

# RU Construction Partners 1, LLC



April 21, 2020 John M. Fritzen Rutgers, The State University of NJ IPO-Facilities Renovations 33 Knightsbridge Rd Rm 3E Piscataway, NJ 08854

NOTE: Pages have been redacted or intentionally excluded by the EPA. Contact SRF\_AIS@epa.gov to request more detailed information if needed.

### Subj: American Iron and Steel Waiver Request for Industrial Process Valves & Strainers

Mr. Fritzen;

Please see attached documentation for the American Iron and Steel waiver request for industrial process strainers for the Cogen project. The following strainers listed below is what we are requesting a waiver for:

• 3 – 8" Strainer (Flanged) Carbon Steel 300LB, Mueller Manufacture

The strainers listed above were specified for this project during the design process. Riggs Distler has reached out to multiple strainers suppliers that represent typical strainers manufactures and could not locate anyone who could find the specified strainers that fall under the AIS requirements. The supplies are listed below, and correspondence with each vendor has been provided. As a result of the communications with our vendors, the specified strainers could not be produced following the AIS requirements, and is the reason we are requesting this waiver.

- Raritan Supply
- Ferguson
- Tioga
- American Industrial

Sincerely,

Mike McMichael Project Manager

#### **Attachments**

- 1. List of DB4 Strainers needed.
- 2. Catalog Sheets and Specs of DB4 Strainer.
- 3. Correspondence with American Industrial
- 4. Correspondence with Raritan Supply Co.
- 5. Correspondence with Tioga Pipe Supply Co.

- 6. Correspondence with Ferguson Supply
- 7. Correspondence with EPA

MANUAL VALVE LIST A.I.S. Complinant \*

Rev. 1 Jay 2.11.20

	Model Unit	Total
3 8" DB4 Strainer Flanged Carbon Steel 300lb. Mueller 872		



P.O. Box 10120 New Brunswick, NJ 08906

PHONE: 732.572.2555 FAX: 732.572.2001

E-MAIL: Info@RaritanValve.com WEB: www.RaritanValve.com

## RUTGERS UNIVERSITY BUSCH CAMPUS COGEN UPGRADE CONTRACT: RDCCP002-0106

SUBMITTAL STRAINER SPECIFICATION SECTION: DB4

> Contractor: Riggs Distler & Company 4 Esterbrook Lane Cherry Hill, NJ 08003

Supplier: Raritan Valve & Automation 295 Meadow Road Edison, NJ 08817



P.O. Box 10120 New Brunswick, NJ 08906

PHONE: 732.572.2555 FAX: 732.572.2001

E-MAIL: Info@RaritanValve.com WEB: www.RaritanValve.com

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# Manufacturer and Supplier Information:

### **Manufacturer:**

Keckley Company 3400 Cleveland Street Skokie, IL 60076 Ph: 847-674-8422

### **Supplier:**

Raritan Valve & Automation 295 Meadow Road Edison, NJ 08817 Ph: 732-572-2555

### Parts and Service Contacts:

### **Manufacturer:**

Keckley Company 3400 Cleveland Street Skokie, IL 60076 Ph: 847-674-8422

## Supplier:

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# Equipment List: Y-Strainer

Model Number: 84RFY-CS062P34-GBB-SA7

Size: 8"

Description: 8" Keckley Style SA-7 Y-Strainer, Carbon Steel Body, 304SS Screen,

Spiral Wound 304SS Gasket, Carbon Steel Cover & Cap Screw, 300# Flanged Ends, 740PSI @ 100°F, 1/16 Screen Perforation, Assembled In

The USA.

Quantity: 3 Each



# Style SA-7

Y-Strainer Carbon Steel (ASTM A 216, Grade WCB) 150 lb. & 300 lb. Flanged



# **Cast Carbon Steel Y-Strainer**

### **APPLICATIONS**

Steam, water, oil or gas where protection from foreign matter in a pipeline is required.

### CONSTRUCTION

The Keckley Style SA-7 stainers are constructed from rugged carbon steel castings and are machined to exacting specifications. These bodies have drilled flanges that are in accordance with ASME B16.5. All flanges come standard with back-faced bolt holes.

### **FEATURES**

The Keckley Style SA-7 strainer features a machined groove in both the body and cover for proper screen alignment and to ensure accurate reseating when servicing is required. The gasket is 304 stainless steel spiral wound and is compressed between the body and cover (for maximum strength and durability) and designed for high pressure and high temperature service. All Keckley Style SA-7 strainers have cap screws and can be furnished with a steel blow-off plug upon request.

Blind covers are available upon request.

### **SCREENS**

Standard perforated 304 stainless steel screens are spot welded along the seam for maximum strength. Different size perforations and meshes are available in stainless steel, monel, and brass to meet specific media requirements. If media is not indicated, screens for *steam* will be supplied.

#### **SELF CLEANING**

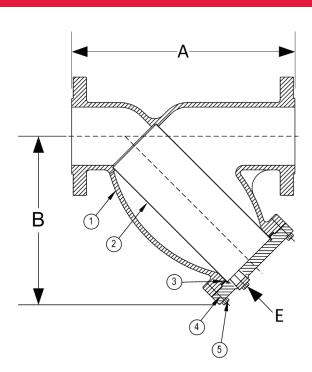
Self cleaning is accomplished by opening the valve or drain plug connected to the blow-off port. **Warning:** See Maintenance Instructions on page S6 of the Strainer Information Section for additional precautions and detailed information on servicing the strainer.

### WORKING PRESSURES - NON SHOCK

NOM. RATING	MEDIA	1/2" to 14"	15 mm to 350 mm
150# R.F. & D.	STEAM	150 PSI @ 565°F	1035 KPa @ 296°C
(STANDARD FLANGE)	W.O.G.	285 PSI @ 100°F	1966 KPa @ 38°C
NOM. RATING	MEDIA	1/2" to 14"	15 mm to 350 mm
300# R.F. & D.	STEAM	300 PSI @ 838°F	2069 KPa @ 448°C
(EX. HEAVY FLANGE)	W.O.G.	740 PSI @ 100°F	5104 KPa @ 38°C



### TECHNICAL DATA **DIMENSIONS AND WEIGHTS**



# Style SA-7

Y-Strainer, 150 lb. & 300 lb. Flanged Carbon Steel (ASTM A 216, Grade WCB)

PARTS LIST						
ITEM	DESCRIPTION	MATERIAL				
1*	Body	Carbon Steel (ASTM A 216, Grade WCB)				
2	Screen	Stainless Steel (304)				
3	Gasket	Spiral Wound Stainless Steel (304)				
4	Cover	Carbon Steel (ASTM A 216, Grade WCB)				
5	Hex Head Cap Screw	Carbon Steel (ASTM A 193, Grade B7)				

Optional: Blow-off Plug, Carbon Steel.

### STANDARD SCREENS SUPPLIED

SIZE			SCREEN PERFORATION							
5	<u> </u>	SCREEN	FOR STEAM		OPEN	FOR L	IQUID	OPEN		
in	mm	GAGE	in	mm	AREA	in	mm	AREA		
1/2 to 4	15 to 100	28	3/64	1.2	33%	1/16	1.6	30%		
5 to 10	125 to 250	22	3/64	1.2	33%	1/8	3.2	43%		
12 & 14	300 & 350	22	1/16	1.6	30%	1/8	3.2	43%		

Standard screens supplied are for steam service, unless otherwise specified. Options: Other perforations, meshes, and screen materials are available.

			DIMENSIONS										WEI	сите	
SIZ	ZE	Α				В					WEIGHTS				
		150	0#	30	0#	15	150# 300		0#	150# 8	300#	15	0#	300#	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kgs	lbs	kgs
1/2	15	6-1/2	165	6-1/8	156	3-3/4	95	3-3/4	95	3/8	10	7	3	6	3
3/4	20	7-3/8	187	7-3/4	197	4-1/4	108	4-1/4	108	1/2	15	11	5	13	6
1	25	7-3/8	187	7-7/8	200	4-1/4	108	4-1/4	108	1/2	15	11	5	13	6
1-1/4	32	7	178	8-1/8	206	5-1/8	130	5-1/8	130	1/2	15	12	5	19	9
1-1/2	40	7-1/8	181	8-1/4	210	5-1/8	130	5-1/8	130	1/2	15	14	6	19	9
2	50	7-7/8	200	9-1/2	241	6	152	6	152	1/2	15	22	10	33	15
2-1/2	65	9-3/4	248	10-3/8	264	7	178	7	178	1	25	32	15	44	20
3	80	10-1/16	256	12	305	7-7/16	189	7-5/16	186	1	25	41	19	58	26
4	100	12-1/8	308	14-1/2	368	8-15/16	227	8-15/16	227	1-1/2	40	63	29	90	41
5	125	15-1/2	394	19-5/16	491	13-1/32	331	13-1/32	331	2	50	111	50	180	82
6	150	18-1/2	470	19-5/16	491	13-1/4	337	13-1/4	337	2	50	136	62	180	82
8	200	21-3/8	543	23-3/8	594	15-1/2	394	15-1/2	394	2	50	212	96	304	138
10	250	26	660	27-3/8	695	18-7/16	468	18-7/16	468	2	50	280	127	470	213
12	300	29-7/8	759	32	813	21-5/8	549	21-5/8	549	2	50	460	209	709	322
14	350	34-1/2	876	36	914	25	635	25	635	2	50	980	445	1300	590

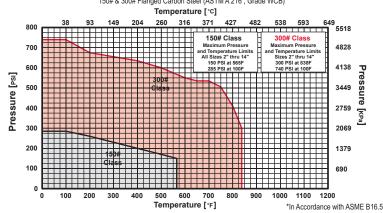
Certified dimensional drawings are available upon request.

#### **TOTAL SCREEN AREA**

Size	(in²)	Size	(in²)	Size	(in²)	Size	(in²)	
1/2"	6.46	1-1/2"	18.68	4"	91.89	10"	532.80	
3/4"	12.32	2"	30.28	5"	209.41	12"	600.71	
1"	12.32	2-1/2"	46.91	<u>6</u> "	241.18	(Total screen area listed		
1-1/4"	18.68	3"	57.62	8"	342.86	for 150 lb.	class only)	

\*See DETERMINING RATIOS on page \$5 of the Strainer Information Section for calculating NET FREE AREA of the screen to inside pipe area.

#### PRESSURE vs. TEMPERATURE CHART



<sup>\*</sup>Optional Body Materials Available in LCB, WC6, and WC9.

<sup>†</sup>This table reflects only the nearest metric equivalents.



# PRESSURE DROP CHART

# Flanged "Y" Pattern Strainers (Styles A, BA, BA-7, SA, SA-7, SSA and SSA-7)

This pressure drop chart is based on the flow of clean water through the Keckley "Y" strainers listed above with screen perforations ranging from 3/64" through 1/8".

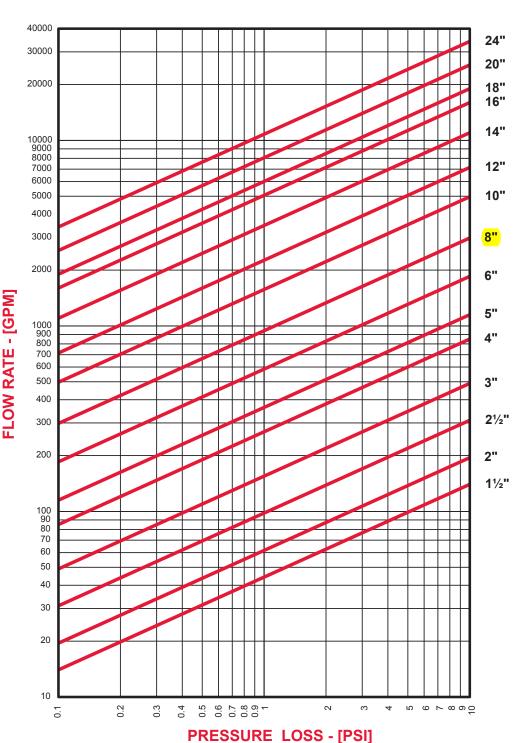
### TO USE CHARTS:

Find your desired rate of flow (GPM) on the left hand side of the chart. Follow its corresponding horizontal line to the point where it intersects the diagonal line indicating the strainer pipe size. From this point of intersection, follow the vertical line down to the bottom of the chart to determine the approximate pressure drop.

### **CORRECTION FACTORS:**

For finer mesh screens that are backed with a perforated sheet, multiply the pressure drops shown at right by the following:

40 mesh x 1.2 60 mesh x 1.4 80 mesh x 1.6 100 mesh x 1.7





**HOW TO ORDER** 

# **STYLE SA-7 PRODUCT NUMBERS**

Below Is An Example Of Building A Part Number For Ordering A Strainer

Size	Pressure Class	End Conn.	Strainer Type	Body Material	Perf Or Mesh	Screen Type	Screen Material	Gasket Type	Cover Conn.	Origin	Style
12	2	B4	Y	CS	062	Р	34	G	В	В	SA7

Description: 12" 150 lb. Schd 40 Butt Weld Y-Strainer, Carbon Steel Body, 1/16" Perforated 304ss screen, Spiral Wound 304ss Gasket – Graphite Filler, Bolted Cover, Domestic (Buy American), SA7.

Size	

### **Pressure Class**

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Ordering	ASME					
Number	Pressure Class					
2	150 Lb.					
4	300 Lb.					

### **End Connection**

Ordering	End
Number	Connection
RF	Raised Face Flange
B4	Butt Weld, Sch 40/40S
B8*	Butt Weld, Sch 80/80S

\*Available in 300 Lb. Class only. Consult Factory prior to ordering.

### **Strainer Type**

Ordering Number	Strainer Type
Υ	Y-Pattern

## **Body Material**

Ordering Number	Body Material	
CS	Carbon Steel	
	(ASTM A 216, Grade WCB)	

### Perf or Mesh

Ordering	Perf. or
Number	Mesh
033	1/32"
045	3/64"
062	1/16"
094	3/32"
125	1/8"
156	5/32"
188	3/16"
250	1/4"
375	3/8"
500	1/2"
750	3/4"
M20	20 Mesh
M30	30 Mesh
M40	40 Mesh
M50	50 Mesh
M60	60 Mesh
M80	80 Mesh
M100	100 Mesh
M150	150 Mesh
M200	200 Mesh
M300	300 Mesh
Х	Special
	•

### Screen Type

Ordering Number	Screen Type
P	Perforated
М	Mesh
L*	Perforated with Mesh Lining
S	Perforated with Mesh Lined Start Up
Х	Special

\*20 mesh and finer screens must be reinforced with perforated screen.

### **Screen Material**

Number	Screen Material
34	Type 304 Stainless Steel
36	Type 316 Stainless Steel
BR	Brass
ML	Monel
TI	Titanium
HC	Hastelloy C276
DS	Duplex Stainless Steel
Х	Special

## **Gasket Type**

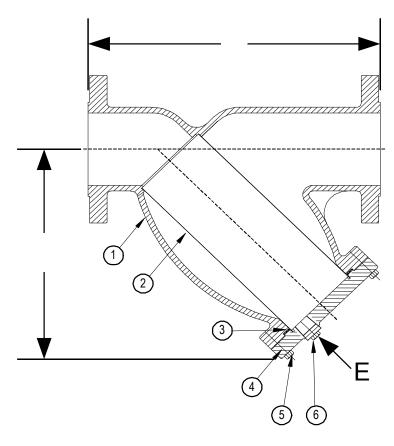
Ordering Number	Gasket Type
G	Spiral Wound SS (304) – Graphite Filler
T	Spiral Wound SS (316) – Teflon Filler
S	Spiral Wound SS (316) – Graphite Filler
М	Spiral Wound Monel – Graphite Filler
X	Special

### **Cover Connection**

Order Numb	•	Cover Connection		
В		Bolted		

### Origin

Country Code	Origin
В	Domestic (Buy American)
	Import



BODY PRESSURE & TEMPERATURE RATINGS – NON SHOCK				
NOM. RATING MEDIA 1/2" to 14"				
300# R.F.& D.	STEAM	300 PSI @ 838°F		
(EX. HEAVY FLANGE)	W.O.G.	740 PSI @ 100°F		

	PARTS LIST				
ITEM	M DESCRIPTION MATERIAL				
1	BODY	CARBON STEEL (ASTM A 216, GRADE WCB)			
2	SCREEN	STAINLESS STEEL (304)			
3	GASKET	SPIRAL WOUND STAINLESS STEEL (304) – WITH GRAPHITE FILLER			
4	COVER	CARBON STEEL (ASTM A 216, GRADE WCB)			
5	HEX HEAD CAP SCREWS	CARBON STEEL (ASTM A 193, GRADE B7)			
6	BLOW-OFF PLUG	CARBON STEEL (ASTM A 105)			

	SIZE	DIM	MENSIONS (in)		COVER		WEIGHT
Product Number†	SIZL	Α	В	Е	No. of Bolts	Size of Bolts	(lbs)
1/24RFY-CS045P34-GB	1/2	6-1/8	3-3/4	3/8	4	3/8-16 x 1-1/2	6
3/44RFY-CS045P34-GB	3/4	7-3/4	4-1/4	1/2	4	3/8-16 x 1-1/2	13
14RFY-CS045P34-GB	1	7-7/8	4-1/4	1/2	4	3/8-16 x 1-1/2	13
11/44RFY-CS045P34-GB	1-1/4	8-1/8	5-1/8	1/2	4	3/8-16 x 1-1/2	19
11/24RFY-CS045P34-GB	1-1/2	8-1/4	5-1/8	1/2	4	3/8-16 x 1-1/2	19
24RFY-CS045P34-GB	2	9-1/2	6	1/2	4	1/2-13 x 1-3/4	33
21/24RFY-CS045P34-GB	2-1/2	10-3/8	7	1	4	1/2-13 x 1-3/4	44
34RFY-CS045P34-GB	3	12	7-5/16	1	4	1/2-13 x 1-3/4	58
44RFY-CS045P34-GB	4	14-1/2	8-15/16	1-1/2	6	1/2-13 x 1-3/4	90
54RFY-CS045P34-GB	5	19-5/16	13-1/32	2	12	5/8-11 x 2-1/4	180
64RFY-CS045P34-GB	6	19-5/16	13-1/4	2	12	5/8-11 x 2-1/4	180
84RFY-CS045P34-GB	8	23-3/8	15-1/2	2	12	5/8-11 x 2-3/4	304
104RFY-CS045P34-GB	10	27-3/8	18-7/16	2	16	5/8-11 x 3	470
124RFY-CS062P34-GB	12	32	21-5/8	2	20	5/8-11 x 3-1/4	709
144RFY-CS062P34-GB	14	36	25	2	16	3/4-10 x 3-1/8	1300

†See "Style SA-7 Product Number Configuration" for additional options.

### STANDARD SCREENS SUPPLIED

SIZE		SCREEN PERFORATION			
SIZE	SCREEN	FOR STEAM	OPEN	FOR LIQUID	OPEN
in	GAGE		AREA	in	AREA
1/2 to 4	28	3/64	33%	1/16	30%
5 to 10	24	3/64	33%	1/8	43%
12 to 14	24	1/16	30%	1/8	43%

Standard screens supplied are for **steam service**, unless otherwise specified. Options: Other perforations, meshes, and screen materials are available.

	DRAWING NO.	
K KECK	AL 77022	
3400 CLEVELAND		
DIMENSIONAL ASSI	PART NO.	
1/2" to 14" 300# Flg St	SCALE: NTS	
	DATE: 07/01/2011	
MAT'L: Cast Carbon Steel	DR. BY DSF	



Client/Project	Rutgers University / Busch Cogeneration Plant Upgrade Project							
Project No.	31-539	31-539						
Specification	400500 Attachment B	<b>Material Class</b>	DB4					
Revision	0	Date	2/14/2020					
Prepared By	CPS	Reviewed By	DD					

Applicable Systems: Hot Water, Makeup Water

Design Code: ASME B31.1
Pressure Class: ASME Class 300
Material: Carbon Steel

Corrosion Allowance: 0.063"

Pipe: 2" & Under ASTM A106 Grade B, Seamless, Sch 80

2-1/2" - 24" ASTM A106 Grade B, Seamless, Sch 40

Fittings: 2" & Under 3000# Forged Socket Weld Fittings, ASTM A105, ASME B16.11

2-1/2" - 24" Wrought Butt-Weld Fittings, ASTM A234 Grade WPB, Seamless, ASME B16.9, Sch to Match Pipe

Flanges: 2" & Under Class 300 Raised Faced Flanges, Socket Weld, ASTM A105, ASME B16.5

2-1/2" - 24" Class 300 Raised Faced Flanges, Weld Neck, ASTM A105, ASME B16.5

Branch Connections: 2" & Under Full Size Tee, Reducing Tee, Sockolets per MSS-SP-97

2-1/2" - 24" Full Size Tee, Reducing Tee, Weldolets per MSS-SP-97

Unions: 2" & Under 3000# Forged Unions, ASTM A105, ASME B16.11

2-1/2" - 24" Use Flanges

Gaskets: 1/8" Thick, Class 300 Spiral Wound Gaskets, 304SS with Flexicarb Filler, Flexitallic or approved equal, ASME B16.20

Bolting: ASTM A193 Grade B7 Studs, ASME B1.1 with ASTM A194 Grade 2H Heavy Hex Nuts, ASME B18.2.2



Client/Project Rutgers University / Busch Cogeneration Plant Upgrade Project Project No. 31-539 400500 Attachment B **Material Class** Specification DB4 Revision 0 2/14/2020 Date CPS Prepared By Reviewed By DD

Τ١	ype:	Not Used

Size Range: Design Codes: Pressure Class:

End Connection: **Ball Valves** 

Body:

Disc/Ball/Plug:

Seat: Stem:

Manufacturers:

Notes:

Type: Not Used

Size Range: Design Codes: Pressure Class:

End Connection:

Body:

**Butterfly Valves** 

Disc/Ball/Plug:

Seat: Stem:

Manufacturers:

Notes:



Client/Project Rutgers University / Busch Cogeneration Plant Upgrade Project Project No. 31-539 Specification 400500 Attachment B **Material Class** DB4 Revision 0 Date 2/14/2020 Prepared By CPS Reviewed By DD

Check Valves	Type: Size Range: Design Codes: Pressure Class: End Connection: Body: Disc/Ball/Plug: Seat: Hing Pin: Manufacturers: Notes:	Swing Check Valve 1/2" to 2" ASME B16.34 API 602 Class 800 Socket Weld Carbon Steel, ASTM A105 Stainless Steel Hardfaced Stainless Steel Hardfaced Stainless Steel Crane model FB-3675XU-W or approved equal Bolted Cover, Stainless Steel and Graphite Gasket	Type: Size Range: Design Codes: Pressure Class: End Connection: Body: Disc/Ball/Plug: Seat: Hing Pin: Manufacturers: Notes:	Swing Check Valve 2-1/2" to 24"  ASME B16.5, B16.10, B16.34, API 598  Class 300  Flanged  Carbon Steel, ASTM A216 Gr WCB  Stainless Steel Hardfaced  Stainless Steel Hardfaced  Stainless Steel  Crane Figure 159 or approved equal  Bolted Cover, Stainless Steel and Graphite  Gasket
Gate Valves	Type: Size Range: Design Codes: Pressure Class: End Connection: Body: Disc/Ball/Plug: Seat: Stem: Manufacturers: Notes:	Gate Valve 1/2" to 2" ASME B16.34 API 602 Class 800 Socket Weld Carbon Steel, ASTM A105 Stainless Steel Hardfaced Stainless Steel Hardfaced Stainless Steel Crane model FB-3604XU-W or approved equal Outside Screw & Yoke, Bolted Bonnet, Spiral Wound Stainless Steel and Graphite Gasket, Graphite Packing	Type: Size Range: Design Codes: Pressure Class: End Connection: Body: Disc/Ball/Plug: Seat: Stem: Manufacturers: Notes:	Gate Valve 2-1/2" to 24" ASME B16.34 API 600 Class 300 Flanged Carbon Steel, ASTM A216 Gr WCB Stainless Steel Hardfaced Stainless Steel Hardfaced Stainless Steel Crane Figure 33 or approved equal  Outside Screw & Yoke, Bolted Bonnet, Spiral Wound Stainless Steel and Graphite Gasket, Graphite Packing



Client/Project Rutgers University / Busch Cogeneration Plant Upgrade Project Project No. 31-539 Specification 400500 Attachment B **Material Class** DB4 Revision 0 2/14/2020 Date **CPS** Prepared By DD Reviewed By

Type: Globe Valve Size Range: 1/2" to 2"

Design Codes: ASME B16.34 API 602

Pressure Class: Class 800 End Connection: Socket Weld

**Globe Valves** 

**Root Valves** 

Body: Carbon Steel, ASTM A105
Disc/Ball/Plug: Stainless Steel Hardfaced

Seat: Stainless Steel Hardfaced

Stem: Stainless Steel

Manufacturers: Crane model FB-3644XU-W or approved

equal

Notes: Outside Screw & Yoke, Bolted Bonnet,

Spiral Wound Stainless Steel and Graphite

Gasket, Graphite Packing

Type: Gate Valve Size Range: 1/2" to 2"

Design Codes: ASME B16.34 API 602

Pressure Class: Class 800

End Connection: Socket Weld x Threaded
Body: Carbon Steel, ASTM A105
Disc/Ball/Plug: Stainless Steel Hardfaced
Seat: Stainless Steel Hardfaced

Stem: Stainless Steel

Manufacturers: Crane model FB-3604XU-TxW or approved

equal

Notes: Outside Screw & Yoke, Bolted Bonnet,

Spiral Wound Stainless Steel and Graphite

Gasket, Graphite Packing

Type: Globe Valve Size Range: 2-1/2" to 12"

Design Codes: ASME B16.5, B16.10, B16.34, API 598

Pressure Class: Class 300 End Connection: Flanged

Body: Carbon Steel, ASTM A216 Gr WCB

Disc/Ball/Plug: Stainless Steel Hardfaced Seat: Stainless Steel Hardfaced

Stem: Stainless Steel

Manufacturers: Crane Figure 151 or approved equal

Notes: Outside Screw & Yoke, Bolted Bonnet

Stainless Steel and Graphite Gasket

**Graphite Packing** 



Client/Project Rutgers University / Busch Cogeneration Plant Upgrade Project 31-539 Project No. Specification 400500 Attachment B **Material Class** DB4 Revision 2/14/2020 0 Date **CPS** Prepared By **Reviewed By** DD

Type: Y Strainer Size Range: 1/2" to 2"

Design Codes:

Strainers

Strainers

Pressure Class: Class 600 End Connection: Socket Weld

Body: Carbon Steel, ASTM A216 Gr WCB

Screen: Stainless Steel

Manufacturers: Mueller 862-BC or approved equal

Notes: Non Asbestos Gaskets.

See mesh sizes table

Type: Tee Strainer Size Range: 2-1/2" to 24"

Design Codes:

Pressure Class: Class 300 End Connection: Flanged

Body: Carbon Steel Screen: Stainless Steel

Manufacturers: Mueller 42T or approved equal

Notes: Non Asbestos Gaskets.

See mesh sizes table

Type: Y Strainer Size Range: 2-1/2" to 24"

Design Codes:

Pressure Class: Class 300 End Connection: Flanged

Body: Carbon Steel, ASTM A216 Gr WCB

Screen: Stainless Steel

Manufacturers: Mueller 782 or approved equal

Notes: Non Asbestos Gaskets.

See mesh sizes table

Service	Pipe Size	Straining		
	2" and Under	0.033"		
Water	2-1/2" to 4"	0.062"		
vvater	6" to 12"	0.062"		
	14" and Larger	1/8"		

**Mesh Size** 



Client/Project Rutgers University / Busch Cogeneration Plant Upgrade Project							
Project No.	31-539						
Specification	400500 Attachment B	<b>Material Class</b>	DB4				
Revision	0	Date	2/14/2020				
Prepared By	CPS	Reviewed By	DD				

Temp	erature, F		100	200	300	400	500	600	700	800	
	e Rating	Press, psig	740	680	655	635	605	570	530	410	
		Press, psig									
ze	Sch 80	1/2									
		3/4									
Pipe Size		1									
Pip		1 1/2									
		2									
		2 1/2									
	Std	3									
		4									
		6									
a)		8									
Size		10									
Pipe (		12									
Pi		14									
		16									
		18									
		20									
		24									

### Notes:

1 Table values are pipe allowable pressures (psig) for given pipe size and temperature. Blank entries indicate that the listed ratings are limiting values.