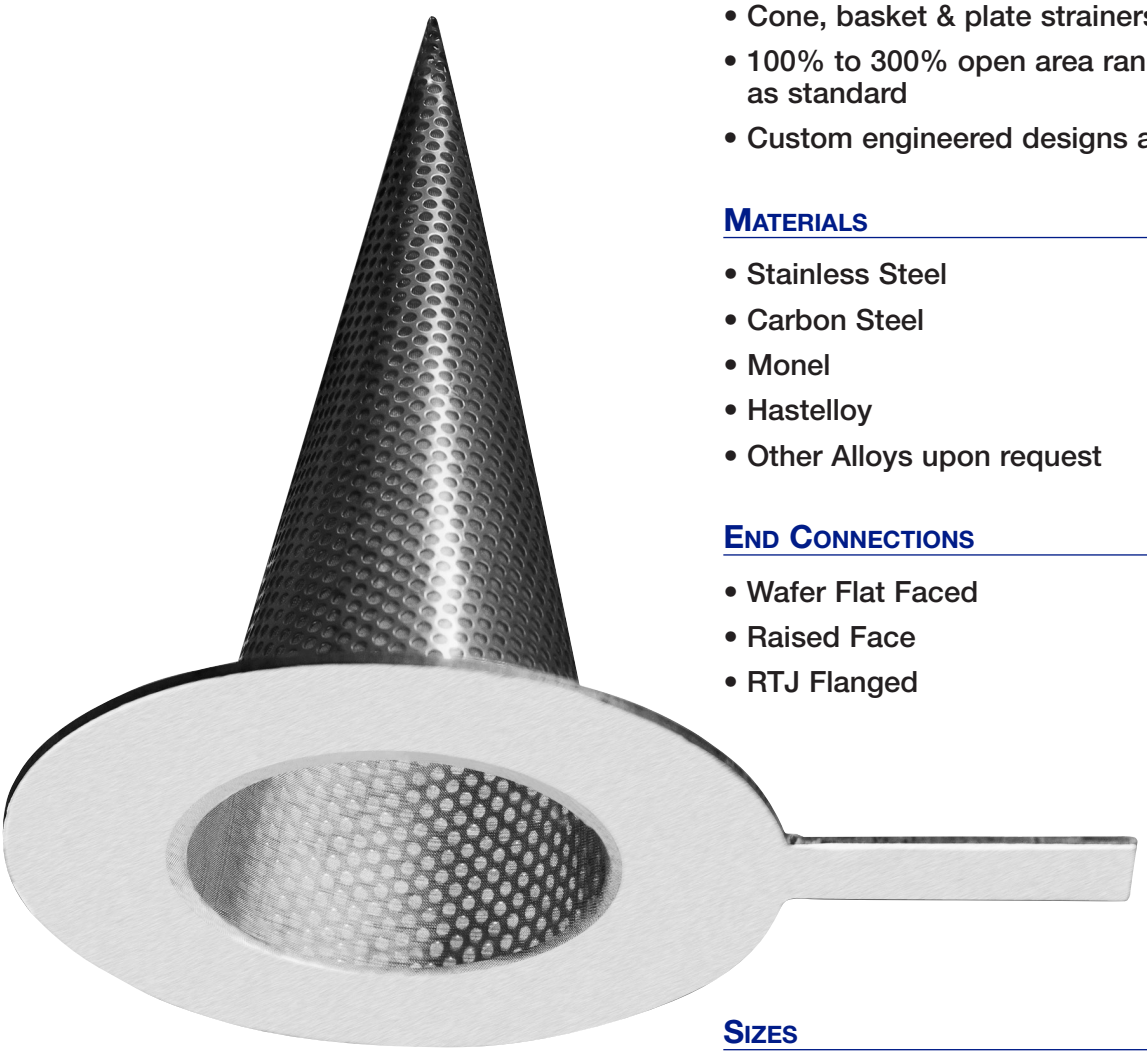
Applications

- Process Industry
- Power Industry
- Chemical Industry
- Oil and Gas
- Metals and Mining
- Water and Waste Water
- Pulp and Paper
- Marine
- Steel Mills

Temporary Strainers

Pressures to 3705 PSIG
Temperatures to 800ºF



Features

- Cone, basket & plate strainers
- 100% to 300% open area range (OAR) as standard
- Custom engineered designs available

Materials

- Stainless Steel
- Carbon Steel
- Monel
- Hastelloy
- Other Alloys upon request

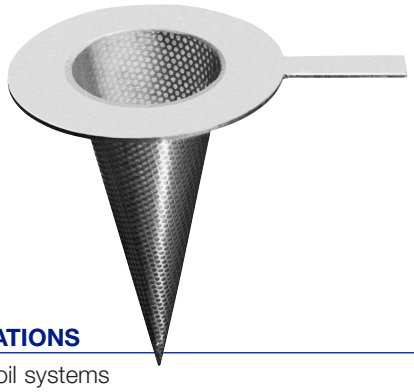
End Connections

- Wafer Flat Faced
- Raised Face
- RTJ Flanged

Sizes

- 3/4" (20mm) up to 24" (600mm) as standard
- Larger sizes available upon request

SSI Fabricated



TC, TB AND TP SERIES
TEMPORARY STRAINERS

PRESSURES TO 3600 PSIG (244.9 BARG)
TEMPERATURES TO 800ºF (427ºC)

Standard and custom designs

Primarily used for new pipeline start-up or where solid loading is minimal.

Filtration down to 40 Microns available

Available in conical, basket and plate configurations

100% to 300% open area range (OAR) as standard

304SS construction is standard. Construction in other materials is available

May be installed in horizontal or vertical pipelines

APPLICATIONS

Water, oil systems

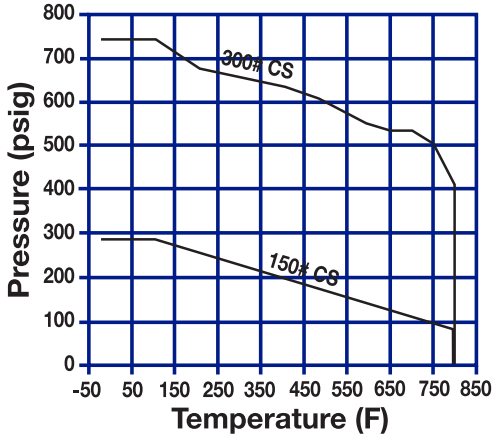
Other liquid systems

Protection of pumps, meters, valves and other similar equipment

OPTIONS

Custom engineered designs
Customer specified Open Area
Other Materials, Sizes and/or Configurations
Other Screen and/or Mesh – *See page*

PRESSURE/TEMPERATURE CHART



MODELS *See Construction Details on page*

T*1 – 100% open area - Flow inside to outside
T*2 – 100% open area - Flow outside to inside
T*3 – 100% open area – Bidirectional flow
T*4 – 150% open area – Flow inside to outside
T*5 – 150% open area – Flow outside to inside
T*6 – 150% open area – Bidirectional flow
T*7 – 200% open area – Flow inside to outside
T*8 – 200% open area – Flow outside to inside
T*9 – 200% open area – Bidirectional flow
T*A – 300% open area – Flow inside to outside
T*B – 300% open area – Flow outside to inside
T*C – 300% open area – Bidirectional flow
T*Z – Custom Configuration

* TC – Temporary Cone, TB – Temporary Basket, TP – Temporary Plate

APPLICABLE CODES

Canadian Registration Numbers (CRN) available

Note: Temporary Strainers are designed for start up service of new or revamped piping systems. Temporary Strainers are not intended to be used in a permanent application. Contact factory when permanent applications are required.

TC, TB, and TP Series Ordering Code

	Model		Material	Inlet Size	Class	Connection	Dash	Cover	Perf	Mesh
T	B	1	V	M	1	W	-	A	4	A
1	2	3	4	5	6	7	8	9	10	11

Model - Position 1 - 3
T*1 - 100% I/O flow
T*2 - 100% O/I flow
T*3 - 100% Bidirectional
T*4 - 150% I/O flow
T*5 - 150% O/I flow
T*6 - 150% Bidirectional
T*7 - 200% I/O flow
T*8 - 200% O/I flow
T*9 - 200% Bidirectional
T*A - 300% I/O flow
T*B - 300% O/I flow
T*C - 300% Bidirectional
T*Z - Custom Configuration

* TC - Temporary Cone
TB - Temporary Basket
TP - Temporary Plate - Only TP1, TP2, TP3

Material - Position 4
V - 304 SS (standard)
C - Carbon Steel
T - 316 SS
M - Monel
H - Hastelloy
Z - Other

Inlet Size* - Position 5

D - 3/4	Q - 8
E - 1	R - 10
G - 1½	S - 12
H - 2	T - 14
J - 2½	U - 16
K - 3	V - 18
M - 4	W - 20
N - 5	Y - 24
P - 6	Z - Other

* Contact factory for other sizes.

Class - Position 6
1 - 150
3 - 300
4 - 600
5 - 900
Z - Other

Connection - Position 7
W - Wafer Flat Face Smooth Finish (Designed to fit between RF Flanges)
Z - Other

Dash - Position 8

Cover - Position 9
A - None

Perf - Position 10
B - 3/64”
1 - 1/32”
2 - 1/16”
3 - 3/32”
4 - 1/8”
5 - 5/32”
6 - 3/16”
7 - 7/32”
8 - 1/4”
9 - 3/8”
Z - Other

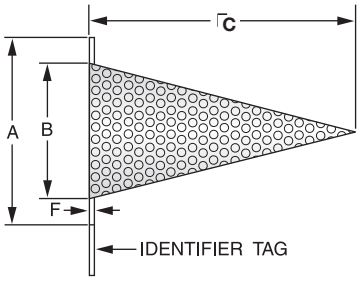
Mesh- Position 11
A - None
1 - 10
2 - 20
3 - 30
4 - 40
5 - 50
6 - 60
7 - 80
8 - 100
9 - 120
Z - Other

Note: Any item outside this range must be a special and must be called out on the order (select “Z” and fill special field).

TC SERIES
TEMPORARY CONE STRAINERS

SPECIFICATION

The strainer body shall be fabricated 304 stainless steel or other specified material. The strainer shall be the conical type with an extended identifier tag handle. The screen shall be size _____ perforated SS with _____ mesh liner. The flow shall be _____. The Strainer shall have an inlet size of _____ and Open Area Ratio of _____. The Temporary Cone Strainer shall be SSI TC Series.



CONICAL TYPE (TC)

MATERIALS OF CONSTRUCTION
(304 STAINLESS STEEL SHOWN *)

Ring A240-304
Handle A240-304
Peforated Plate A240-304
Mesh (optional).....A276-304

* Other material available - consult factory

Connections: 3/4" - Custom
150#, 300#, 600#, 900# and 1500# Wafer Flat Faced Smooth Flanges are standard
Designed to fit between RF Flanges

DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)*

SIZE	A				B	C				F[1]	Weight
	150/300#	600#	900#	1500#		100%	150%	200%	300%		
¾ (20)	2⅛ (54)	2½ (64)	2⅝ (67)	2⅝ (67)	⅝ (16)	1⅛ (29)	1 2/3 (43)	2¼ (57)	3⅜ (86)	⅛ (3)	0.5 (0.2)
1 (25)	2½ (64)	2¾ (70)	3 (76)	3 (76)	¾ (19)	1⅝ (41)	2 ½ (64)	3 1/3 (84)	5 (127)	⅛ (3)	0.5 (0.2)
1½ (40)	3¼ (83)	3⅝ (92)	3¾ (95)	3¾ (95)	1¼ (32)	2⅛ (56)	3 ⅜ (86)	4½ (114)	6¾ (171)	⅛ (3)	0.5 (0.2)
2 (50)	4 (102)	4¼ (108)	5½ (140)	5½ (140)	1¾ (44)	3 (76)	4 ½ (114)	6 (152)	9⅛ (232)	⅛ (3)	0.5 (0.2)
2½ (65)	4¾ (121)	5 (127)	6⅜ (162)	6⅜ (162)	2¼ (57)	3⅛ (81)	5 (127)	6⅔ (170)	10⅛ (257)	⅛ (3)	1 (0.5)
3 (80)	5¼ (133)	5¾ (146)	6½ (165)	6¾ (171)	2¾ (70)	4 (102)	6¼ (159)	8½ (216)	12¾ (324)	⅛ (3)	1 (0.5)
4 (100)	6¾ (171)	7½ (191)	8 (203)	8⅛ (206)	3¾ (95)	5⅛ (130)	7⅞ (200)	10⅝ (270)	17 (432)	⅛ (3)	2 (0.9)
5 (125)	7⅝ (194)	9⅜ (238)	9⅝ (244)	9⅞ (251)	4⅝ (117)	6½ (165)	10⅛ (257)	14 (356)	21 (533)	⅛ (3)	2 (0.9)
6 (150)	8⅝ (219)	10⅜ (263)	11¼ (286)	11 (279)	5⅜ (137)	8⅛ (207)	13 (330)	17 (432)	26 (660)	⅛ (3)	3 (1.4)
8 (200)	10⅞ (276)	12½ (318)	14 (356)	13¾ (349)	7⅜ (187)	10⅛ (259)	16 (406)	22 (559)	33 (838)	⅛ (3)	5 (2.3)
10 (250)	13¼ (337)	15⅝ (397)	17 (432)	17 (432)	9⅜ (238)	13 (330)	20 (508)	27 (686)	40 (1016)	⅛ (3)	7 (3.2)
12 (300)	16 (406)	17⅞ (454)	19½ (495)	20⅜ (517)	11 (279)	16 (406)	24 (610)	33 (838)	49 (1245)	⅛ (3)	11 (5.0)
14 (350)	17⅜ (441)	19 (483)	20⅜ (517)	22⅝ (575)	12¼ (311)	17 (432)	27 (686)	36 (914)	54 (1372)	⅛ (3)	12 (5.4)
16 (400)	20⅛ (511)	21⅞ (555)	22½ (572)	25⅛ (638)	14 (356)	20 (508)	31 (787)	41 (1041)	62 (1575)	⅛ (3)	16 (7.3)
18 (450)	21¼ (540)	23¾ (603)	25 (635)	27⅝ (702)	15¾ (400)	23 (584)	35 (889)	47 (1194)	71 (1803)	⅛ (3)	20 (9.1)
20 (500)	23½ (597)	26⅝ (676)	27⅜ (695)	29⅝ (753)	17½ (445)	25 (635)	39 (991)	53 (1346)	79 (2007)	⅛ (3)	26 (11.8)
24 (600)	27⅞ (708)	30⅞ (784)	32⅞ (835)	35⅜ (899)	21¼ (540)	30 (762)	47 (1194)	63 (1600)	95 (2413)	⅛ (3)	30 (13.6)

Dimensions shown are subject to change. Contact factory for certified prints when required.

*Dimensions shown using 1/8" perf and no mesh. Open Area percentage will change with alternate perf and/or mesh. The change will equal the ratio of the open area of the perf/mesh compared to the open area of 1/8" mesh.

For Open Area percentages for perf/mesh see page

Please contact factory for further information.

SCREEN OPENINGS

SIZE	STANDARD SCREEN	MATERIALS
3/4"- 8"	1/8" Perf.	22 Gauge[1]
10"- 24"	1/8" Perf.	16 Gauge[1]

Note: Other screens and mesh liners available upon request

The Open Area % is calculated as follows:

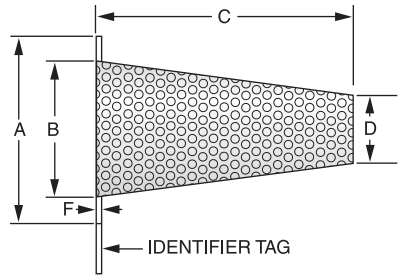
$$OA\% = \left[\frac{\text{Screen Area x Open Area \%}}{\text{Area of Sch. 40/std. pipe}}\right] \times 100$$

Note: Open Area % for 1/8" perf is 40%.

TB SERIES
TEMPORARY BASKET STRAINERS

SPECIFICATION

The strainer body shall be fabricated 304 stainless steel or other specified material. The strainer shall be the basket type with an extended identifier tag handle. The screen shall be size _____ perforated SS with _____ mesh liner. The flow shall be _____. The Strainer shall have an inlet size of _____ and Open Area Ratio of _____. The Temporary Cone Strainer shall be SSI TB Series.



BASKET TYPE (TB)

MATERIALS OF CONSTRUCTION
(304 Stainless Steel Shown *)

Ring A240-304
Handle.....A240-304
Peforated Plate A240-304
Mesh (optional) A276-304
* Other material available - consult factory

Connections: 3/4" - Custom
150#, 300#, 600#, 900# and 1500# Wafer Flat Faced Smooth Flanges are standard
Designed to fit between RF Flanges

SCREEN OPENINGS

SIZE	STANDARD SCREEN	MATERIALS
3/4"- 8"	1/8" Perf.	22 Gauge[1]
10"- 24"	1/8" Perf.	16 Gauge[1]

Note: Other screens and mesh liners available upon request

DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)*

SIZE	A				B	C				D	F[1]	Weight
	150/300#	600#	900#	1500#		100%	150%	200%	300%			
¾ (20)	2⅛ (54)	2½ (64)	2⅝ (67)	2⅝ (67)	⅝ (16)	¾ (19)	1⅛ (29)	1½ (38)	2¼ (57)	⅓ (8)	⅛ (3)	0.5 (0.2)
1 (25)	2½ (64)	2¾ (70)	3 (76)	3 (76)	¾ (19)	1⅛ (29)	1⅔ (43)	2¼ (57)	3⅜ (86)	⅜ (10)	⅛ (3)	0.5 (0.2)
1½ (40)	3¼ (83)	3⅝ (92)	3¾ (95)	3¾ (95)	1¼ (32)	1½ (38)	2¼ (57)	3 (76)	4½ (114)	⅝ (16)	⅛ (3)	0.5 (0.2)
2 (50)	4 (102)	4¼ (108)	5½ (140)	5½ (140)	1¾ (44)	2 (51)	3 (76)	4 (102)	6 (152)	⅞ (22)	⅛ (3)	0.5 (0.2)
2½ (65)	4¾ (121)	5 (127)	6⅜ (162)	6⅜ (162)	2¼ (57)	2⅛ (56)	3⅜ (86)	4½ (114)	6¾ (171)	1⅛ (29)	⅛ (3)	1 (0.5)
3 (80)	5¼ (133)	5¾ (146)	6½ (165)	6¾ (171)	2¾ (70)	2¾ (70)	4¼ (1)	5⅔ (145)	8½ (216)	1⅜ (35)	⅛ (3)	1 (0.5)
4 (100)	6¾ (171)	7½ (191)	8 (203)	8⅛ (206)	3¾ (95)	3½ (89)	5⅓ (136)	7⅛ (183)	11 (279)	1⅞ (48)	⅛ (3)	2 (0.9)
5 (125)	7⅝ (194)	9⅜ (238)	9⅝ (244)	9⅞ (251)	4⅝ (117)	4½ (114)	6¾ (171)	9⅛ (232)	14 (356)	2⅓ (59)	⅛ (3)	2 (0.9)
6 (150)	8⅝ (219)	10⅜ (263)	11¼ (286)	11 (279)	5⅜ (137)	5½ (140)	8½ (216)	11⅜ (289)	17 (432)	2⅔ (68)	⅛ (3)	3 (1.4)
8 (200)	10⅞ (276)	12½ (318)	14 (356)	13¾ (349)	7⅜ (187)	7 (178)	10⅔ (272)	15 (381)	22 (559)	3⅔ (94)	⅛ (3)	5 (2.3)
10 (250)	13¼ (337)	15⅝ (397)	17 (432)	17 (432)	9⅜ (238)	8⅝ (219)	14 (356)	18 (457)	27 (686)	4⅔ (119)	⅛ (3)	7 (3.2)
12 (300)	16 (406)	17⅞ (454)	19½ (495)	20⅜ (517)	11 (279)	10½ (267)	17 (432)	22 (559)	33 (838)	5½ (140)	⅛ (3)	11 (5.0)
14 (350)	17⅜ (441)	19 (483)	20⅜ (517)	22⅝ (575)	12¼ (311)	11½ (292)	18 (457)	24 (610)	36 (914)	6⅛ (156)	⅛ (3)	12 (5.4)
16 (400)	20⅛ (511)	21⅞ (555)	22½ (572)	25⅛ (638)	14 (356)	14 (356)	21 (533)	28 (711)	42 (1067)	7 (178)	⅛ (3)	16 (7.3)
18 (450)	21¼ (540)	23¾ (603)	25 (635)	27⅝ (702)	15¾ (400)	16 (406)	24 (610)	32 (813)	47 (1194)	7⅞ (200)	⅛ (3)	20 (9.1)
20 (500)	23½ (597)	26⅝ (676)	27⅜ (695)	29⅝ (753)	17½ (445)	17 (432)	27 (686)	35 (889)	53 (1346)	8¾ (222)	⅛ (3)	26 (11.8)
24 (600)	27⅞ (708)	30⅞ (784)	32⅞ (835)	35⅜ (899)	21¼ (540)	21 (533)	32 (813)	42 (1067)	64 (1626)	10⅝ (270)	⅛ (3)	30 (13.6)

Dimensions shown are subject to change. Contact factory for certified prints when required.

*Dimensions shown using 1/8" perf and no mesh. Open Area percentage will change with alternate perf and/or mesh. The change will equal the ratio of the open area of the perf/mesh compared to the open area of 1/8" mesh.

For Open Area percentages for perf/mesh see page

Please contact factory for further information.

The Open Area % is calculated as follows:

$$OA\% = \left[\frac{\text{Screen Area x Open Area \%}}{\text{Area of Sch. 40/std. pipe}}\right] \times 100$$

Note: Open Area % for 1/8" perf is 40%.

1. Thicker material available upon request Please contact factory.

TP SERIES
TEMPORARY PLATE STRAINERS

SPECIFICATION

The strainer body shall be fabricated 304 stainless steel or other specified material. The strainer shall be the plate type with an extended identifier tag handle. The screen shall be size _____ perforated SS with _____ mesh liner. The flow shall be _____. The Strainer shall have an inlet size of _____ and Open Area Ratio of _____. The Temporary Cone Strainer shall be SSI TP Series.

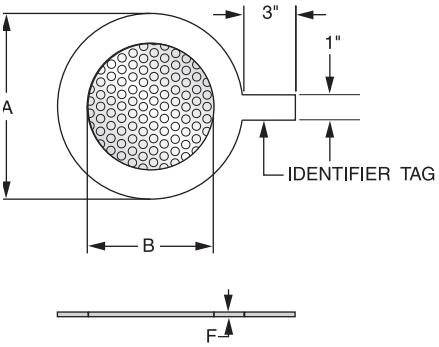


PLATE TYPE (TP)

MATERIALS OF CONSTRUCTION
(304 Stainless Steel Shown *)

Ring A240-304
Handle A240-304
Peforated Plate A240-304
Mesh (optional) A276-304

* Other material available - consult factory

Connections: 3/4" - Custom
150#, 300#, 600#, 900# and 1500# Wafer Flat Faced Smooth Flanges are standard
Designed to fit between RF Flanges

DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

SIZE	A				B	D	F[1]	Weight
	150/300#	600#	900#	1500#				
¾ (20)	2⅛ (54)	2½ (64)	2⅝ (67)	2⅝ (67)	⅝ (16)	⅛ (8)	⅛ (3)	0.5 (0.2)
1 (25)	2½ (64)	2¾ (70)	3 (76)	3 (76)	¾ (19)	⅜ (10)	⅛ (3)	0.5 (0.2)
1½ (40)	3¼ (83)	3⅝ (92)	3¾ (95)	3¾ (95)	1¼ (32)	⅝ (16)	⅛ (3)	0.5 (0.2)
2 (50)	4 (102)	4¼ (108)	5½ (140)	5½ (140)	1¾ (44)	⅞ (22)	⅛ (3)	0.5 (0.2)
2½ (65)	4¾ (121)	5 (127)	6⅜ (162)	6⅜ (162)	2¼ (57)	1⅛ (29)	⅛ (3)	1 (0.5)
3 (80)	5¼ (133)	5¾ (146)	6½ (165)	6¾ (171)	2¾ (70)	1⅜ (35)	⅛ (3)	1 (0.5)
4 (100)	6¾ (171)	7½ (191)	8 (203)	8⅛ (206)	3¾ (95)	1⅞ (48)	⅛ (3)	2 (0.9)
5 (125)	7⅝ (194)	9⅜ (238)	9⅝ (244)	9⅞ (251)	4⅝ (117)	2⅓ (59)	⅛ (3)	2 (0.9)
6 (150)	8⅝ (219)	10⅜ (263)	11¼ (286)	11 (279)	5⅜ (137)	2⅔ (68)	⅛ (3)	3 (1.4)
8 (200)	10⅞ (276)	12½ (318)	14 (356)	13¾ (349)	7⅜ (187)	3⅔ (94)	⅛ (3)	5 (2.3)
10 (250)	13¼ (337)	15⅝ (397)	17 (432)	17 (432)	9⅜ (238)	4⅔ (119)	⅛ (3)	7 (3.2)
12 (300)	16 (406)	17⅞ (454)	19½ (495)	20⅜ (517)	11 (279)	5½ (140)	⅛ (3)	11 (5.0)
14 (350)	17⅜ (441)	19 (483)	20⅜ (517)	22⅝ (575)	12¼ (311)	6⅛ (156)	⅛ (3)	12 (5.4)
16 (400)	20⅛ (511)	21⅞ (555)	22½ (572)	25⅛ (638)	14 (356)	7 (178)	⅛ (3)	16 (7.3)
18 (450)	21¼ (540)	23¾ (603)	25 (635)	27⅝ (702)	15¾ (400)	7⅞ (200)	⅛ (3)	20 (9.1)
20 (500)	23½ (597)	26⅝ (676)	27⅜ (695)	29⅝ (753)	17½ (445)	8¾ (222)	⅛ (3)	26 (11.8)
24 (600)	27⅞ (708)	30⅞ (784)	32⅞ (835)	35⅜ (899)	21¼ (540)	10⅝ (270)	⅛ (3)	30 (13.6)

Dimensions shown are subject to change. Contact factory for certified prints when required.

SCREEN OPENINGS

SIZE	STANDARD SCREEN	MATERIALS
3/4"- 8"	1/8" Perf.	22 Gauge[1]
10"- 24"	1/8" Perf.	16 Gauge[1]

Note: Other screens and mesh liners available upon request

The Open Area % is calculated as follows:

$$OA\% = \left[\frac{\text{Screen Area x Open Area \%}}{\text{Area of Sch. 40/std. pipe}}\right] \times 100$$

Note: Open Area % for 1/8" perf is 40%.

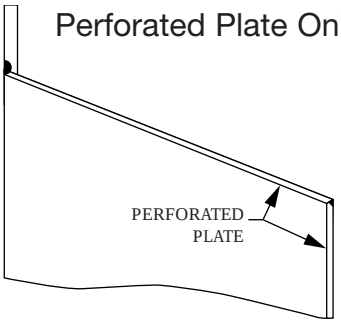
1. Thicker material available upon request Please contact factory.

SSI Fabricated

TC, TB AND TP SERIES
TEMPORARY STRAINERS
STANDARD CONSTRUCTION DETAILS

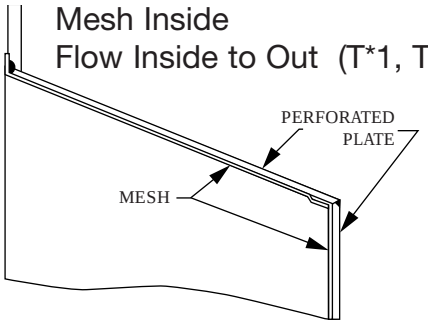
NO MESH

Perforated Plate Only (All)

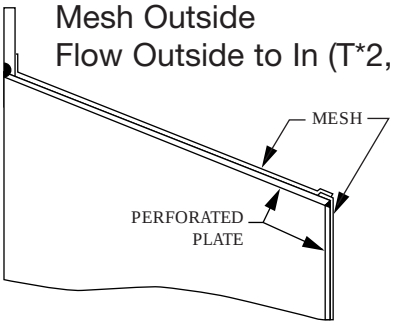


MESH LINED

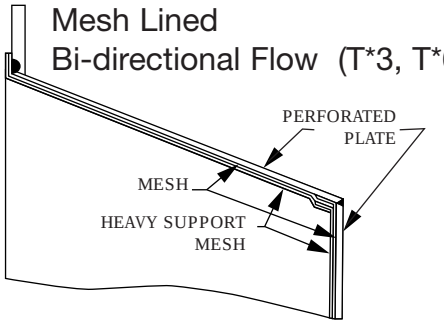
Mesh Inside
Flow Inside to Out (T*1, T*4, T*7, T*A)



Mesh Outside
Flow Outside to In (T*2, T*5, T*8, T*B)



Mesh Lined
Bi-directional Flow (T*3, T*6, T*9, T*C)



* TC - Temporary Cone
TB - Temporary Basket
TP - Temporary Plate (Only TP1, TP2, TP3)

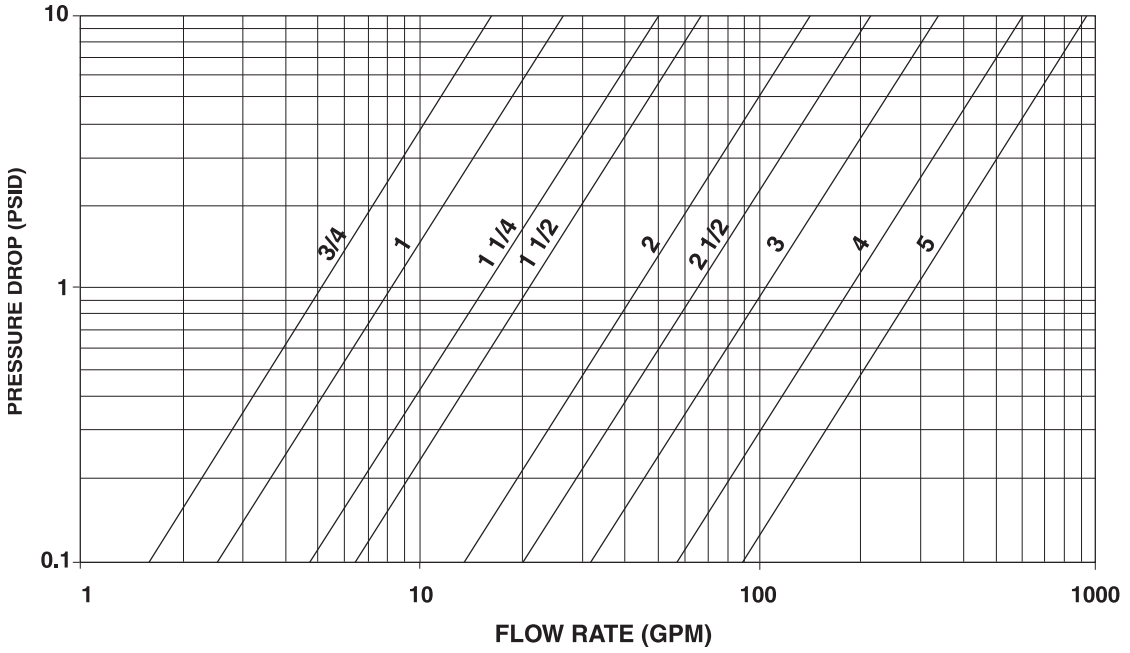
TC, TB AND TP SERIES

TEMPORARY STRAINERS

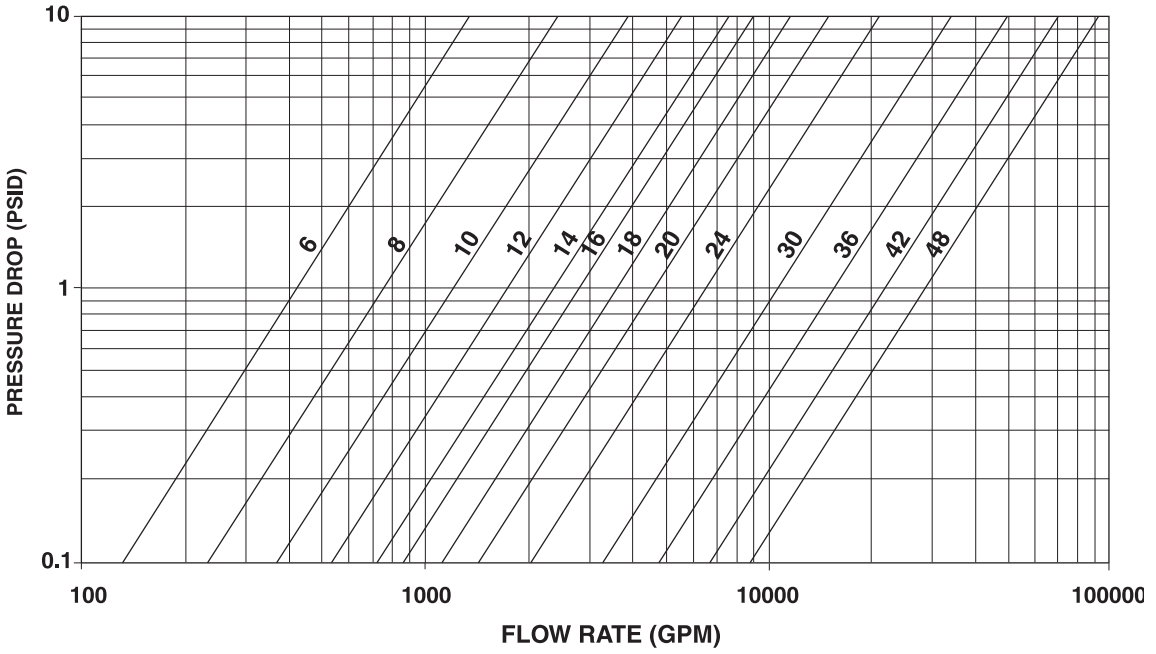
PRESSURE DROP VS FLOW RATE

Water Service Clean Screen, 1/32" - 1/4" perforator Screen*

(SIZES 3/4" - 5")



(SIZES 6" - 48")



* For Gas, Steam or Air Service, consult factory.

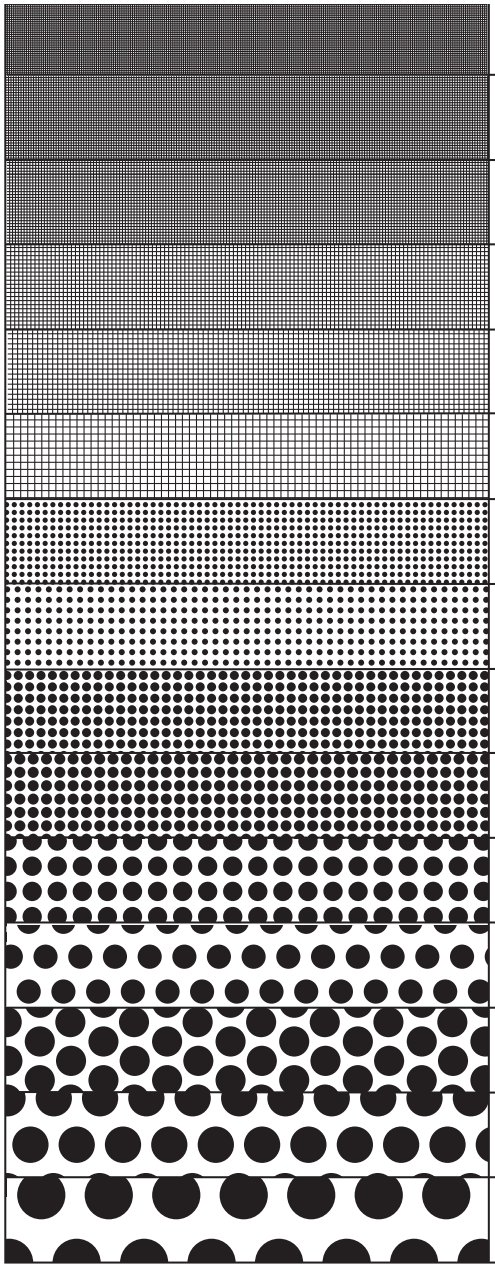
Correction Factors for Other Viscous Liquids and/or Mesh Liners
Page 10

Correction Factors for Clogged Screens
Page 10

SSI Fabricated

Temporary Strainer Technical Information

SCREEN OPENINGS



100 Mesh - 30% O.A. 0.006” Openings
80 Mesh - 36% O.A. 0.008” Openings
60 Mesh - 38% O.A. 0.010” Openings
40 Mesh - 41% O.A. 0.016” Openings
30 Mesh - 45% O.A. 0.022” Openings
20 Mesh - 49% O.A. 0.035” Openings
0.027” Dia.- 23% O.A.
0.033” Dia.- 28% O.A.
3/64” Dia.- 36% O.A.
1/16” Dia.- 37% O.A.
3/32” Dia.- 39% O.A.
1/8” Dia.- 40% O.A.
5/32” Dia.- 58% O.A.
3/16” Dia.- 50% O.A.
1/4” Dia.- 40% O.A.

FACTORS TO CONSIDER

1 Purpose

If the strainer is being used for protection rather than direct filtration, standard screens will suffice in most applications.

2 Service

With services that require extremely sturdy screens, such as high pressure/temperature applications or services with high viscosities, perforated screens without mesh liners are recommended. If a mesh liner is required to obtain a certain level of filtration, then a trapped perf/mesh/perf combination is recommended.

3 Filtration Level

When choosing a perf. or a mesh/perf. combination, attention should be given to ensure overstraining does not occur. As a general rule, the specified level of filtration should be no smaller than half the size of the particle to be removed. If too fine a filtration is specified, the pressure drop through the strainer will increase very rapidly, possibly causing damage to the screen.

Screen openings other than those shown above are readily available. Various mesh sizes as fine as 5 micron and perforated plate as coarse as 1/2” Dia. are in inventory.

Screens are available in a wide range of materials. Screens of carbon steel, stainless steel (304, 316), alloy 20, monel 400, hastelloy C and titanium grade 2 are in inventory.

Custom manufactured screens are available upon request. Please consult factory.

TEMPORARY STRAINER

PRESSURE DROP CORRECTION FACTORS

Mesh Lined Baskets and/or Fluids with a Viscosity other than Water

Centistokes	SSU	Unlined Perforated Basket	20 Mesh Lined Basket	40 Mesh Lined Basket	60 Mesh Lined Basket	80 Mesh Lined Basket	100 Mesh Lined Basket	200 Mesh Lined Basket
2	30 (water)	1	1.05	1.2	1.4	1.6	1.7	2
100	500	1.6	1.7	1.9	2.1	2.4	2.6	3.1
216	1000	1.7	2	2.2	2.4	2.6	2.8	3.3
433	2000	1.9	2.2	2.4	2.7	2.9	3.2	3.8
650	3000	2	2.3	2.6	2.9	3.2	3.5	4.1
1083	5000	2.2	2.6	3	3.5	4	4.5	5.3
2200	10000	2.5	3	3.5	4.2	5	6	7.1

1. Obtain water pressure drop from graphs on appropiate product page.
2. Multiply the pressure drop obtained from (1) by the specific gravity of the liquid.
3. Multiply the pressure drop from (2) by the appropiate correction factor for the mesh liner and/or viscosity.

Example

Model: **TCIVMIW-A44**
Size: **4"**
Filtration: **1/8" perforated screen 40 Mesh lines**
Flow rate: **200 GPM**
Fluid: **Water**
SG: **1**
Viscosity: **30 SSI**

Answer

A) From Pressure Drop Chart, pressure drop of water is 1.25 psid
B) Multiply by specific gravity; 1.25 x 1 = 1.25 psid
C) From chart above, multiply 1.25 x 1.2 (correction factor) = 1.5 psid

CORRECTION FACTORS FOR CLOGGED SCREENS

% Clogged	Ratio of Free Screen Area to Pipe Area						
	10:1	8:1	6:1	4:1	3:1	2:1	1:1
10							3.15
20						1.15	3.9
30						1.4	5
40						1.8	6.65
50					1.25	2.5	9.45
60				1.15	1.8	3.7	14.5
70				1.75	2.95	6.4	26
80		1.1	1.75	3.6	6.25	14	58
90	2.3	3.45	6	13.5	24	55	

* Multiply values obtained from Pressure Drop Charts by the appropriate values shown below.

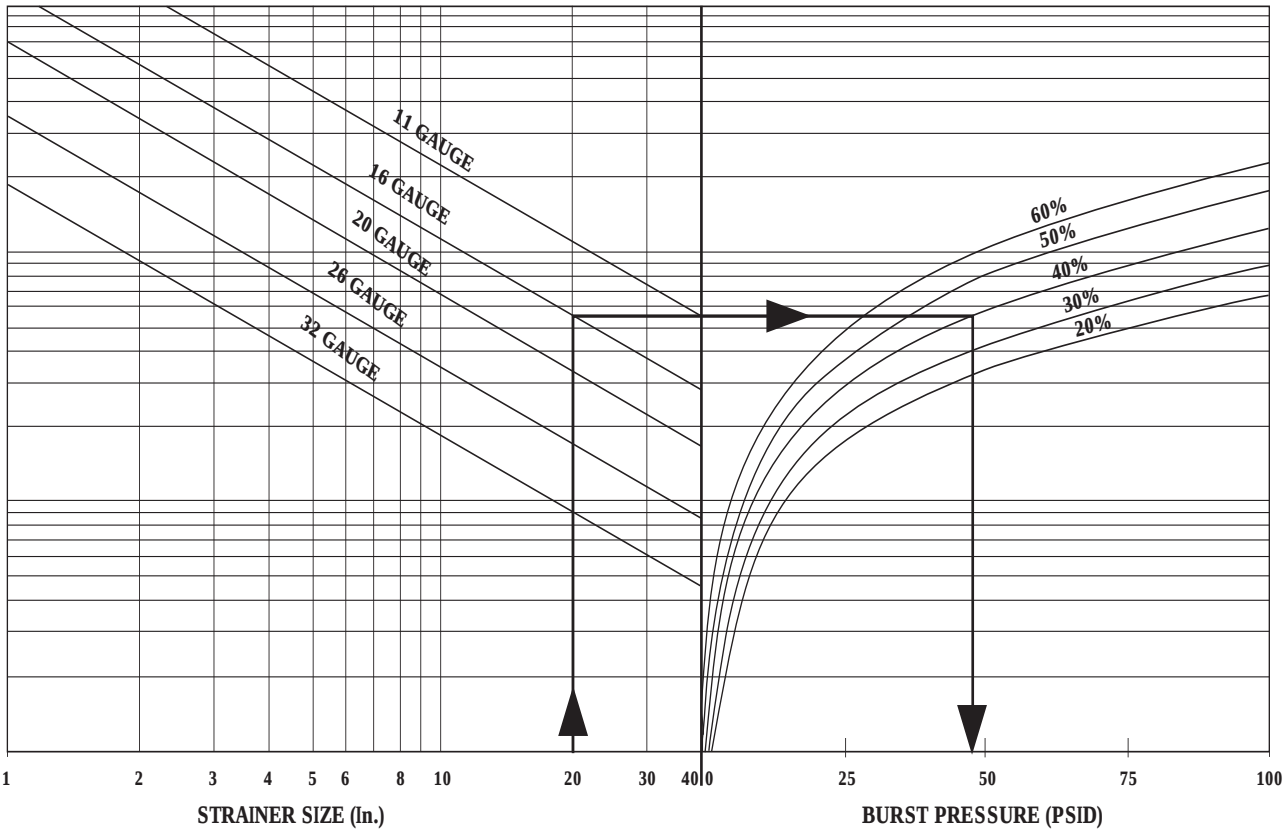
Example

Strainer Size: **6"**
Model: **TCIVPIW-A4A**
Filtration: **1/8" Perf.**
Flow rate: **200 GPM**
Service: **Water**
% Clogged: **60%**

Answer

A) The Pressure Drop Chart indicates a drop of .13 psid with standard screen.
B) The Effective Area of TCI is 100% or 1:1.
C) Using Chart above we read the correction factor of 1:1 to be 14.5 at 60% clogged.
D) Total pressure drop equals .13 x 14.5 = 1.885 psid.

TC SERIES
TEMPORARY STRAINER
BURST PRESSURE



Notes:

1. The above chart is to be used for strainers manufactured from perforated plate and is based on the formula:

$$P = \frac{2St \cos \theta}{D + 1.2t \cos \theta}$$

SOURCE: ASME Section VIII, Div. 1., Appendix 1.

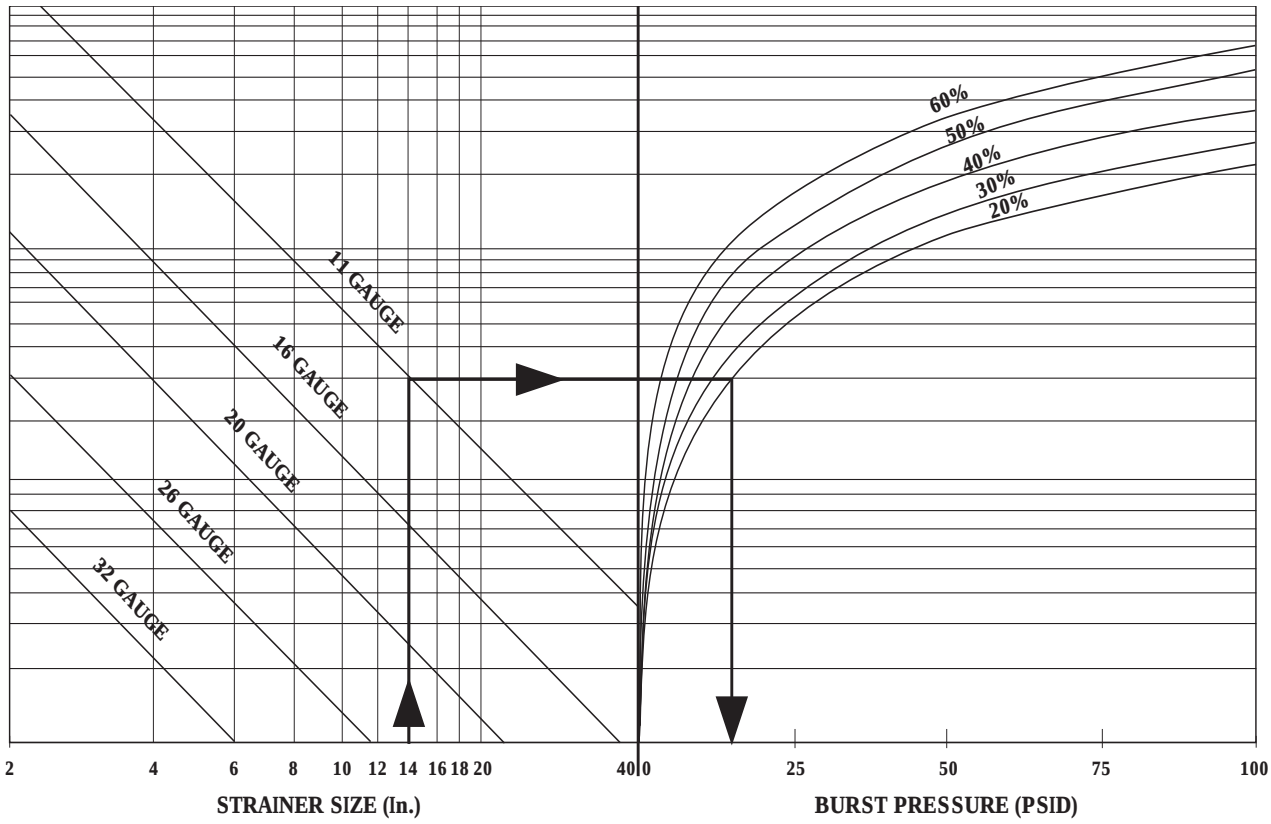
P = Burst Pressure, psi.
S = Reduced allowable stress
t = Thickness of perforated plate, in.
D = Dimension B - *See page 3* , in.
θ = 15 degree

2. The above chart is based on standard dimensions. Higher burst pressure ratings are available. Please contact factory.
3. The above chart is based on a screen material of stainless steel. No safety factor is incorporated. It is the responsibility of the user to determine an acceptable safety factor.
4. See Screen Openings Chart for % Open Area's of inventoried perforated plate.

Example:	
Strainer Size:	20"
Screen Thickness:	16 gauge
Screen Material Open Area:	40%

A) Locate Strainer size.
B) Follow vertical line to gauge thickness.
C) Follow horizontal line to required perforation open area.
D) Follow vertical line downward to read burst pressure.
E) Burst pressure equals 48 psid.

TB SERIES
TEMPORARY STRAINER
BURST PRESSURE



Notes:

1. The above chart is to be used for strainers manufactured from perforated plate and is based on the formula:

$$t = d\sqrt{\frac{0.3P}{S}}$$

SOURCE: ASME Section VIII, Div. 1., UG-34.

t = Thickness of perforated plate, in.
d = Dimension B - *See page 4* , in.
P = Burst Pressure, psi
S = Reduced allowable stress, psi

2. The above chart is based on standard dimensions. Higher burst pressure ratings are available. Please contact factory.
3. The above chart is based on a screen material of stainless steel. No safety factor is incorporated. It is the responsibility of the user to determine an acceptable safety factor.
4. See Screen Openings Chart for % Open Area's of inventoried perforated plate.

Example:	
Strainer Size:	14"
Screen Thickness:	11 gauge
Screen Material Open Area:	20%

A) Locate Strainer size.
B) Follow vertical line to gauge thickness.
C) Follow horizontal line to required perforation open area.
D) Follow vertical line downward to read burst pressure.
E) Burst pressure equals 15 psid.

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