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GRUVLOK®

Stainless Steel

BUILDING CONNECTIONS THAT LAST

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Gruvlok® Figure 7400SS Rigidlite® Coupling

The Gruvlok Figure 7400SS Rigidlite Coupling is available in 1¼" - 8" sizes. The standard material is ASTM A743 CF8M (Type 316) Cast Stainless Steel which is ideal for corrosive environments.

Any Gruvlok gasket material may be utilized in the 7400SS coupling for a broad array of applications. Gasket properties are as designated in accordance with ASTM D2000. The 7400SS is provided with hex head Type 316, Class 1 Stainless Steel bolts and heavy stainless steel Nuts. This bolt and nut combination minimizes the chances of stress corrosion cracking.

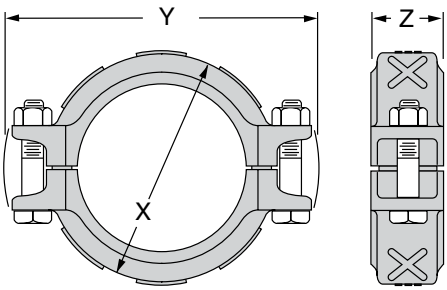


FIGURE 7400SS COUPLING

Nominal Size	O.D.	Max. Wk. Pressure	Max. End Load†	Range of Pipe End Separation	Coupling Dimensions			Coupling Bolts*		Specified Torque		Approx. Wt. Ea.
					X	Y	Z	Qty.	Size	Min.	Max.	
In./DN(mm)	*In./mm*	*PSI/bar*	*Lbs./kN*	*In./mm*	*In./mm*	*In./mm*	*In./mm*		*In.*	*Ft.-Lbs.*		*Lbs./Kg*
1¼	1.660	300	649	0-1/32	2⅞	4⅛	1¾	2	⅜ x 2¼	15	20	1.6
32	*42.4*	*20.7*	*2.89*	*0-0.79*	*73*	*105*	*44*					*0.7*
1½	1.900	300	851	0-1/32	3⅛	4⅝	1¾	2	⅜ x 2¼	15	20	1.7
40	*48.3*	*20.7*	*3.78*	*0-0.79*	*79*	*117*	*44*					*0.8*
2	2.375	300	1,329	0-1/32	3⅝	5⅜	1¾	2	⅜ x 2¼	15	20	2.1
50	*60.3*	*20.7*	*5.91*	*0-0.79*	*92*	*137*	*44*					*1.0*
2½	2.875	300	1,948	0-1/32	4⅛	5⅞	1¾	2	⅜ x 2¼	15	20	2.3
65	*73.0*	*20.7*	*8.66*	*0-0.79*	*105*	*149*	*44*					*1.0*
3	3.500	300	2,886	0-1/32	4⅝	6⅝	1¾	2	½ x 2¾	50	60	3.1
80	*88.9*	*20.7*	*12.84*	*0-0.79*	*117*	*168*	*44*					*1.4*
4	4.500	300	4,771	0-3/32	6	7¾	1⅞	2	½ x 2¾	50	60	4.4
100	*114.3*	*20.7*	*21.22*	*0-2.38*	*152*	*197*	*48*					*2.0*
6	6.625	275	9,480	0-3/32	8⅛	11⅛	2	2	¾ x 3	80	100	7.8
150	*168.3*	*19.0*	*42.17*	*0-2.38*	*206*	*283*	*51*					*3.5*
8	8.625	275	16,067	0-3/32	10⅜	13⅝	2⅜	2	¾ x 3	80	100	13.2
200	*219.1*	*19.0*	*71.47*	*0-2.38*	*264*	*346*	*60*					*6.0*

* Bolts are hex head design Type 316 Grade B8M Class 1 Stainless Steel to ASTM A193, with Type 316 Grade 8M Stainless Steel heavy hex nuts conforming to ASTM A194. Use of suitable anti-galling thread compound is recommended.

† Ratings apply when used with Schedule 40 ASTM A312 Type 304 and Type 316 Stainless Steel pipe for all sizes.

Range of Pipe End Seperation values are for roll grooved pipe and may not be doubled for cut groove pipe.

Caution: Contact your Anvil Representative for corrosive application environments.

No coating or zinc options.

Gruvlok® Coupling & Flange Working Pressure Ratings (PSI)

The following are pressure ratings for Gruvlok Stainless Steel Piping Systems. The ratings for Schedule 10S pipe are based upon the use of roll-groover roll sets that have been specifically designed for use on Schedule 10 Stainless Steel pipe. Using roll sets that were designed for roll grooving standard wall pipe may significantly reduce the pressure ratings that can be obtained. The Model 1007/3007 roll groovers require the use of the optional Schedule 10 roll set to groove Schedule 5S and 10S. For grooving Schedule 40S on the Model 1007/3007 roll groovers, the standard steel roll grooving set should be used.

GRUVLOK COUPLING & FLANGE WORKING PRESSURE RATINGS (PSI)
ON 304 AND 316 STAINLESS STEEL ROLL GROOVED PIPE

Nominal Pipe Size	Pipe O.D.	Nominal Wall Thickness	Pipe Schedule Number	Coupling and Flanges									
				Fig. 7000 Lightweight	Fig. 7001 Standard	Fig. 7003 Hingelok	Fig. 7004 HPR	Fig. 7010* Reducing	Fig. 7012 Flange	Fig. 7013 Flange	Fig. 7400 Rigidlite	Fig. 7401 Rigidlok	Fig. 7400SS Coupling
In./DN(mm)	*In./mm*	*Inches*	–	*PSI*									
1 *25*	1.315 *33.4*	0.065	5S	400	400	–	–	–	–	–	300	–	–
		0.109	10S	400	500	–	–	–	–	–	300	–	–
		0.133	40	500	750	–	–	–	–	–	300	–	–
1¼ *32*	1.660 *42.4*	0.065	5S	400	400	–	–	–	–	–	300	–	275
		0.109	10S	500	500	–	–	–	–	–	300	–	300
		0.140	40	500	750	–	–	–	–	–	300	–	300
1½ *40*	1.900 *48.3*	0.065	5S	400	400	275	–	–	–	–	300	400	275
		0.109	10S	500	500	300	–	–	–	–	300	500	300
		0.145	40	500	750	300	–	–	–	–	300	750	300
2 *50*	2.375 *60.3*	0.065	5S	250	325	250	325	250	250	275	250	325	275
		0.109	10S	500	500	300	500	500	300	300	300	500	300
		0.154	40	500	750	300	750	500	300	300	300	750	300
2½ *65*	2.875 *73.0*	0.083	5S	250	325	250	325	250	250	275	250	325	200
		0.120	10S	500	500	300	500	500	300	300	300	500	300
		0.203	40	500	750	300	750	500	300	300	300	750	300
3 *80*	3.500 *88.9*	0.083	5S	250	325	250	325	250	250	275	250	325	200
		0.120	10S	500	500	300	500	500	300	300	300	500	300
		0.216	40	500	750	300	750	500	300	300	300	750	300
4 *100*	4.500 *114.3*	0.083	5S	200	250	200	250	200	200	250	200	250	200
		0.120	10S	300	400	300	400	300	300	300	300	400	300
		0.237	40	500	750	300	750	500	300	300	300	750	300
5 *125*	5.563 *141.3*	0.109	5S	125	200	125	200	125	125	200	125	200	–
		0.134	10S	200	300	200	300	200	200	300	200	300	–
		0.258	40	300	500	300	500	300	300	300	300	500	–
6 *150*	6.625 *168.3*	0.109	5S	75	125	75	125	75	75	125	75	125	125
		0.134	10S	200	200	200	200	200	200	200	200	200	250
		0.280	40	300	500	300	500	300	300	300	300	500	275
8 *200*	8.625 *219.1*	0.109	5S	50	75	50	75	50	50	75	50	75	75
		0.148	10S	150	200	150	200	150	150	200	150	200	150
		0.322	40	300	400	300	400	300	300	300	300	400	275
10 *250*	10.750 *273.0*	0.134	5S	–	50	–	50	–	50	50	–	50	–
		0.165	10S	–	100	–	100	–	100	100	–	100	–
		0.365	40	–	400	–	400	–	300	300	–	400	–
12 *300*	12.750 *323.9*	0.156	5S	–	75	–	75	–	50	75	–	75	–
		0.180	10S	–	125	–	125	–	100	125	–	125	–
		0.375	40	–	400	–	400	–	300	300	–	400	–

Notes:
1) Pressure ratings based on ASTM A312 Type 304 stainless steel pipe or equivalent.
2) Failure to use Rollers specifically designed for Stainless Steel Pipe may significantly reduce pressure retention capabilities.
3) Pressure ratings on cut grooved pipe meet or exceed the schedule 40 pressure ratings listed above. For information regarding higher ratings contact Anvil.
4) * For pressure ratings on Figure 7010 Reducing Couplings use larger pipe size.
5) For pressure ratings for the reducing tees, concentric reducers and eccentric reducers, use the rating of the weakest end.

Gruvlok® Stainless Steel Fittings

Anvil offers two different sets of stainless steel fittings. The Gruvlok A Series Fittings have full flow designs formed from type 304SS pipe. The Schedule 10 fittings are fabricated from segmentally welded 316SS unless otherwise noted and are also available as Schedule 40 and/or Type 304SS.

Gruvlok A Series Stainless Steel Fittings are full flow design with ends grooved to Gruvlok specifications. The A Series standard material is formed from Type 304 Stainless Steel. The A Series Fittings are annealed after forming and grooving to provide increased corrosion resistance. Gruvlok A Series Stainless Steel 45˚ and 90˚ elbows and tees have compact center-to-end dimensions which make installation quick and easy with the Gruvlok Figure 7400SS Coupling, or other Gruvlok products.

Pressure Rating for the Gruvlok A Series Stainless Steel Fittings:

The following are pressure ratings for the Gruvlok A Series Stainless Steel Fittings. The pressure rating for the Reducing Tees and Concentric Reducers should be based upon the rating of the weakest end.

A SERIES SS FITTING PRESSURE RATINGS										
Sizes	1¼"	1½"	2"	2½"	3"	4"	6"	8"	10"	12"
Pressure (psi)	500	500	500	500	500	500	400	250	100	200

FIG. A7050SS
90° Stainless Steel Elbow
Type 304

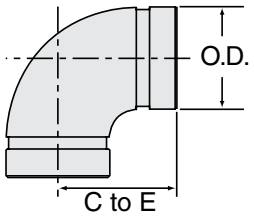


FIGURE A7050SS
90° STAINLESS STEEL ELBOW

Nominal Size	Center to End*	Approx. Wt. Ea.
In./DN(mm)	In./mm	Lbs./Kg
1¼ 32	2 13/16 71.44	0.8 0.4
1½ 40	3 76.20	1.0 0.5
2 50	3 11/16 93.66	1.3 0.6
2½ 65	4 5/16 109.54	1.8 0.8
3 80	5 1/16 128.59	2.9 1.3
4 100	6 5/16 160.34	4.6 2.1
5 125	7 1/2 190.50	8.3 3.7
6 150	9 228.60	11.2 5.1
8 200	12 304.80	22.7 10.3
10 250	15 381.00	35.3 16.0
12 300	18 457.20	56.9 25.8

FIG. A7051SS
45° Stainless Steel Elbow
Type 304

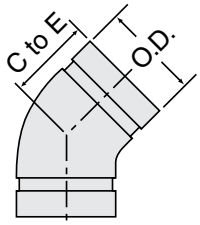


FIGURE A7051SS
45° STAINLESS STEEL ELBOW

Nominal Size	Center to End*	Approx. Wt. Ea.
In./DN(mm)	In./mm	Lbs./Kg
1¼ 32	1¾ 44.45	0.4 0.2
1½ 40	1 7/8 47.63	0.5 0.2
2 50	2 1/8 53.98	0.7 0.3
2½ 65	2 3/8 60.33	0.9 0.4
3 80	2 13/16 71.44	1.5 0.7
4 100	3 5/16 84.14	2.4 1.1
5 125	3 7/8 98.43	4.4 2.0
6 150	4 1/2 114.30	6.0 2.7
8 200	5 7/8 149.23	11.7 5.3
10 250	7 1/8 180.98	17.6 8.0
12 300	8 5/8 219.08	27.6 12.5

FIG. A7060SS
Stainless Steel Tee
Type 304

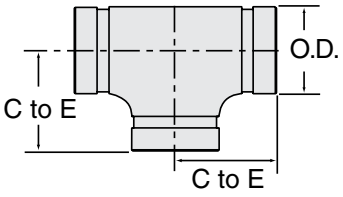


FIGURE A7060SS
STAINLESS STEEL TEE

Nominal Size	Center to End*	Approx. Wt. Ea.
In./DN(mm)	In./mm	Lbs./Kg
1¼ 32	2¾ 69.85	1.1 0.5
1½ 40	2 15/16 74.61	1.3 0.6
2 50	3 3/16 80.96	3.2 1.5
2½ 65	3 11/16 93.66	4.4 2.0
3 80	4 101.60	5.8 2.6
4 100	4 15/16 125.41	8.6 3.9
5 125	5¾ 146.05	14.5 6.6
6 150	6½ 165.10	18.5 8.4
8 200	8 1/16 204.79	25.5 11.6
10 250	9½ 241.30	36.5 16.6
12 300	11 279.40	64.5 29.3

FIG. A7074SS
Stainless Steel Cap
Type 304

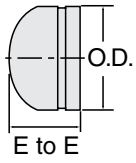


FIGURE A7074SS
STAINLESS STEEL CAP

Nominal Size	End to End*	Approx. Wt. Ea.
In./DN(mm)	In./mm	Lbs./Kg
1¼ 32	1¾ 44.45	0.4 0.2
1½ 40	1¾ 44.45	0.4 0.2
2 50	2 50.80	0.4 0.2
2½ 65	2 3/16 55.56	0.9 0.4
3 80	2 9/16 65.09	1.1 0.5
4 100	2 15/16 74.61	1.5 0.7
5 125	3 1/8 79.38	2.5 1.1
6 150	3 9/16 90.49	3.1 1.4
8 200	4 101.60	6.6 3.0
10 250	5 127.00	9.9 4.5
12 300	6 152.40	15.2 6.9

Notes: 1) *Dimensions may differ from those shown above. Contact an Anvil Representative for more information.
2) For A Series 304 SS pressure ratings refer to the chart on page 4.

FIG. A7061SS

Stainless Steel Reducing Tee
Type 304

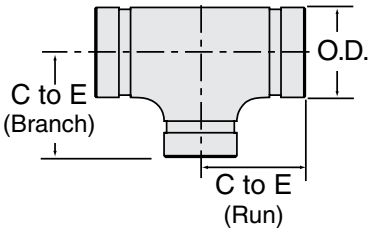


FIGURE A7061SS
STAINLESS STEEL REDUCING TEE

Nominal Size	Center to End (Run)	Center to End (Branch)	Approx. Wt. Ea.
In./DN(mm)	*In./mm*	*In./mm*	*Lbs./Kg*
1½ x 1¼ *40 x 32*	2 15/16 *74.61*	2¾ *69.85*	1.3 *0.6*
2 x 1¼ *50 x 32*	3 3/16 *80.96*	2 15/16 *74.61*	1.8 *0.8*
2 x 1½ *50 x 40*	3 3/16 *80.96*	3 1/16 *77.79*	1.8 *0.8*
2½ x 1½ *65 x 40*	3 11/16 *93.66*	3 5/16 *84.14*	2.7 *1.2*
2½ x 2 *65 x 50*	3 11/16 *93.66*	3 9/16 *90.49*	2.7 *1.2*
3 x 1½ *80 x 40*	4 *101.60*	3 9/16 *90.49*	3.1 *1.4*
3 x 2 *80 x 50*	4 *101.60*	3 11/16 *93.66*	5.1 *2.3*
3 x 2½ *80 x 65*	4 *101.60*	3 7/8 *98.43*	5.4 *2.4*
4 x 2 *100 x 50*	4 15/16 *125.41*	4 5/16 *109.54*	8.0 *3.6*
4 x 2½ *100 x 65*	4 15/16 *125.41*	4 5/8 *117.48*	5.3 *2.4*
4 x 3 *100 x 80*	4 15/16 *125.41*	4¾ *120.65*	8.6 *3.9*
6 x 3 *150 x 80*	6½ *165.10*	5 13/16 *147.64*	16.8 *7.6*
6 x 4 *150 x 100*	6½ *165.10*	6 *152.40*	16.8 *7.6*
8 x 4 *200 x 100*	8 1/16 *204.79*	7 3/16 *182.56*	29.7 *13.4*
8 x 6 *200 x 150*	8 1/16 *204.79*	7 11/16 *195.26*	33.4 *15.1*
10 x 6 *250 x 150*	9½ *241.30*	8 7/8 *255.43*	21.6 *9.8*
10 x 8 *250 x 200*	9½ *241.30*	9 1/16 *230.19*	32.2 *14.6*
12 x 8 *300 x 200*	11 *279.40*	10 1/16 *255.59*	47.2 *21.4*
12 x 10 *300 x 250*	11 *279.40*	10 9/16 *268.29*	62.5 *28.3*

FIG. A7072SS

Stainless Steel Concentric Reducer
Type 304

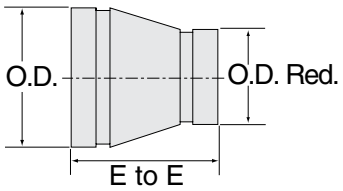


FIGURE A7072SS
STAINLESS STEEL CONCENTRIC REDUCER

Nominal Size	End to End*	Approx. Wt. Ea.
In./DN(mm)	*In./mm*	*Lbs./Kg*
1½ x 1¼ *40 x 32*	3¾ *95.25*	0.4 *0.2*
2 x 1¼ *50 x 32*	4 1/8 *104.78*	0.7 *0.3*
2 x 1½ *50 x 40*	4 1/8 *104.78*	0.7 *0.3*
2½ x 1½ *65 x 40*	4 7/16 *112.71*	1.1 *0.5*
2½ x 2 *65 x 50*	4 7/16 *112.71*	1.1 *0.5*
3 x 1½ *80 x 40*	4¾ *120.65*	1.3 *0.6*
3 x 2 *80 x 50*	4¾ *120.65*	1.3 *0.6*
3 x 2½ *80 x 65*	4¾ *120.65*	1.3 *0.6*
4 x 2 *100 x 50*	5 5/16 *134.94*	1.8 *0.8*
4 x 2½ *100 x 65*	5 5/16 *134.94*	1.8 *0.8*
4 x 3 *100 x 80*	5 5/16 *134.94*	2.0 *0.9*
6 x 3 *150 x 80*	6¾ *171.45*	3.8 *1.7*
6 x 4 *150 x 100*	6¾ *171.45*	4.0 *1.8*
8 x 4 *200 x 100*	7 9/16 *192.09*	6.6 *3.0*
8 x 6 *200 x 150*	7 9/16 *192.09*	7.3 *3.3*
10 x 6 *250 x 150*	8 11/16 *220.66*	9.7 *4.4*
10 x 8 *250 x 200*	8 11/16 *220.66*	10.6 *4.8*
12 x 8 *300 x 200*	9 7/16 *239.71*	15.0 *6.8*
12 x 10 *300 x 250*	9 7/16 *239.71*	15.9 *7.2*

Notes: 1) *Dimensions may differ from those shown above. Contact an Anvil Representative for more information.
2) For A Series 304 SS pressure ratings refer to the chart on page 4.
3) The pressure rating for the reducing tees and concentric reducers is based upon the rating of the weakest end.

Gruvlok® Stainless Steel Fittings
Type 316SS

Gruvlok Schedule 10 Stainless Steel Fittings are segmentally welded with ends grooved to Gruvlok specifications. The standard material is 316 Stainless Steel unless otherwise noted with 304SS and/or Schedule 40 optional. Installation is quick and easy with the Gruvlok Figure 7400SS Coupling, or other Gruvlok product.

FIG. 7050SS

90° Stainless Steel Elbow
Type 316

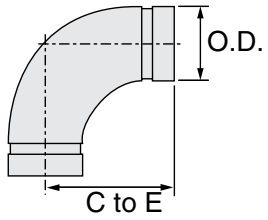


FIGURE 7050SS 90° STAINLESS STEEL ELBOW		
Nominal Size	Center to End*	Approx. Wt. Ea.
In./DN(mm)	*In./mm*	*Lbs./Kg*
1¼ *32*	3⅝ *98*	1.2 *0.5*
1½ *40*	4¼ *108*	1.4 *0.6*
2 *50*	4⅜ *111*	2.3 *1.0*
2½ *65*	5¾ *146*	3.3 *1.5*
3 *80*	5⅞ *149*	4.6 *2.1*
4 *100*	7½ *191*	7.9 *3.6*
6 *150*	10¾ *273*	17.0 *7.7*
8 *200*	15 *381*	29.4 *13.4*
10 *250*	18 *457*	41.8 *18.9*
12 *300*	21 *533*	46.5 *21.1*

FIG. 7051SS

45° Stainless Steel Elbow
Type 316

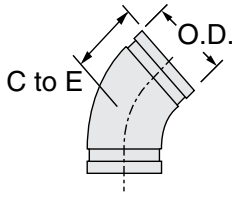


FIGURE 7051SS 45° STAINLESS STEEL ELBOW		
Nominal Size	Center to End*	Approx. Wt. Ea.
In./DN(mm)	*In./mm*	*Lbs./Kg*
1¼ *32*	2½ *64*	0.7 *0.3*
1½ *40*	2½ *64*	0.9 *0.4*
2 *50*	2½ *64*	1.5 *0.7*
2½ *65*	3 *76*	1.9 *0.9*
3 *80*	3⅜ *86*	3.3 *1.5*
4 *100*	4 *102*	5.4 *2.4*
6 *150*	5½ *140*	11.2 *5.1*
8 *200*	7¼ *184*	19.8 *9.0*
10 *250*	8½ *216*	21.0 *9.5*
12 *300*	10 *254*	23.0 *10.4*

FIG. 7060SS

Stainless Steel Tee
Type 316

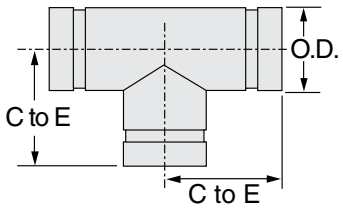


FIGURE 7060SS STAINLESS STEEL TEE		
Nominal Size	Center to End*	Approx. Wt. Ea.
In./DN(mm)	*In./mm*	*Lbs./Kg*
1¼ *32*	2¾ *70*	1.5 *0.7*
1½ *40*	2¾ *70*	1.8 *0.8*
2 *50*	3¼ *83*	2.4 *1.1*
2½ *65*	3¾ *95*	4.0 *1.8*
3 *80*	4¼ *108*	5.8 *2.6*
4 *100*	5 *127*	10.3 *4.7*
6 *150*	6½ *165*	25.7 *11.7*
8 *200*	7¾ *197*	41.1 *18.6*
10 *250*	9 *229*	36.0 *16.3*
12 *300*	10 *254*	48.4 *22.0*

Notes: 1) *Dimensions may differ from those shown above. Contact an Anvil Representative for more information.
2) Fabricated fittings weights are based on Schedule 10 pipe.
3) Fabricated Schedule 10, 316SS and Schedule 40 Center to End dimensions are the same.
4) The pressure rating for the Gruvlok Schedule 10 Stainless Steel Fittings are equal to the pressure rating of the coupling used on Schedule 10 pipe as shown in the Working Pressure Ratings Chart for Stainless Steel Roll Grooved Pipe on page 3.

Gruvlok® Stainless Steel Fittings
Type 316SS

FIG. 7074SS

Stainless Steel Cap
Type 316

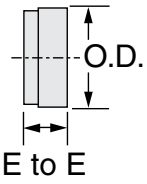


FIGURE 7074SS
STAINLESS STEEL CAP

Nominal Size	End to End*	Approx. Wt. Ea.
In./DN(mm)	*In./mm*	*Lbs./Kg*
1¼ *32*	1⅝ *41*	0.4 *0.2*
1½ *40*	1⅝ *41*	0.5 *0.2*
2 *50*	1⅝ *41*	0.8 *0.4*
2½ *65*	1¾ *45*	1.1 *0.5*
3 *80*	1¾ *45*	1.6 *0.7*
4 *100*	1¾ *45*	2.8 *1.3*
6 *150*	1⅞ *48*	3.7 *1.7*
8 *200*	2¼ *57*	8.8 *4.0*
10 *250*	2¼ *57*	12.1 *5.5*
12 *300*	2¼ *57*	17.3 *7.8*

FIG. 7061SS

Stainless Steel Reducing Tee
Type 316

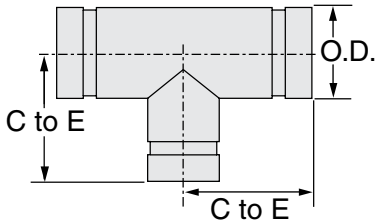


FIGURE 7061SS
STAINLESS STEEL REDUCING TEE

Nominal Size	Center to End*	Approx. Wt. Ea.
In./DN(mm)	*In./mm*	*Lbs./Kg*
1½ x 1½ x ¾ *40 x 40 x 20*	2¾ *70*	1.3 *0.6*
1½ x 1½ x 1 *40 x 40 x 25*	2¾ *70*	1.4 *0.6*
1½ x 1½ x 1¼ *40 x 40 x 32*	2¾ *70*	1.5 *0.7*
2 x 2 x ¾ *50 x 50 x 20*	3¼ *83*	2.0 *0.9*
2 x 2 x 1 *50 x 50 x 25*	3¼ *83*	2.1 *1.0*
2 x 2 x 1¼ *50 x 50 x 32*	3¼ *83*	2.3 *1.0*
2 x 2 x 1½ *50 x 50 x 40*	3¼ *83*	2.5 *1.1*
2½ x 2½ x ¾ *65 x 65 x 20*	3¾ *95*	2.8 *1.3*
2½ x 2½ x 1 *65 x 65 x 25*	3¾ *95*	3.0 *1.4*
2½ x 2½ x 1½ *65 x 65 x 40*	3¾ *95*	3.5 *1.6*
2½ x 2½ x 2 *65 x 65 x 50*	3¾ *95*	3.8 *1.7*
3 x 3 x ¾ *80 x 80 x 20*	4¼ *108*	4.0 *1.8*
3 x 3 x 1 *80 x 80 x 25*	4¼ *108*	4.1 *1.9*
3 x 3 x 1¼ *80 x 80 x 32*	4¼ *108*	4.2 *1.9*
3 x 3 x 1½ *80 x 80 x 40*	4¼ *108*	4.3 *1.9*
3 x 3 x 2 *80 x 80 x 50*	4¼ *108*	4.5 *2.0*
3 x 3 x 2½ *80 x 80 x 65*	4¼ *108*	4.8 *2.2*
4 x 4 x 2 *100 x 100 x 50*	5 *127*	5.8 *2.6*
4 x 4 x 2½ *100 x 100 x 65*	5 *127*	5.9 *2.7*
4 x 4 x 3 *100 x 100 x 80*	5 *127*	6.0 *2.7*
6 x 6 x 3 *150 x 150 x 80*	6½ *165*	14.0 *6.4*
6 x 6 x 4 *150 x 150 x 100*	6½ *165*	14.5 *6.6*
8 x 8 x 4 *200 x 200 x 100*	7¾ *197*	29.6 *13.5*
8 x 8 x 6 *200 x 200 x 150*	7¾ *197*	31.1 *14.1*

FIG. 7072SS

Stainless Steel Concentric Reducer
Type 316

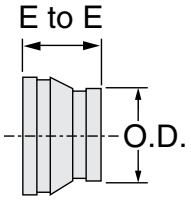


FIGURE 7072SS
STAINLESS STEEL CONCENTRIC REDUCER

Nominal Size	End to End*	Approx. Wt. Ea.
In./DN(mm)	*In./mm*	*Lbs./Kg*
1½ x 1 *40 x 25*	6½ *165*	0.7 *0.3*
1½ x 1¼ *40 x 32*	6½ *165*	0.7 *0.3*
2 x 1 *50 x 25*	7 *178*	0.9 *0.4*
2 x 1¼ *50 x 32*	7 *178*	0.9 *0.4*
2 x 1½ *50 x 40*	7 *178*	1.2 *0.5*
2½ x 1 *65 x 25*	7½ *191*	1.1 *0.5*
2½ x 1½ *65 x 40*	7½ *191*	1.2 *0.5*
2½ x 2 *65 x 50*	7½ *191*	1.2 *0.5*
3 x 1 *80 x 25*	7½ *191*	1.8 *0.8*
3 x 1¼ *80 x 32*	7½ *191*	1.8 *0.8*
3 x 1½ *80 x 40*	7½ *191*	1.9 *0.9*
4 x 2 *100 x 50*	8 *203*	2.9 *1.3*
4 x 2½ *100 x 65*	8 *203*	3.1 *1.4*
4 x 3 *100 x 80*	8 *203*	3.1 *1.4*
6 x 2½ *150 x 65*	9½ *241*	7.1 *3.2*
6 x 3 *150 x 80*	9½ *241*	7.0 *3.2*
6 x 4 *150 x 100*	9½ *241*	7.0 *3.2*
8 x 4 *200 x 100*	10 *254*	11.7 *5.3*
8 x 6 *200 x 150*	10 *254*	11.5 *5.2*

Notes: 1) *Dimensions may differ from those shown above. Contact an Anvil Representative for more information.
2) Fabricated fittings weights are based on Schedule 10 pipe.
3) Fabricated Schedule 10, 316SS and Schedule 40 Center to End dimensions are the same.
4) The pressure rating for the Gruvlok Schedule 10 Stainless Steel Fittings are equal to the pressure rating of the coupling used on Schedule 10 pipe as shown in the Working Pressure Ratings Chart for Stainless Steel Roll Grooved Pipe on page 3.
5) The pressure rating for the reducing tees and concentric reducers should be based upon the dimension of the weakest end.

FIG. 7073SS

Stainless Steel Eccentric Reducers
Type 316

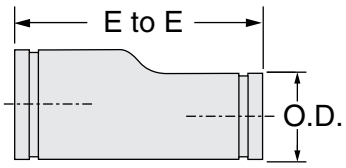


FIGURE 7073SS
STAINLESS STEEL ECCENTRIC REDUCER

Nominal Size	End to End*	Approx. Wt. Ea.
In./DN(mm)	*In./mm*	*Lbs./Kg*
1½ x 1 *40 x 25*	8½ *216*	1.7 *0.8*
1½ x 1¼ *40 x 32*	8½ *216*	4.5 *2.0*
2 x 1 *50 x 25*	9 *229*	2.2 *1.0*
2 x 1¼ *50 x 32*	9 *229*	2.4 *1.1*
2 x 1½ *50 x 40*	9 *229*	2.5 *1.1*
2½ x 1 *65 x 25*	9½ *241*	3.2 *1.5*
2½ x 1½ *65 x 40*	9½ *241*	3.6 *1.6*
2½ x 2 *65 x 50*	9½ *241*	4.0 *1.8*
3 x 1 *80 x 25*	9½ *241*	4.0 *1.8*
3 x 1¼ *80 x 32*	9½ *241*	4.3 *2.0*
3 x 1½ *80 x 40*	9½ *241*	4.5 *0.9*
4 x 2 *100 x 50*	10 *254*	6.7 *3.0*
4 x 2½ *100 x 65*	10 *254*	7.3 *3.3*
4 x 3 *100 x 80*	10 *254*	7.9 *3.6*
6 x 2½ *150 x 65*	11½ *292*	12.8 *5.8*
6 x 3 *150 x 80*	11½ *292*	13.6 *6.2*
6 x 4 *150 x 100*	11½ *292*	14.9 *6.8*
8 x 4 *200 x 100*	12 *305*	19.7 *8.9*
8 x 6 *200 x 150*	12 *305*	23.2 *10.5*

FIG. 7084SS

Groove x Class 150
Stainless Steel Flange Adapter
Type 304

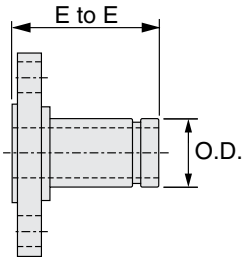


FIGURE 7084SS
STAINLESS STEEL FLANGE ADAPTER

Nominal Size	End to End*	Approx. Wt. Ea.
In./DN(mm)	*In./mm*	*Lbs./Kg*
2 *50*	4 *102*	5.7 *2.6*
2½ *65*	4 *102*	8.6 *3.9*
3 *80*	4 *102*	9.7 *4.4*
4 *100*	6 *152*	14.6 *6.6*
5 *125*	6 *152*	17.5 *7.9*
6 *150*	6 *152*	19.4 *8.8*
8 *200*	6 *152*	32.9 *14.9*
10 *250*	8 *203*	45.0 *20.4*
12 *300*	8 *203*	70.8 *32.1*

Notes: 1) *Dimensions may differ from those shown above. Contact an Anvil Representative for more information.
2) Fabricated fittings weights are based on Schedule 10 pipe.
3) Fabricated Schedule 10, 316SS and Schedule 40 Center to End dimensions are the same.
4) The pressure rating for the Gruvlok Schedule 10 Stainless Steel Fittings are equal to the pressure rating of the coupling used on Schedule 10 pipe as shown in the Working Pressure Ratings Chart for Stainless Steel Roll Grooved Pipe on page 3.
5) The pressure rating for the eccentric reducers should be based upon the dimension of the weakest end.

Anvil Pipe Hangers and Supports

The present line of Anvil pipe hangers and supports is the result of a century of experience in the industrial piping field. Anvil's extensive line includes hangers and supports for any suspension problem encountered in pipe installation work. Refer to the Pipe Hanger Catalog (item #165) for more information.

Strut and Strut Fittings Continuous Metal Framing

Anvil-Strut offers a complete line of continuous slot metal framing complete with channels, fittings and accessories for any framing or support problem...large or small, heavy or light.

Anvil-Strut's offering comes complete with exacting standards of research, design, engineering and manufacturing. Maximum recommended load ratings for channels have been established through testing and are based on allowable stresses applicable to strut material specifications.

Beyond the versatility that strut and strut fittings offer as a basic building material, metal framing is popular for more exotic applications such as clean rooms, satellite dish supports, x-ray supports, storage racks, theater screens, tunnel stanchions and offshore catwalks. Refer to the Anvil-Strut Catalog (item #555) for more information.

Anvil Design Services offers both Basic and Extended Services…

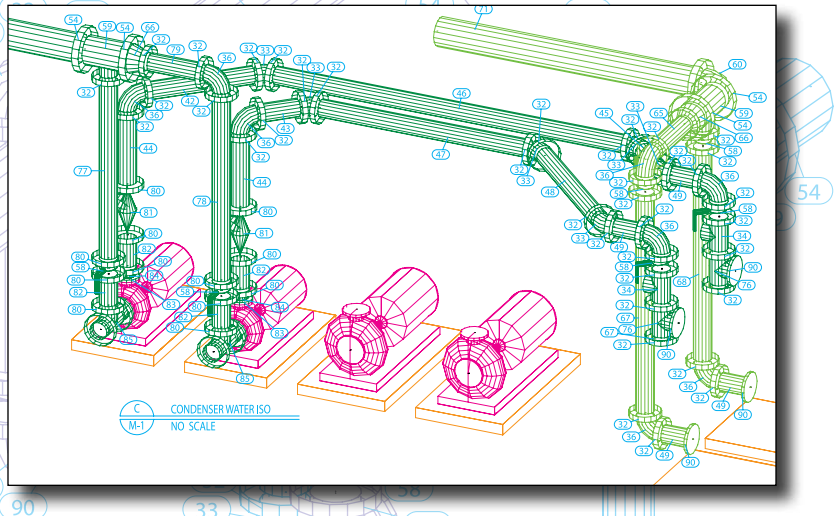
Basic Services:

Anvil Design Services produces fabrication drawings of mechanical room piping 2½ " and larger including chillers, heat exchangers, boilers, and pumps from contractor supplied flow diagrams, mechanical drawings, and approved submittals and specifications.

The drawings include a Bill of Materials with tags referencing the components in the mechanical room. The piping is color coded by service and is represented in 3-D with plan, isometric, and elevation views.

Initially, Anvil personnel meet with you to determine your piping preferences. The project scope and fee is agreed upon in a Design Services contract. The plans and specifications are then interpreted in terms of economy, accuracy, and compliance.

We may suggest modifications in arrangement, construction, equipment location, or product to attain the desired results. Piping layouts are carefully analyzed to determine whether further economies can be attained in the piping system.



Piping drawings are then prepared to determine the most efficient pipe routing, taking equipment location and any interferences into consideration. Preliminary prints are sent to you for revision or approval.

Upon approval, (4) sets of drawings with tags and Bills of Materials of the included system components are sent to you. Copies of the electronic data file of the project drawings are available at no extra charge.

With Basic Services, you can plan the mechanical room. The preliminary drawings can be taken to coordination meetings with other trades to "reserve" space by "getting in" first. Also, your field supervisor can spend more time supervising and not calculating pipe lengths and pipe routing. The components can be grouped from the finished drawings for better workflow planning.

We usually reduce fitting counts by 10%-15% by moving equipment whenever possible, usually less than a foot. The more movement that is allowed, the more savings can be realized.

Extended Services:

Extended Services include any scope beyond Basic Services.
There are many different types of services offered as extended:

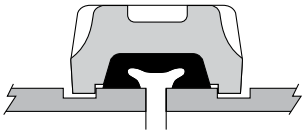
- BOM by component (pump, chiller) or by system
- Unique Tagging – adding unique tags to individual components
- Air Handling Units – with associated ductwork
- Single Line Routing – non-dimensional
- Distribution Piping
- Dimensioned Floor Penetrations
- AWWA Piping - Total Scope
- Commercial Piping
- Oil Field Piping
- Retrofit Projects - Field Survey
- Hybrid Systems
- Anything Else

Gruvlok® Gasket Selection Guide

Gruvlok Gasket-Styles

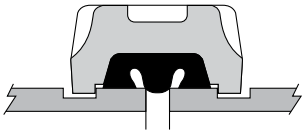
Gruvlok offers a variety of pressure responsive gasket styles. Each serves a specific function while utilizing the same basic sealing concept. Proper installation of the gasket compresses the inclined gasket lips on the pipe O.D., forming a leaktight seal. This sealing action is reinforced when the gasket is encompassed and compressed by the coupling housings. The application of internal line pressure energizes the elastometric gasket and further enhances the gasket sealing action.

"C" STYLE



The "C" Style cross section configuration is the most widely used gasket. It is the gasket style provided as standard in many Gruvlok Couplings (Fig. 7400SS, 7000, 7001, 7003, 7004HPR, 7307, 7400 and 7401). Grade "E" and "T" are standard grades while other grades are available for special applications.

FLUSH GAP®



Designed to prohibit contaminates from building up in the gasket cavity. The centering rib fits flush over the gap between the two pipe ends thus closing off the gasket cavity. It can be used with Fig. 7400SS, 7000, 7001, 7003, 7004, 7400 and 7401 Couplings for many applications. Recommended for use in dry fire protection systems. Not recommended for use at temperatures above 160°F.

Gasket Grade Index

STANDARD GASKETS

Grade	Temp. Range	Compound	Color Code	General Service Applications
E	-40°F to +230°F (-40°C to110°C)	EPDM	Green	Water, dilute acids, alkalies, salts, and many chemical services not involving hydrocarbons, oils, or gases. Excellent oxidation resistance. **NOT FOR USE WITH HYDROCARBONS**
T	-20°F to +180°F (-29°C to 82°C)	Nitrile (Buna-N)	Orange	Petroleum products, vegetable oils, mineral oils, and air contaminated with petroleum oils. **NOT FOR USE IN HOT WATER SERVICES**

SPECIAL GASKETS

Grade	Temp. Range	Compound	Color Code	General Service Applications
O	+20°F to +300°F (-20°C to 149°C)	Fluoro Elastomer	Blue	High temperature resistance to oxidizing acids, petroleum oils, hydraulic fluids, halogenated, hydrocarbons and lubricants
L	-40°F to +350°F (-40°C to 177°C)	Silicone	Red Gasket	Dry, hot air and some high temperature chemical services.

Gasket Recommendation Listing

WATER & AIR

Service	Gasket Grade
Air, (no oil vapors) Temp. -40°F to 230°F (-40°C to 110°C)	E
Air, (no oil vapors) Temp. -40°F to 350°F (-40°C to 177°C)	L
Air, Oil vapor Temp. -20°F to 150°F (-29°C to 66°C)	T
Air, Oil vapor Temp. 20°F to 300°F (-7°C to 149°C)	O
Water, Temp to 150°F (66°C)	E/T
Water, Temp to 230°F (110°C)	E
Water, Acid Mine	E/T
Water, Chlorine	(E/O)
Water, Deionized	E/T
Water, Seawater	E/T
Water, Waste	E/T
Water, Lime	E/T

Where more than one gasket grade is shown the preferred gasket grade is listed first. Where the gasket grade is shown in parentheses, Contact an Anvil Representative for an engineering evaluation and recommendation. Specify gasket grade when ordering. Use Gruvlok lubricant on gasket. Check gasket color code to be certain it is recommended for the service intended.

PETROLEUM PRODUCTS

Service	Gasket Grade
Crude Oil - Sour	T
Diesel Oil	T
Fuel Oil	T
Gasoline, Leaded	T
Gasoline, Unleaded*	(O)
Hydraulic Oil	T
JP-3, JP-4 and JP-5	T/O
JP-6, 100°F (38°C) Maximum Temp.	O
Kerosene	T
Lube Oil, to 150°F (66°C)	T
Motor Oil	T
Tar and Tar Oil	T
Transmission Fluid —Type A	O
Turbo Oil #15 Diester Lubricant	O

Unless otherwise noted, all gasket listings are based upon 100°F (38°C) maximum temperature service conditions.
For services not listed, contact an Anvil Representative for recommendation.
*Contact Anvil for service evaluation.

Roll Groovers

Save time and money with fast, accurate and repeatable grooves

The Gruvlok Model 1007 and Model 3007 Roll Groovers utilize an advanced zero maintenance design for a more efficient, safer and easier roll grooving job. The hands clear design and foot switch operation allows for safe roll grooving of pipe sizes from 2" through 16" with lengths from 5" to 20 feet. Quick and simple to set-up, roll grooving is now user friendly. Call your Anvil Sales Representative for a roll grooving demonstration.

MODEL 1007 ROLL GROOVER

MODEL 3007 ROLL GROOVER

Optional Equipment:

- 2"-8" Gruvlok CTS Copper System Grooving Rolls and Depth Gauges.
- 2"-12" Schedule 10 Grooving Rolls: Consisting of 2"-6" and 8"-12" roll sets.
- 14"-16" Grooving Rolls (Model 1007 only)
- Optional 230 volt, 60Hz, 15 amp, single phase electrical panel with motor is available for the 1007 Roll Groover.

Features:

- **WIDE GROOVING RANGE**
  2" thru 16" standard wall & schedule 10 steel pipe,
  2" thru 12" Schedule 10S and 40S Stainless Steel and
  2" thru 8" copper tube type K, L, M, and DWV. (CTS Copper System)
- **PIPE LENGTHS**
  20' random schedule 40 (standard wall) to 5" groove by groove nipples. The shortest roll groove nipple capability in the industry; hands-clear operation.
- **HANDS CLEAR GROOVING OF PIPE AND NIPPLES**
  Enhanced operator safety provided by outboard guide roll assembly.
- **ACCURATE, REPEATABLE-GROOVE DIAMETER CONTROL**
  Simplified direct action design provides positive, repeatable, control.
- **USER FRIENDLY DESIGN**
  Pump location is adjustable for operator comfort and safety.
- **FAST GROOVING TIMES**
  Large capacity two-stage pump. Two-stage design saves time engaging pipe while providing smooth application of optimum grooving force with reduced operator effort.
- **BETTER CONTROL OF PIPE FLARE**
  Outboard guide roll assembly registers pipe for proper orientation.
- **QUICK, EASY SETUP AND ROLL CHANGE**
- **RUGGED DESIGN REQUIRES ZERO MAINTENANCE**
  Sealed bearings eliminate need for periodic maintenance.
- **EASE OF OPERATION**
  High grooving forces obtained through use of larger capability ram requires less pump effort.
- **FOOT SWITCH POWER APPLICATION**
- **OPERATOR SAFE DESIGN**

ANVIL® INTERNATIONAL

Building Connections That Last

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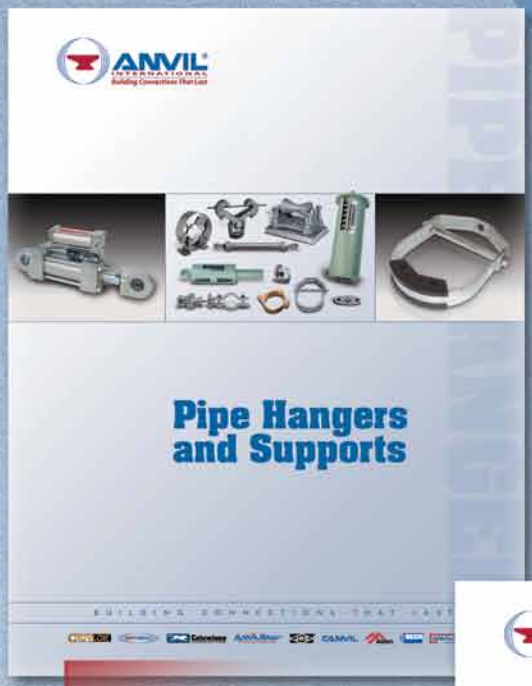
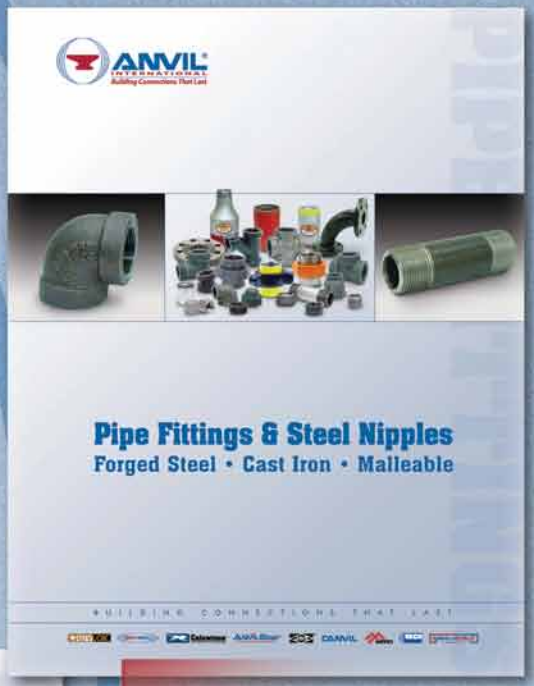
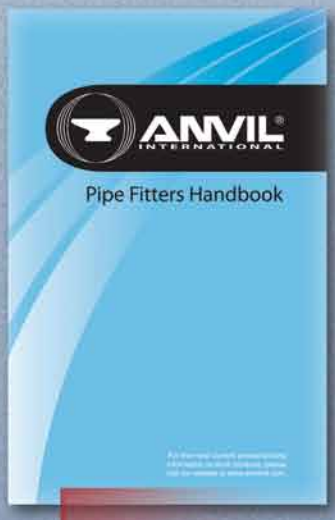


Pipe Hangers & Support Catalog
Order Document #165

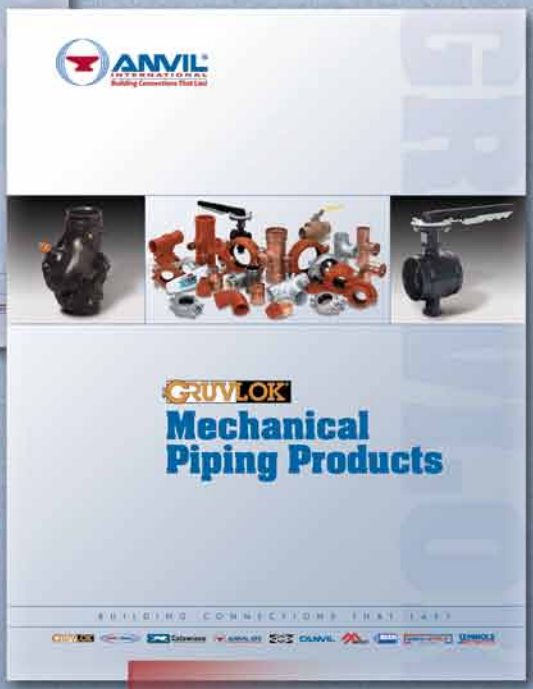


Pipe Fittings Catalog
Order Document #010

Anvil-Strut Metal Framing Product & Engineering Catalog
Order Document #125



Pipe Fitters Handbook
Order Document #030



Gruvlok Mechanical Piping Products Catalog
Order Document #040

BRANDS OF ANVIL INTERNATIONAL

Anvil® product lines include malleable and cast iron fittings, unions and flanges; seamless and welded steel pipe nipples; steel pipe couplings; universal anvilets; forged steel fittings and unions; pipe hangers and supports; threaded rod; and engineered hangers.

The Gruvlok® product line consists of couplings for grooved and plain-end fittings, butterfly valves and check valves; flanges; pump protection components; pipe grooving tools; as well as copper and stainless steel system components.

Anvil-Strut™ products include a complete line of channel in stock lengths of 10 and 20 feet, with custom lengths available upon request. A variety of fittings and accessories are also offered. All products can be ordered in an assortment of finishes and material choices including SupR-Green™, Zinc Trivalent Chromium, pre-galvanized, hot-dipped galvanized, electro-galvanized, aluminum, plain, and stainless steel.

The Merit® product line includes a variety of tee-lets and drop nipples for fire protection applications. Most Merit products are UL/ULC Listed, FM Approved, and rated from 175 to 300 psi.

Catawissa™ NACE and API approved wing unions for Standard Service are offered in non-pressure seal ends as well as threaded and butt weld, and are interchangeable with most leading union manufacturers. Fully traceable and available with complete mill certifications, Catawissa's oilfield wing union product line includes the standard ball-and-cone design plus our unique Figure 300 Flat Face design, where space and pipe line separation are a consideration.

Founded in 1983, NAP is a manufacturer of fabrication equipment, including automatic welders, plasma cut-off equipment, hole cutting equipment, make-on machines and pipe threaders. NAP, innovators of pipe fabrication equipment.

The SPF/Anvil™ product line includes a variety of internationally sourced products such as grooved couplings, fittings, cast iron, malleable iron and ductile iron threaded fittings, steel pipe nipples, as well as tee-lets.

JB Smith™ is the leading manufacturer of oil country tubular fittings, swages and bull plugs – all meeting API specifications. Offering tubing nipples, casing nipples as well as a full line of traditional line pipe and oil country threads in every schedule, JB Smith is the resource for all your oilfield needs.

Steel pipe nipples and steel pipe couplings are manufactured in accordance with the ASTM A733 Standard Specification for Welded and Seamless Carbon Steel and Stainless Steel Pipe Nipples. Steel pipe couplings are manufactured in accordance with the ASTM A865 Standard Specification for Threaded Couplings, Steel, Black or Zinc-Coated (Galvanized) Welded or Seamless, for Use in Steel Pipe Joints. API couplings are manufactured in accordance with the API Specification for line pipe.

Canvil® manufactures low pressure hexagon reducer bushings, as well as plugs and hex caps up to 1" in diameter in various finishes including Oil Treat, Phosphate and Electro Galvanized. In addition, Canvil manufactures A105 hex or round material in class 3000 and 6000 pound, forged steel couplings and bar stock products offered as either as normalized (A105N) or non-normalized (A105) that are fully traceable for mechanicals and chemistry through our MTR program.

Anvil EPS-Engineered Pipe Supports are products used to support piping systems under thermal, seismic, and other dynamic loading conditions. The product line encompasses variable spring hangers, constant supports, sway struts and snubbers as well as standard and special design clamps. Anvil EPS brings the highest quality products and innovative engineering solutions to common and uncommon piping system problems.

ANVIL® INTERNATIONAL
Building Connections That Last

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CUSTOMER SERVICE CENTERS

UNITED STATES

University Park, IL
Tel: 708-885-3000 • Fax: 708-534-5441
Toll Free: 1-800-301-2701

Irving, TX
Tel: 972-871-1206 • Fax: 972-641-8946
Toll Free: 1-800-451-4414

CANADA

Simcoe, Ontario
Tel: 519-426-4551 • Fax: 519-426-5509

EUROPE AND MIDDLE EAST

Tel: +31-53-5725570 • Fax: +31-53-5725579

International Customer Service
Tel: +1-708-885-3000 • Fax: +1-708-534-5441

MEXICO, PUERTO RICO AND LATIN AMERICA

International Customer Service
Tel: +1-708-885-3000 • Fax: +1-708-534-5441

U.S. REGIONAL DISTRIBUTION CENTERS

UNIVERSITY PARK

750 Central Avenue
University Park, IL 60484

COLUMBIA

800 Malleable Road
Columbia, PA 17512

IRVING

1401 Valley View Lane, Suite 150
Irving, TX 75061

ONTARIO

1470 S. Vintage Avenue
Ontario, CA 91761

ANVIL EPS

Engineered Pipe Supports
Customer Service Center

160 Frenchtown Road
North Kingstown, RI 02852

Tel: 401-886-3000
Fax: 401-886-3010
Toll Free: 1-877-406-3108

additional INVENTORY LOCATIONS*

UNITED STATES: Arizona, Colorado, Georgia, Indiana, Massachusetts, Minnesota, Missouri, New York, Tennessee, Texas, Washington and Wisconsin

INTERNATIONAL: Ontario, Canada

*Inventory varies at locations

BUILDING CONNECTIONS THAT LAST

GRUVLOK · SPF/ANVIL · Catawissa · ANVIL EPS · JBS · CANVIL · MERIT · BECK · ANVIL-STRUT · SEMINOLE Tubular Products · North Alabama Pipe

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