62	1/4"
Γ	2 1/2	1 37/64	9 9/32	3 15/16	4 33/64	5 3/4	7 19/32	4 17/32	17 7/8	22	C100/77	1/4"
ſ	3	1 31/32	5 7/8	3 15/16	4 7/8	6 3/8	8 5/16	4 17/32	19 9/16	24	C100/95	1/4"
Γ	4	1 31/32	6 21/32	3 15/16	5 1/2	7 3/8	9 3/32	4 17/32	21 31/32	33	C100/115	1/4"
1	5	1 31/32	7 5/64	3 15/16	5 29/32	8 19/64	10 43/64	5 1/2	24 7/8	44	C125/143	1/4"
Γ	6	2 23/64	8 3/8	3 15/16	6 57/64	9 21/64	11 21/32	5 1/2	27 7/8	55	C125/168	1/4"
Γ	8	2 23/64	10 5/16	4 13/16	8 1/16	12 5/32	14 3/32	6 57/64	34 21/34	97	C160/220	1/4"
ſ	10	2 3/4	12 33/64	4 13/16	9 27/32	14 21/64	16 55/64	8 21/32	41 1/32	147	C200/270	3/8"
ſ	12	2 3/4	14 41/64	4 13/16	11 13/16	16 19/64	18 13/16	8 21/32	46 15/16	180	C200/320	3/8"
ſ	14	3 25/32	16 63/64	7 3/5	13 5/16	19 11/16	21 5/8	10 29/32	54 39/64	295	C250/375	3/8"
Γ	16	3 15/16	19 9/64	7 3/4	15 7/16	21 21/32	23 37/64	10 29/32	60 43/64	364	C250/425	3/8"
Γ	18	4 11/64	21 17/64	10 5/8	17	23 35/64	26 25/32	15 1/32	67 21/64	485	C300/475	1/2"
Γ	20	4 21/64	23 45/64	10 5/8	19 3/32	25 29/32	28 3/4	15 1/32	73 3/4	617	C300/525	1/2"
Γ	24	4 21/64	27 7/8	10 5/8	23 7/32	29 27/32	32 43/64	15 1/32	85 3/4	728	C300/625	1/2"
Γ	28	4 21/64	32 27/32	14 31/32	27	35 7/16	37 51/64	17 31/64	100 15/64	1146	C350/730	3/4"
	30	4 21/64	34 13/16	14 31/32	29 59/64	37 13/64	40 5/32	17 31/64	107 9/32	1290	C350/780	3/4"
	32	4 21/64	39 31/32	12 19/32	31 9/64	38 7/64	43 7/64	17 31/64	112 23/64	1433	C350/830	3/4"
ľ	36	4 21/64	40 61/64	12 19/32	35 15/64	44 1/64	46 21/32	20 17/64	126 7/64	1874	C400/930	3/4"
Ī	40	4 21/64	45 9/32	12 19/32	38 25/64	48 15/64	50 19/32	20 17/64	137 13/64	2337	C400/1030	3/4"







ELECTRIC ACTUATOR



- ▲ Electric actuator
- Rising stem
- The standard electric motor is equipped with:

 Manual emergency operation
 Limit switches (open / closed)
 Torque switches

L														
							Dimensio	ns (Inche	es)					
	Size	А	В	С	D	Е	F	ØG	Н	1	J	L	М	Torque (lbf-in)
9	2	1 37/64	4 11/16	3 15/16	4 1/8	5 5/64	14 3/32	6 5/16	21 17/32	10 7/16	9 13/16	2 7/16	9 11/32	177
	2 1/2	1 37/64	5 9 /32	3 15/16	4 17/32	5 3/4	15 29/32	6 5/16	21 17/32	10 7/16	9 13/16	2 7/16	9 11/32	221
	3	1 31/32	5 7/8	3 15/16	4 7/8	6 3/8	16 57/64	6 5/16	23 37/64	10 7/16	9 13/16	2 7/16	9 11/32	265
	4	1 31/32	6 21/32	3 15/16	5 33/64	7 25/64	18 1/2	6 5/16	25 13/34	10 7/16	9 13/16	2 7/16	9 11/32	354
	5	1 31/32	7 3/32	3 15/16	5 29/32	8 5/16	19 27/32	6 5/16	26 17/32	10 7/16	9 13/16	2 7/16	9 11/32	442
1	6	2 23/64	8 9/32	3 15/16	6 57/64	9 21/64	21 55/64	6 5/16	44 19/64	10 7/16	9 13/16	2 7/16	9 11/32	531
	8	2 23/64	10 5/16	4 13/16	8 5/64	12 5/32	26 21/64	7 7/8	50 3/4	11 7/64	10 5/64	2 7/16	9 23/32	619
	10	2 3/4	12 33/64	4 13/16	9 27/32	14 21/64	30 17/64	7 7/8	53 1/8	11 7/64	10 5/64	2 7/16	9 23/32	708
Ī	12	2 3/4	14 21/32	4 13/16	11 13/16	16 5/16	34 7/32	7 7/8	57 1/4	11 7/64	10 5/64	2 7/16	9 23/32	796
	14	3 25/32	16 31/32	7 3/4	13 5/16	19 11/16	38 7/64	7 7/8	61 9/64	11 7/64	10 5/64	3 23/64	9 23/32	929
	16	3 15/16	19 1/8	7 3/4	15 7/16	21 21/32	42 13/64	7 7/8	65 1/4	11 7/64	10 5/64	3 23/64	9 23/32	1062
	18	4 11/64	21 1/4	10 5/8	17 1/64	23 35/64	47 7/16	12 13/32	71 1/16	15 5/32	12 25/32	3 35/64	11 7/32	1416
	20	4 21/64	23 45/64	10 5/8	19 3/32	25 29/32	51 57/64	12 13/32	75 33/64	15 5/32	12 25/32	3 35/64	11 7/32	1593
	24	4 21/64	27 7/8	10 5/8	23 7/32	29 27/32	60 1/32	12 13/32	87 33/64	15 5/32	12 25/32	3 35/64	11 7/32	1859
	28	4 21/64	32 53/64	14 31/32	27 1/64	35 7/16	69 13/32	12 13/32	112 1/16	15 5/32	12 25/32	3 35/64	11 7/32	2036
	30	4 21/64	34 13/16	14 31/32	29 59/64	37 13/64	74 3/32	15 3/4	116 47/64	15 5/32	13 1/16	3 35/64	11 7/32	2301
	32	4 21/64	39 31/32	12 39/64	31 9/64	38 37/64	76 11/16	15 3/4	119 11/32	15 5/32	13 1/16	3 35/64	11 7/32	2567
	36	4 21/64	40 15/16	12 39/64	35 1/4	42 51/64	84 59/64	15 3/4	127 9/16	15 5/32	13 1/16	3 35/64	11 7/32	2876
	40	4 21/64	45 9/32	12 39/64	38 3/8	47 15/64	92 17/32	15 3/4	135 5/64	15 5/32	13 1/16	3 35/64	11 7/32	3275
	48	5 29/32	55 1/8	17 23/32	48 27/64	58 15/32	119 3/32	19 11/16	170 15/32	20 5/64	13 63/64	4 17/32	12 13/64	5753







TECHNICAL INFORMATION

Size	Metal Seated Cv	Resilient Seated Cv	No. Turns to Open / Close	Pounds Thrust @ 100 psi
2"	162	131	7	420
2.5"	182	131	8	480
3"	394	316	10.5	650
4"	566	508	12.2	900
5"	958	508	16	1150
6"	1332	1197	18	1400
8"	2343	2046	19.5	2100
10"	2637	3396	24.5	2600
12"	4987	4559	30	3300
14"	7012	6233	53	4200
16"	9744	8986	64	5400
18"	12290	11441	71	6600
20"	15088	14167	79	7850
24"	21317	19949	95	10800

$$Cv = Q \sqrt{\frac{SG}{\Delta P}}$$

Q = Flow (gpm) SG = Specific Gravity ΔP = Pressure Drop (psi)







TEMPERATURE CHARTS & BOLTING SPECIFICATIONS

Temperature Charts SEAT / SEALS Max. Temp. Material **Applications** (°F) Metal / Metal >482 High temperature, Low Tightness EPDM (E) 248 Acids and non mineral oils Nitrile (N) 248 Resistance to petroleum products Viton® (V) 392 General chemical service, High temperature Silicone (S) 482 Food service, High temperature PTFE (T) 482 Corrosion Resistance

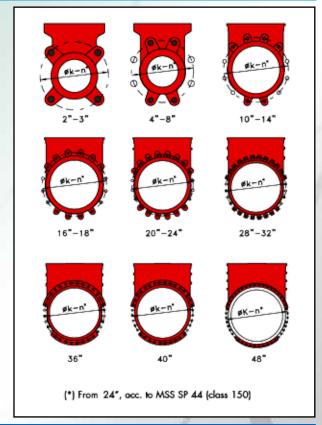
More details and other materials under request.

0.0								
PACKING								
Material	Max. Temp. (°F)	рН						
PTFE Impregn. synth. fibre (ST)	464	2 - 13						
Braided PTFE (TH)	500	0 - 14						
Graphited (GR)	1112	0 - 14						



ASME B16.5 Class 150 Bolting Specifications

Size	K	n°	M	
2"	4 3/4"	4	5/8" UNC	4
2 1/2"	5 1/2"	4	5/8" UNC	4
3"	6"	4	5/8" UNC	4
4"	7 1/2"	8	5/8" UNC	4 - 4
5"	8 1/2"	8	3/4" UNC	4 - 4
6"	9 1/2"	8	3/4" UNC	4 - 4
8"	11 3/4"	8	3/4" UNC	4 - 4
10"	14 1/4"	12	7/8" UNC	6 - 6
12"	17"	12	7/8" UNC	6 - 6
14"	18 3/4"	12	1" UNC	8 - 4
16"	21 1/4"	16	1" UNC	10 - 6
18"	22 3/4"	16	1 1/8" UNC	10 - 6
20"	25"	20	1 1/8" UNC	14 - 6
24"	29 1/2"	20	1 1/4" UNC	14 - 6
28"	34"	28	1 1/4" UNC	20 - 8
30"	36"	28	1 1/4" UNC	20 - 8
32"	32" 38 1/2"		1 1/2" UNC	20 - 8
36"	42 3/4"	32	1 1/2" UNC	22 - 10
40"	47 1/4"	36	1 1/2" UNC	26 - 10
48"	56"	44	1 1/2" UNC	28 - 16







DESIGN & TESTING

MSS SP-81 applies to bonnetless metal seated knife gate valves, 2" to 24" size, 150 psi CWP. Sizes above 24" are not covered under this standard. Additionally, resilient seated knife gate valves and slide knife gate valves are also not covered under MSS SP-81. These products are subject to the individual manufacturer's internal testing & design standard.

Body - MSS SP-81 requires the valve body (pressure vessel and related structure) to be designed for and hydrostatically pressure tested to 1.5 times the rated working pressure.

- Valve rated pressure 150 psi
- Body test pressure 225 psi

Gate - MSS SP-81 requires the gate to be designed for and hydrostatically pressure tested to 1.1 times the rated working pressure.

- Valve rated pressure 150 psi
- Gate test pressure 165 psi

Seat - MSS SP-81 has an allowable leakage rate (for metal to metal seated valves) of 40 cc per inch of diameter, per minute at 40 psi pressure. On a 12" valve this would be equal to 40 times 12, or 480 cc per minute at 40 psi.

- Maximum allowable leakage of 0.6 GPM when tested with water at 40 psi applied in the normal flow direction.
- No visible leakage when tested with water at 40 psi (for soft seated valves only).

Face to Face - MSS SP-81 has specified face-to-face dimensions and tolerances for each valve size to assure ease of installation for the consumer, regardless of the valve manufacturer.



Toll Free: 1-800-263-8251 Toll Free Fax: 1-800-876-1164 International: 1-905-335-1350 International Fax: 1-905-332-4993

Email: info@sureflowequipment.com www.sureflowequipment.com







Sure Flow Equipment Inc. - Limited Warranty

All products are warranted to be free of defects in material and workmanship for a period of one year from the date of shipment, subject to below. All custom products are not subject to return, credit or refund. If the purchaser believes a product to be defective, the purchaser shall:

- Notify the manufacturer within ten(10) days after receipt of merchandise, state the alleged defect and request permission to return the product. Merchandise will not be accepted for return without a "Return Code" clearly marked on the outside of the package. Contact the office to obtain a return code. Merchandise will not be accepted for return or credit later than six (6) months after invoicing.
- If permission is given, return the product with the transportation prepaid. Collect shipments will not be accepted. Goods must be returned prepaid.

If a shipment is received in a damaged or deficient condition, a claim must be filed with the delivering carrier and noted on the freight bill before you accept the merchandise. All other claims must be made in writing and received by Sure Flow Equipment Inc. within ten (10) days after receipt of merchandise.

If the product is accepted for return and found to be defective, the manufacturer will, at its discretion, either repair or replace the product, F.O.B. factory, within 60 days of receipt, or issue credit for the purchase price. Sure Flow Equipment Inc. shall not be liable for failure to deliver or delays in delivering occasioned by acts of God, war, labor difficulties, inability to obtain materials or any other causes whatsoever beyond our control.

Other than to repair, replace or credit as described above, purchaser agrees that manufacturer shall not be liable for any loss, costs, expenses, or damages of any kind arising out of the product, its use, installation or replacements, labeling, instructions, information or technical data of any kind, description of product use, sample or model, warnings or lack of any of the foregoing.

NO OTHER WARRANTIES, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, ARE MADE OR AUTHORIZED. NO AFFIRMATION OF ACT, PROMISE, DESCRIPTION OF PRODUCT OR USE OR SAMPLE OR MODEL SHALL CREATE ANY WARRANTY FROM MANUFACTURER, UNLESS SIGNED BY THE PRESIDENT OF MANUFACTURER.

CANCELLATIONS:

Cancelled orders will be subject to a charge of at least 35%.

Cancelled custom orders will be subject to a charge of 100% of quoted price.

SPECIAL DOCUMENTATION: A charge will apply for non-standard, special documentation requests such as Material Test Reports (MTR's) and Certificates of Conformance (COC's).

MINIMUM BILLING: \$100.00 NET

Product shipping weights are approximate and subject to variances depending on packaging methods/requirements.





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Fax: 905-332-4993



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View our current catalogues online! Use your smart phone to scan QR code and see what

