

**WEDGE & SLAB GATE VALVES**



# WEDGE GATE AND SLAB GATE VALVES FOR SPECIAL APPLICATIONS

Code: **GW2M**

## Wedge gate Valves

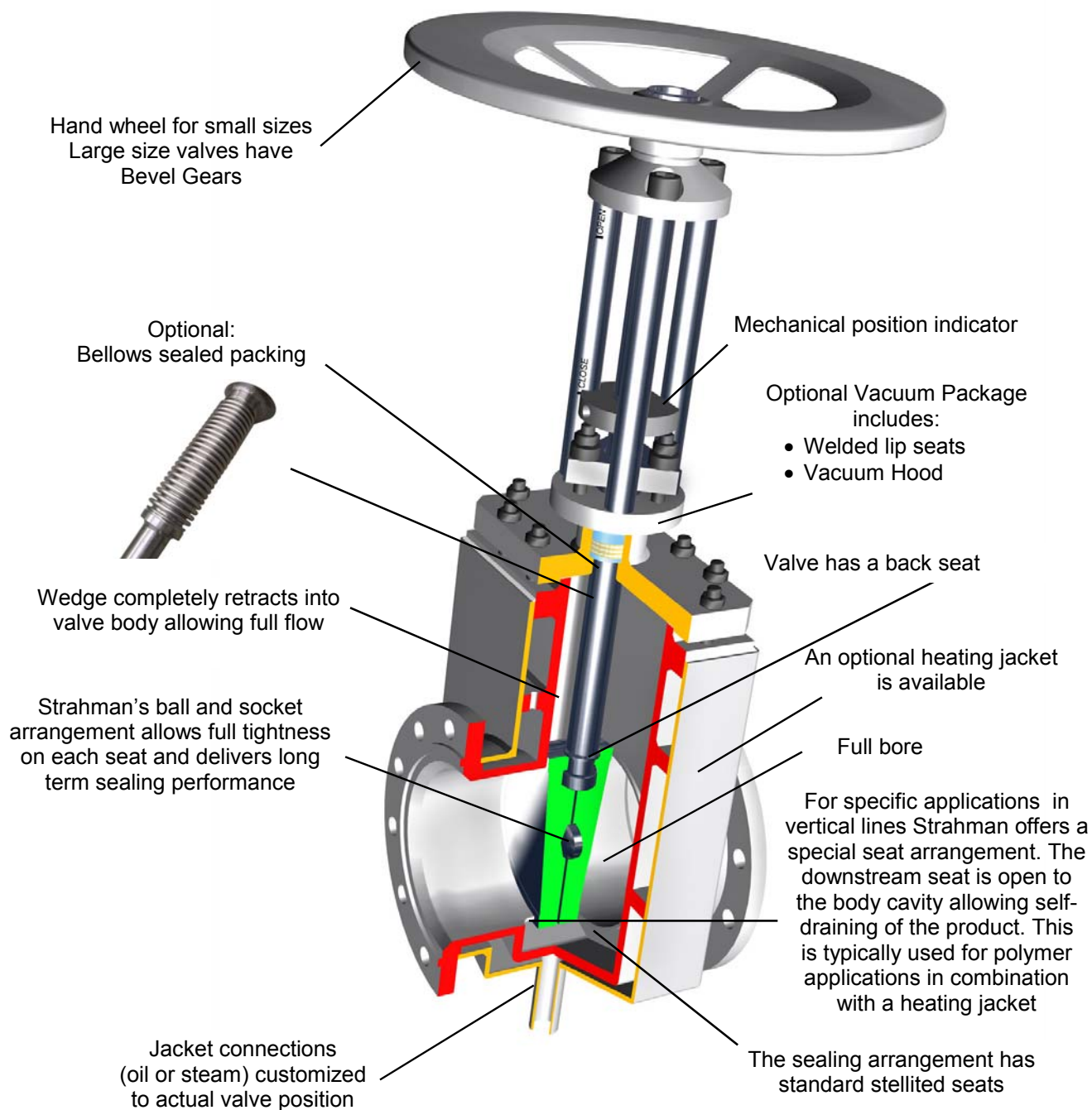


Fig. 060 / 065D

Strahman Valves designs and manufactures gate valves for special applications. They include specific applications where large diameters, jacketing or special materials are necessary. Most of Strahman's gate valves are customized to meet specific process requirements. They are well suited as isolation valves for process lines in chemical and petrochemical applications.

The safety of process equipment often depends on the reliability of these "key equipment" valves. The main features include tight shut-off, full bore design, availability of metal or resilient sealing arrangements and the choice between wedge or parallel seated designs. Jacketed wedge gate valves are mainly used in the polymer industry. Bellow-sealed wedge gate valves with welded lip seals are suitable for toxic and lethal products. Slab gate valves are recommended for isolation of ethylene furnaces where heavy feedstocks are cracked.

## Wafer type Slab Gate Valve

Code: **GSD**

Slab Gate Valve with Dismountable Sleeve

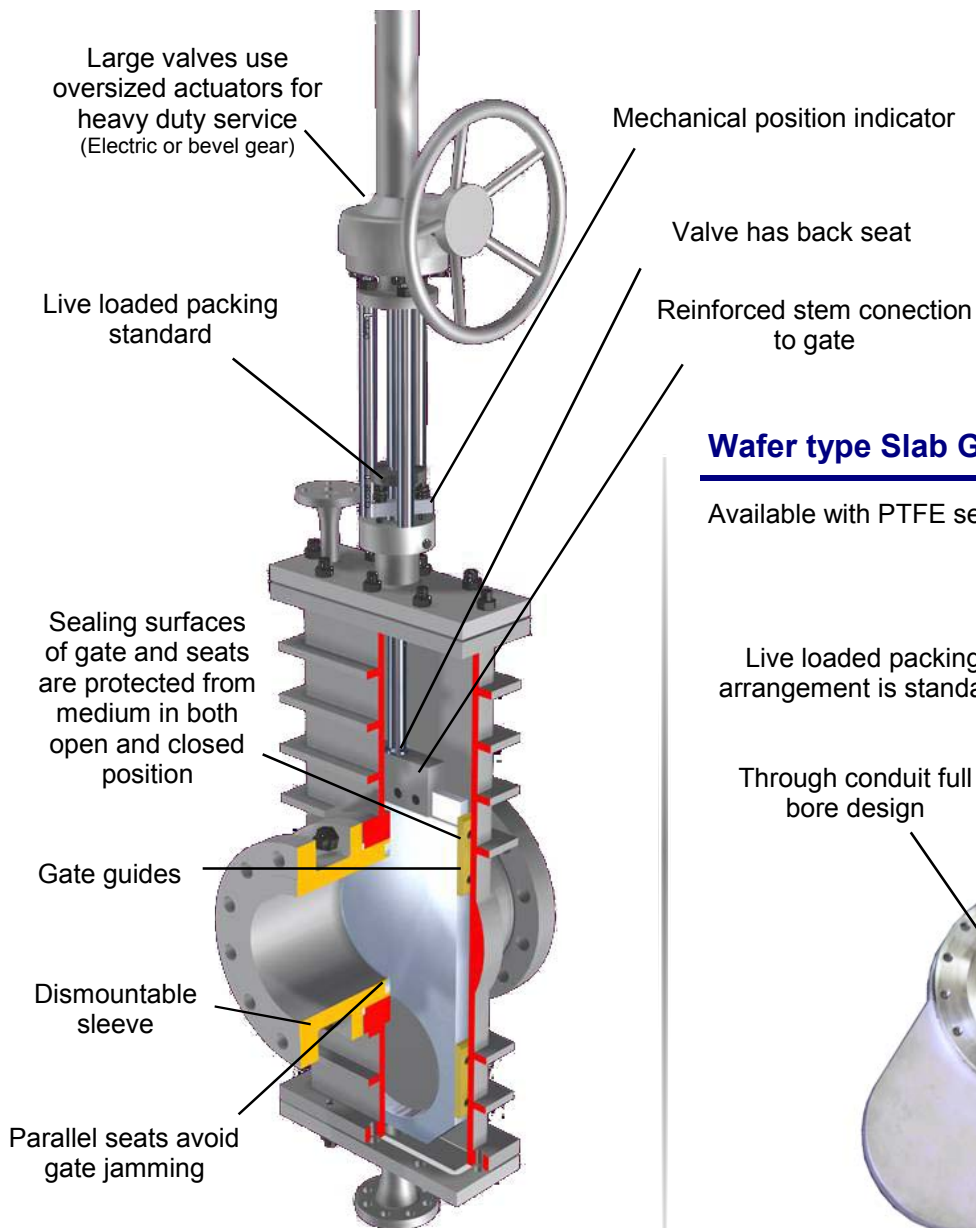


Fig. 074

## Wafer type Slab Gate

Code: **GSD**

Available with PTFE seats only

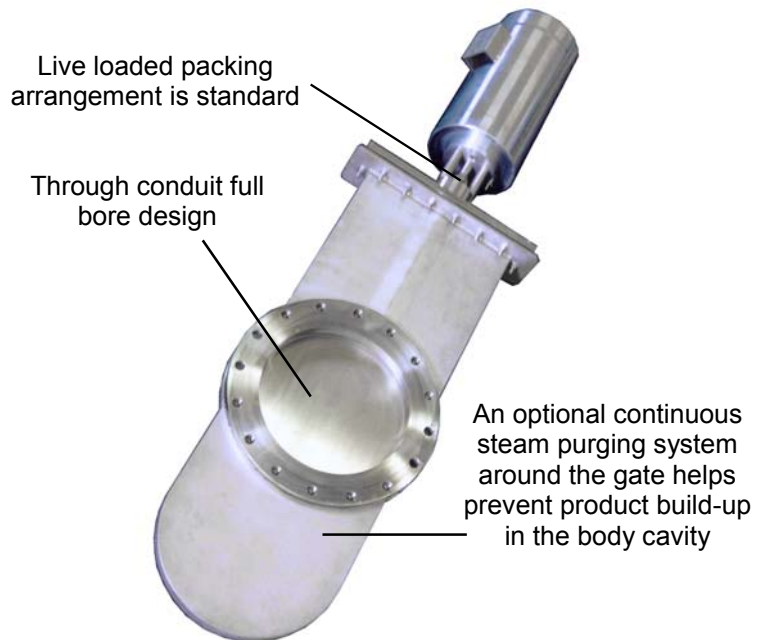


Fig. 072

## BODY ARRANGEMENTS

Strahman Gate valves have three different configurations:

- Fig. 060 or 065 is for Wedge gate valves
- Fig. 072 is for Wafer type slab gate valves
- Fig. 074 is for Slab gate valves with dismountable seats

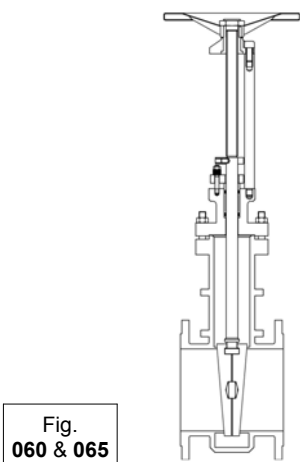


Fig.  
060 & 065

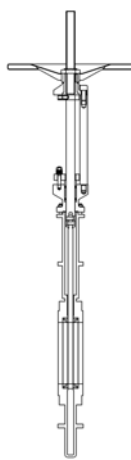


Fig.  
072

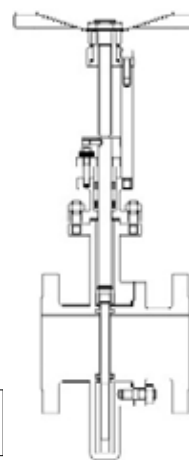


Fig.  
074

## RANGE DEFINITION

GW Manufacturing Range	PN 10	PN 16	PN 20-150 lbs.	PN 25	PN 40	PN 50 300 lbs.	PN 64 400 lbs.	PN 100 600 lbs.	PN 150/160-900 lb	PN 250 -1500 lb	PN 320	PN 420-2500 lb	PN 630-4500 lb
3/8"- DIN10													
1/2"- DIN15													
3/4"- DIN20													
1"- DIN25													
1 1/4"- DIN32													
1 1/2"- DIN40													
2"- DIN50													
2 1/2"- DIN65													
3"- DIN80													
4"- DIN100													
5"- DIN125													
6"- DIN150													
8"- DIN200													
10"- DIN250													
12"- DIN300													
14"- DIN350													
16"- DIN400													
18"- DIN450													
20"- DIN500													
24"- DIN600													
28"- DIN700													
32"- DN800													
36"- DN900													
40"- DN1000													
44"- DN1100													
48"- DN1200													

Fig. 060 & 065

GS Manufacturing Range	PN 10	PN 16	PN 20-150 lbs.	PN 25	PN 40	PN 50 300 lbs.	PN 64 400 lbs.	PN 100 600 lbs.	PN 150/160-900 lb	PN 250 -1500 lb	PN 320	PN 420-2500 lb	PN 630-4500 lb
3/8"- DIN10													
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Fig. 072  
& 074

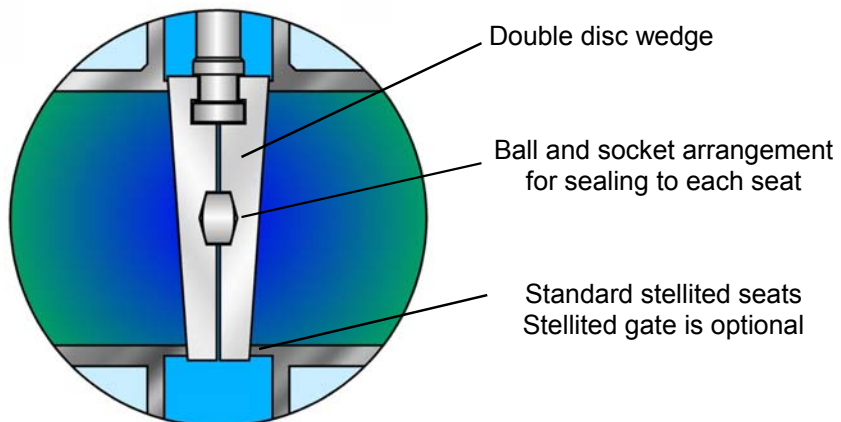
Fig.074  
Only

# SEALING SYSTEMS

Strahman Gate Valve sealing systems utilize different designs for wedge and slab valves. The following drawings illustrate the specific differences.

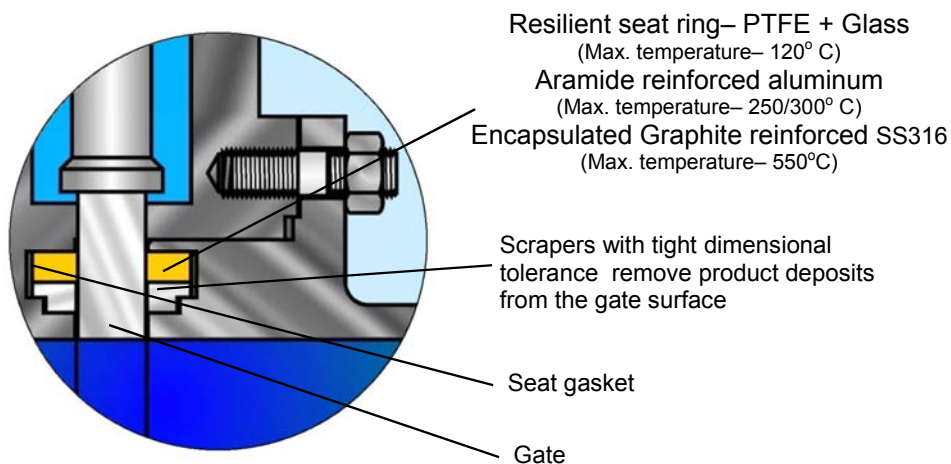
## Wedge

- Metal to Metal Gate to body seat sealing
- Stellite coating standard on body seat
- Bi-directional valve



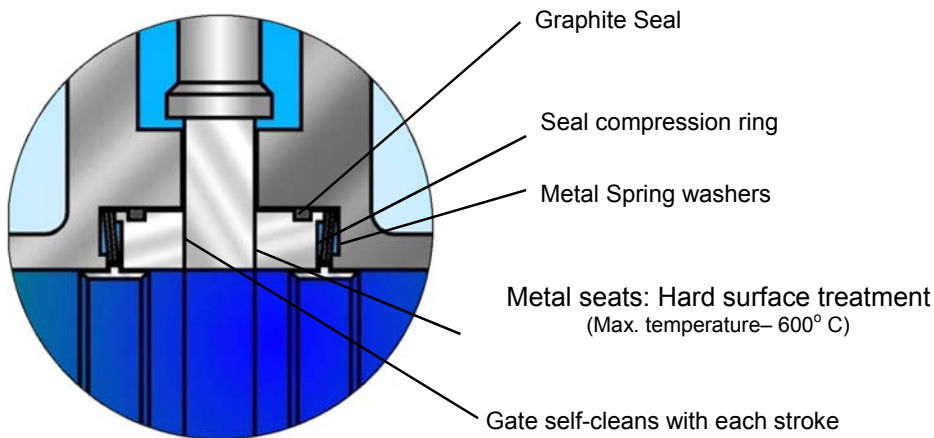
## Resilient Seats with Scraper Ring

- Metal to resilient material Gate to seat sealing
- Bi-directional valve
- Replaceable seats



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- Metal to resilient material Gate to seat sealing
- Bi-directional valve
- Replaceable seats





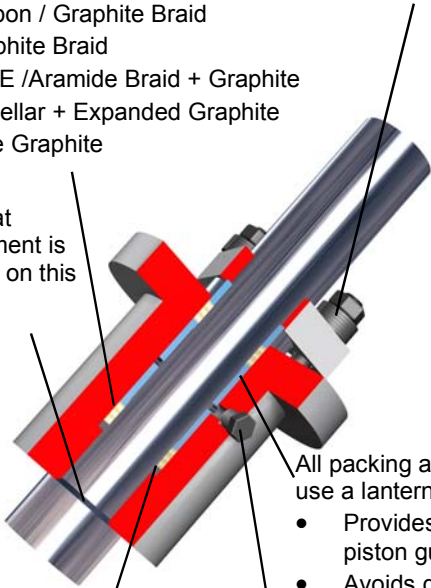
## PACKING DEFINITION

Typical Packing Materials:

- PTFE
- PTFE / Aramide Braid
- Carbon / Graphite Braid
- Graphite Braid
- PTFE /Aramid Braid + Graphite
- Lamellar + Expanded Graphite
- Pure Graphite

Back seat arrangement is standard on this valve

Live loaded packing arrangement minimizes maintenance



All packing arrangements use a lantern ring that:

- Provides better stem piston guiding
- Avoids dead space in body cavities

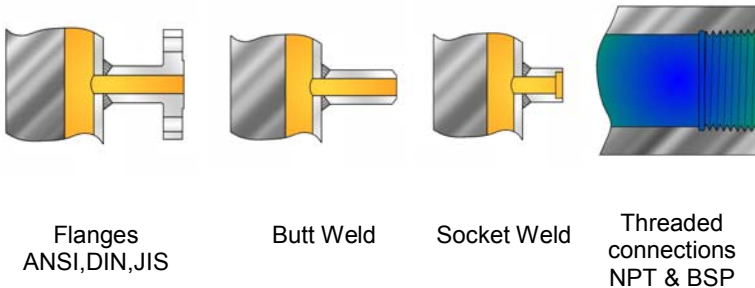
Bottom ring material is selected with a differential hardness from the piston to prevent piston damage

Optional 1/4 inch NPTF can be used for leak detection or inert gas injection to avoid leakage to atmosphere by creating an over pressure

## STANDARD BODY GASKET RANGE

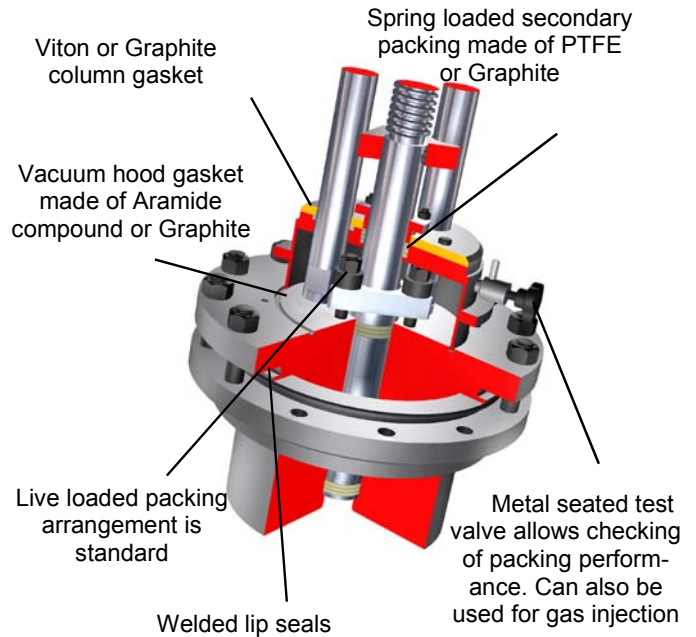
- PTFE
- Aramide / Nitrile
- Carbon / Aramide
- Laminated Graphite
- Laminated Graphite / 316
- Welded Lips

## JACKET CONNECTIONS



## VACUUM HOOD

For valves on full vacuum service Strahman offers a special **vacuum package** that maintains tightness to atmosphere. Valves with this package are usually equipped with an **M Ring Seal** design as process sealing. The system uses a replaceable aluminium or nickel seal ring and provides high vacuum performance. This special **vacuum package** provides zero leakage between atmosphere and process.



## Valve Coding System

**G W 2 \$ W J**

<b>G</b> Gate Valve	<b>W</b> Wedge	<b>2</b> Double Disc	<b>\$</b> Special	<b>W</b> Wafer	<b>J</b> Jacketed
<b>S</b> Slab	<b>S</b> Soft Seated	<b>S</b> Dismountable Sleeve	<b>M</b> Metal to Metal	<b>O</b> Oversized Flange	<b>-</b> Non-Jacketed
<b>A</b> Accessories	<b>\$</b> Special	<b>D</b> Dismountable Seat	<b>\$</b> Special	<b>G</b> Graylock	
		<b>\$</b> Special		<b>\$</b> Special	
				<b>F</b> Flanged	
				<b>W</b> Butt Weld	
				<b>A</b> Wafer	
				<b>O</b> Oversized Flange	
				<b>G</b> Graylock	
				<b>\$</b> Special	
				<b>J</b> Jacketed	
				<b>-</b> Non-Jacketed	

NOTE: Some combinations may not be compatible

## TECHNICAL & GENERAL INFORMATION

### Design Code & Construction

- Design standard compliant with ASME B16.34
- International standards include ANSI, DIN, JIS, API etc.
- Wide range of material selections including carbon steel / stainless steel / Titanium / Hastelloy / Duplex / Monel / Tantalum / Zirconium
- Fabricated, cast, forged and bar stock designs
- Combinations of fabricated, sand and investment casings, and bar stock available

### Surface Finish

- For polymer applications, Strahman recommends a surface facing of 300 (Ra 0.4) for all parts are in contact with the medium

### Quality assurance & testing

- ISO 9001 compliant
- TUV / HPO / TA Luft
- PED / ATEX / CE marking
- Standard testing procedures

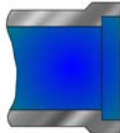
## LINE & BRANCH CONNECTIONS



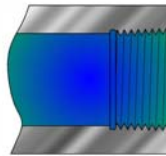
Flanges  
ANSI, DIN, JIS



Heated  
Flanges



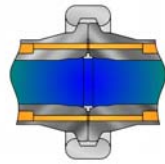
Socket  
Weld



Threaded  
connections  
NPT & BSP



Butt  
Weld



Fast Bolting Union  
Graylock Securamax

## ACTUATION OPTIONS



Hand Wheel



Bevel Gear



Electric Actuator



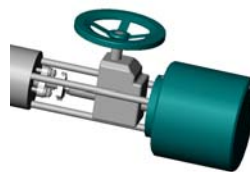
Air Motor



Double or single  
acting Air Cylinder



Double or single acting Air  
Cylinder with Safety Hand Wheel



Double or single acting Air  
Cylinder with side mounted  
Safety Hand Wheel



Hydraulic  
Cylinder

The Strahman family of products include:

#### **SAMPLING VALVES**

Strahman has a full line of sampling valves that produce live samples without exception. Our sampling valves unique design prevent failure caused by sediment or clogging.

#### **DRAIN VALVES**

Strahman Drain Valves are designed to prevent clogging. They are ideal for use in liquid and gas service or with slurries, polymers, and high viscosity fluids that tend to solidify at room temperature.

#### **WASH DOWN EQUIPMENT**

Strahman offers a full line of mixing units, hose stations, hoses, nozzles and wash down accessories. Our wash down line is designed for industrial use and is used in a wide variety of industries including food, beverage, pharmaceutical, chemical and other applications.

#### **LINE BLINDS**

Strahman Line Blinds provide zero leakage down stream and total isolation on process pipelines, vessels, and maritime applications. No pipeline movement is required when blind position is changed.

Please contact your local Strahman representative for further details  
or  
visit our website : [www.strahmanvalves.com](http://www.strahmanvalves.com)



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