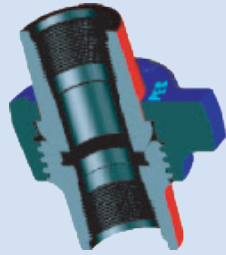
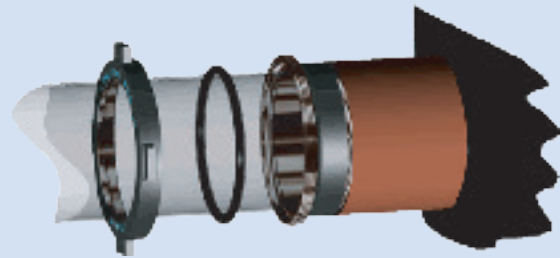


KEMPER

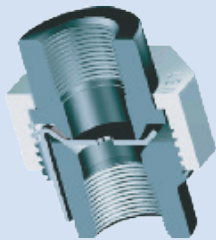
VALVE & FITTINGS CORPORATION



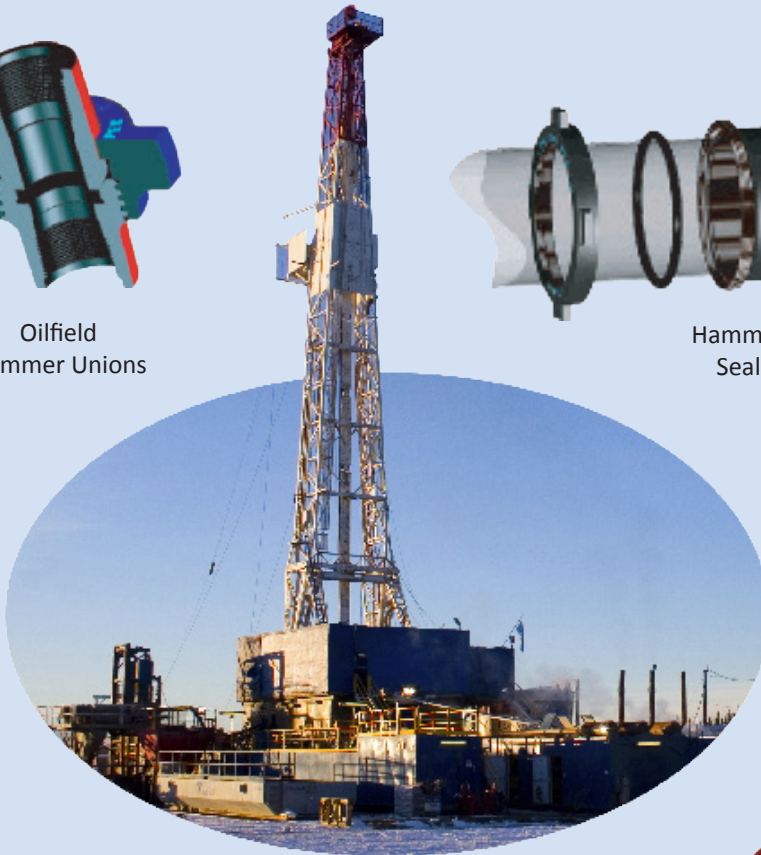
Oilfield
Hammer Unions



Hammer
Seal



Industrial
Unions



Swivel
Joints



Non-Freeze Tank
Valves



Seal-O-Grip

OILFIELD SERVICE AND DISTRIBUTION PRODUCTS

Kemper Valve & Fittings Corporation is a rapidly growing and leading provider of oilfield valves, hammer unions, swivel joints, oilfield flowline components, manifolds and complete rebuild / recertification services. This brochure outlines the products that are distributed through leading oilfield supply stores in North America. See our companion brochure “Flow Control and Stimulation Products” for additional products that are specifically designed and sold to the well servicing segment of the oil industry.



ISO 9001 Registered
DNV Registered



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Sales & Distribution

12343 Cutten Road
Houston, TX 77066
Local: 281-781-2730
Toll Free: 800-231-2724
Fax: 281-781-2731

Sales & Service

2733 Industrial Drive
Sulphur, OK 73086
Local: 580-247-9623
Toll Free: 888-533-3722
Fax: 580-622-2058

Sales & Service

1423 4th Avenue
Grand Junction, CO 81501
Local: 970-609-5845
Fax: 970-609-5839

Manufacturing HQ

3001 Darrell Road
Island Lake, IL 60042
Local: 847-526-2166
Toll Free: 800-323-1659
Fax: 847-526-2241

Sales & Service

111 Arrowhead Drive
Unit C
Slippery Rock, PA 16057
Local: 724-790-4990
Fax: 724-738-0172

Sales & Service

1000 West 2nd Street
Odessa, TX 79763
Local: 432-301-9990
Fax: 432-301-9991

Sales & Service

180 Sherman Way
Kensett (Searcy), AR 72082
Local: 501-268-2698
Fax: 501-268-2196

Sales & Distribution

1243 East Highway 40
Unit 1
Vernal, UT 84078
Local: 435-781-8258
Fax: 435-781-3037

Canadian Sales 🇨🇦

8001 Edgar Industrial Avenue
Red Deer, Alberta T4P 3S2
Local: 403-348-0872
Fax: 403-348-0873

Sales & Service

1391 County Road 429
Pleasanton, TX 78064
Local: 210-446-5863
Fax: 830-569-8236

OILFIELD HAMMER UNIONS

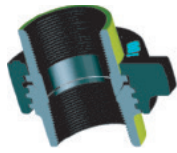


Figure 100

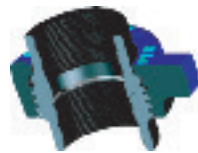


Figure 200



Figure 300



Figure 400

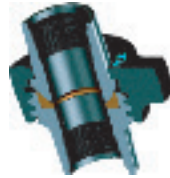


Figure 600



Figure 1002

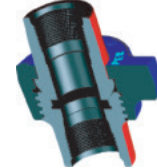


Figure 1502

Figure Number	Standard Service Color Code (Subs - Nut)		Non-Shock Cold Working Pressure Rating (psi)				Nominal Pipe Size (Inches)											
			Standard Service		H ₂ S Service (3)		1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12
			CWP	Test	CWP	Test												
100	1	Yellow	Black	1000	1500						•	•	•	•	•	•		
101		Yellow	Orange	1000	1500									•				
200		Grey	Blue	2000	3000		•	•	•	•	•	•	•	•	•	•	•	
201		Grey	Orange	2000	3000					•	2	•						
206		Grey	Blue	2000	3000		•	•	•	•	•	•	•	•	•	•	•	
207		Grey	Blue	2000	3000							•	•		•			
211		Blue	Grey	2000	3000													
300		Yellow	Grey	2000	3000						•							
400		Pink	Black	4000	6000	4000	6000				•		2	2	*	*		* * *
402		Brown	Black	4000	6000	4000	6000				•							
600		White	Black	6000	9000						•		•					
Figure G		Yellow	White	6000	9000	6000	9000											
602		Orange	Black	6000	9000	6000	9000	•	•	•	•		•	2	•	•		
1002		Blue	Pink	10000	15000	7500	12000	•	•	•	•		•	•	*	*		
1003		Green	Black	7500	12000	5000	7500						•	•	*	*		
1502		Pink	Blue	15000	22500	10000	15000	•		•	•		•	•	•			
2002		White	Green	20000	30000						•							
2202		Green	Green			15000	22500				•							

* Indicates reduced Cold Working Pressure due to Pipe Size or other design factor - Reduction as shown below;

5", 6", 10", 12" Figure 400 - CWP = 2500 psi - Test = 4000 psi

5" Figure 1002 w/ LPT Ends - CWP = 5000 psi - Test = 7500 psi

5", 6", Figure 1002 B/W - CWP = 7500 psi - Test = 12000 psi

5", 6" Figure 1003 B/W - CWP = 7500 psi - Test = 12000 psi

Sour Gas Service Prepped 5", 6" Figure 1002 B/W - CWP = 5000 psi - Test = 7500 psi

Sour Gas Service Prepped 5" Figure 1003 B/W - CWP = 5000 psi - Test = 7500 psi

1 - ALSO AVAILABLE IN 16" FIGURE 100 w/ BUTTWELD SCHEDULE 80 ENDS

2 - ALSO AVAILABLE IN API 8 OR 10 ROUND THREADED ENDS

3 - MINIMUM ORDER QUANTITIES MAY BE REQUIRED FOR UNIONS PREPPED FOR SOUR GAS SERVICE, OR OTHER NON-STANDARD UNION CONFIGURATIONS
PLEASE CONSULT MANUFACTURING, DISTRIBUTION OR STIMULATION SALES FOR AVAILABILITY, MINIMUM ORDER QUANTITIES, AND PRICING

OILFIELD HAMMER UNIONS

FIGURE 100
BLACK NUT, YELLOW SUBS

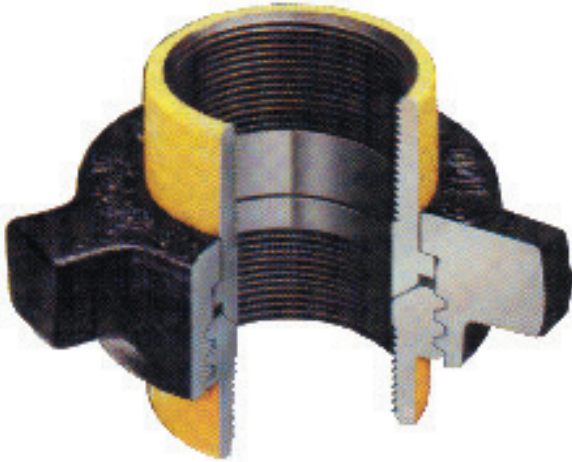


Figure 100. 1,000 psi NSCWP unions are available in 2" thru 8". This union is also available as a 16" butt-weld sch. 80. Recommended for low-pressure manifolds and applications where working pressures do not exceed 1,000 psi. Figure 100 unions are made from tough, impact resistant ductile iron, with precisely manufactured ball cone (male to female) seats.

FIGURE 200
BLUE NUT, GRAY SUBS

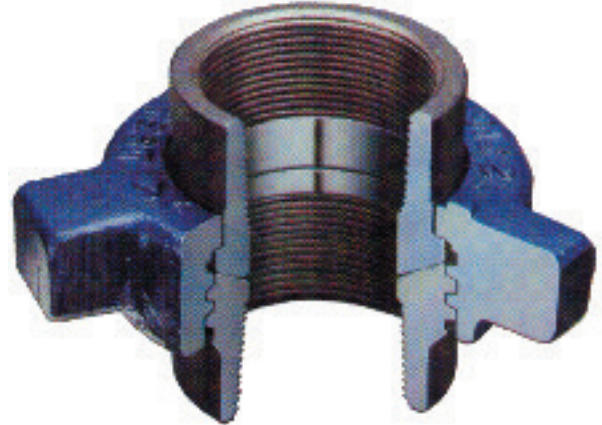


Figure 200. 2,000-psi NSCWP unions are available in 1-inch through 10-inch. These unions are compact and popular for low pressure rig piping. They also meet most requirements in the medium pressure ranges for air, water, oil or gas service. Available in butt-weld Schedule 40 and 80. Also available with stainless steel subs.

FIGURE 300
GRAY NUT, YELLOW SUBS

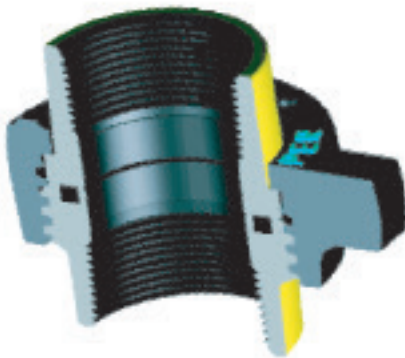


Figure 300 - 2,000 psi NSCWP unions are available in 1" & 2" sizes. These unions feature the effective and dependable "flat-face / O-ring" sealing design. They seal equally well in low or high pressure vapor or liquid service. The "flat-face" design also permits straight away lateral break-outs of short rigid piping sections, without the need to spread the pipe.

FIGURE 206
BLUE NUT, GRAY SUBS

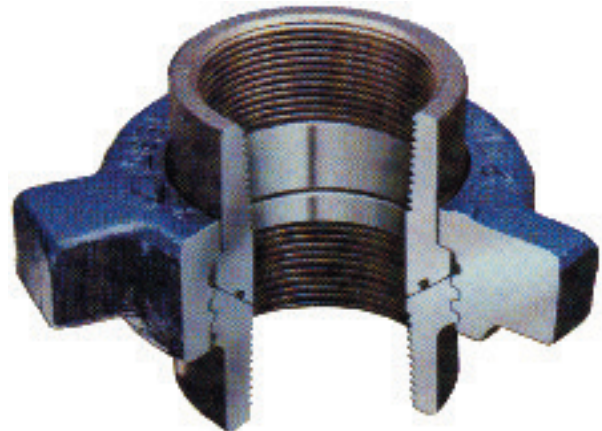


Figure 206. 2,000-psi NSCWP unions are available in 1-inch through 10-inch. These unions are fitted with an o-ring in the male sub seating surface for enhanced sealing. Available in butt-weld Schedule 40 and 80. Also available with stainless steel subs.

OILFIELD HAMMER UNIONS

FIGURE 207
BLUE CAP, GRAY SUB



Figure 207. 2,000-psi NSCWP unions are available in 3, 4 and 6-inch. These unions are fitted with a nitrile o-ring in a blanking cap for effective closure. With the cap removed, the female sub will make up to hose, pipe or tubing fitted with a Figure 200 or 206 male sub and nut. Recommended for air, water, oil or gas service. Available in butt-weld Schedule 40 and 80.

FIGURE 211
GRAY NUT, BLUE SUBS

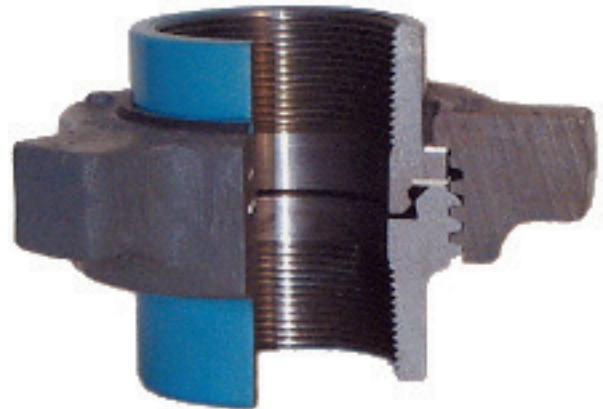


Figure 211. 2,000-psi NSCWP Insulating Unions are available in 2 and 3-inch sizes. The insulated design eliminates metal to metal contact across the union, while dual abrasion resistant precision molded elastomers provide a positive seal. Recommended where electrolytic corrosion prevention is a problem, or to statically isolate sections of piping. Replacement seal kits are available to extend service of the union.

FIGURE 400
BLACK NUT, RED SUBS

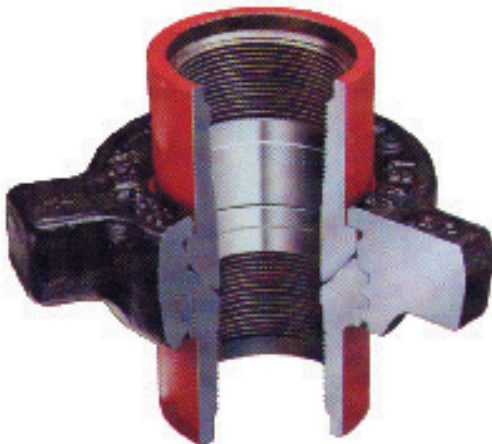


Figure 400 - These unions are available in 2", 3", & 4" 4,000 psi and 5", 6" & 12" 2,500 psi NSCWP. All three parts are made from steel forgings with heavy walls and rugged design. They feature ball and cone sealing for easy alignment. (5" & above have a nitrile O-ring for additional sealing).

FIGURE 600
BLACK NUT, SILVER SUBS

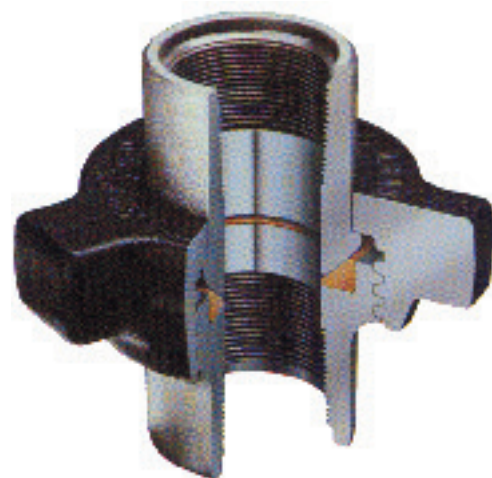


Figure 600. 6,000-psi NSCWP unions are available in 1, 1 ¼, 1 ½, 2, and 4-inch sizes. These unions have a bronze seat insert to provide an additional hardness differential across the seats for enhanced sealing.

OILFIELD HAMMER UNIONS

FIGURE 602
BLACK NUT, ORANGE SUBS

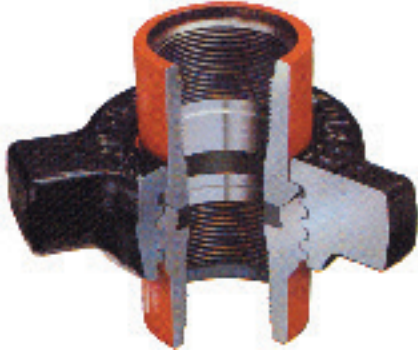


Figure 602 - 6,000 psi NSCWP unions are available in 1", 1 1/4", 1 1/2", 2", 3", 4", 5" and 6" sizes in standard or sour gas service. These unions feature a resilient nitrile seal ring that helps sealing and protects the steel-to-steel seating of the union (6" has a nitrile O-ring). Recommended for manifold and truck-mounting where size and weight critical.

FIGURE 1002
RED NUT, BLUE SUBS

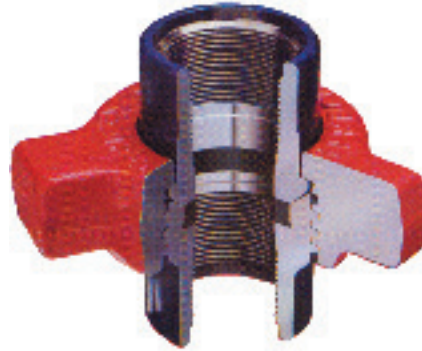


Figure 1002. These unions are available in 1 thru 4-inch 10,000-psi and 5 and 6-inch 7,500-psi NSCWP. These unions also have a resilient nitrite seal ring (5-inch and 6-inch have nitrile o-ring). They are made from alloy steel and are used primarily by service companies in applications such as cementing, fracturing and acidizing. Designed for high-pressure systems, including truck-mounted systems. Fig. 1002 unions also are available for sour gas service.

FIGURE 1003
BLACK NUT, GREEN SUBS



Figure 1003. Available in 3-inch rated at 10,000-psi and 4, 5 and 6-inch rated at 7,500-psi CWP. 3 and 4-inch are available in LPT threaded ends and all sizes in butt-weld Sch. 160 or XXH. Recommended for air, water, oil, mud or gas service where alignment of piping is a problem. Especially suitable for high pressure manifolding and drilling rig use. These unions incorporate a ball seat that provides for 7½° of misalignment or angular adjustment from center, for a total of 15° misalignment capability. In addition to the steel-to-steel seating of the union, a nitrile o-ring assures a pressure tight connection in any position of misalignment.

FIGURE 1502
BLUE NUT, RED SUBS

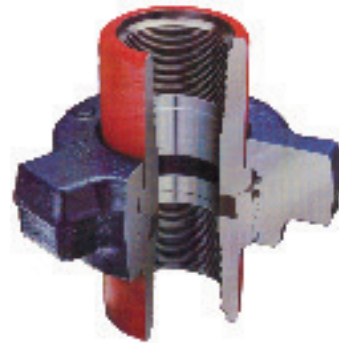


Figure 1502 - These 15,000 psi NSCWP unions are available in 1", 1 1/2", 2", 3", 4", 5" and 6" sizes, with a replaceable resilient nitrite seal ring. Alloy steel construction, heavy walls, and rugged design have made these unions popular with the service companies for working pressures up to 15,000 psi. Fig 1502 unions also are available for sour gas service.

All Kemper o-ring and seal rings are available in standard NBR material or upon request, Viton or Highly Saturated Nitrile.

SWIVEL JOINTS - 6000 CWP

CODE SILVER, STYLE 50



CODE SILVER, STYLE 70



- High Pressure Swivel Joints - 6,000-psi CWP (Cold Working Pressure) in 3/4", 1", 1 1/4", 1 1/2" and 2" LPT sizes.
- For test lines, fracturing, acidizing, cementing and well servicing up to 6,000-psi CWP.
- Swivel Joints can be custom configured in any style for quick delivery.
- Manufactured to the highest quality standards in the industry.
- All supporting documentation, including MTRs, is available at any time for *no additional cost*.
- Maintenance, rebuild and recertification are available through our Service facilities.



Style 10
3 Swivels, 2 Elbows



Style 20
1 Swivel



Style 30
1 Swivel, 1 Elbow



Style 40
1 Swivel, 2 Elbows



Style 50
2 Swivels, 2 Elbows



Style 60
2 Swivels, 1 Elbow



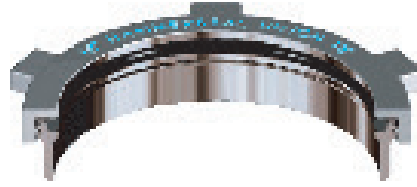
Style 70
2 Swivels, 3 Elbows



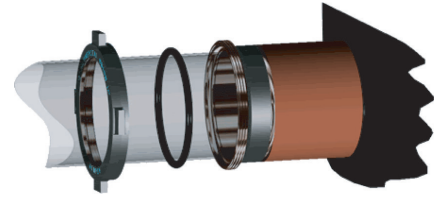
Style 80
3 Swivels, 3 Elbows

Hammerseal™ Unions Join drilling mud tanks in a hurry

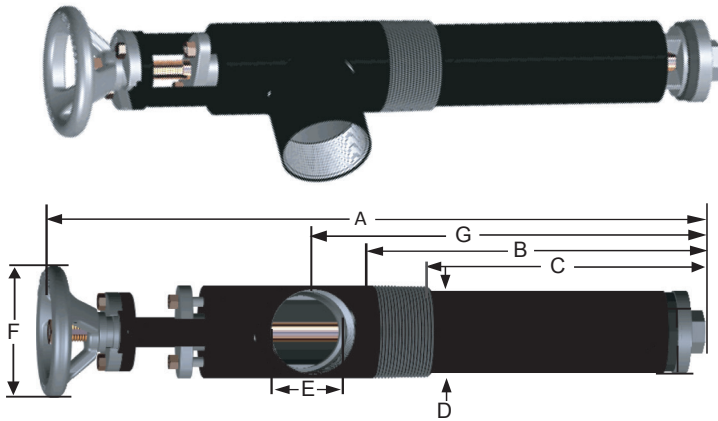
Even if mud tanks aren't aligned perfectly (up to 7°), you can hammer these tough unions tight to a non-leak seal. The externally threaded female portion of the HammerSeal™ welds to a Schedule 80 stub pipe at the tank wall. The connecting pipe (nominal size defines the union) extends through the nut component, the o-ring and then the female portion of the union. When the internally threaded lug nut is hammered tight onto the female, the o-ring is compressed into an oblong cross section to seal up to 150-psi against the outside diameter of the connecting pipe.



*3" and 20" HammerSeals™ are Available -
Please Consult Factory*



Non-Freeze Tank Valves Give trouble-free service in cold country



The only precision-manufactured non-freeze storage tank valves in 2-inch and 3-inch sizes (4-inch valve available on special order only). These valves operate in extremely cold climates when other tank valves freeze up. The stainless steel valve stem meets most corrosive service requirements. Adjustable gland prevents leaking and extends the wear-life of the gland packing. A heavy duty nitrile valve seat and nitrile gland packing tolerate hydrocarbon liquids for long periods without deterioration. Standard line pipe connections permit easy make-up at the tank connection and valve outlet. Operating pressure is up to 150-psi (10.5 kg/cm²). High torque handwheel makes opening and closing easy at all times. Complete valves and individual parts available. All sizes also available with flange connections.

Seal-O-Grip™ Connections Provide air-inflatable tight seal between mud tanks



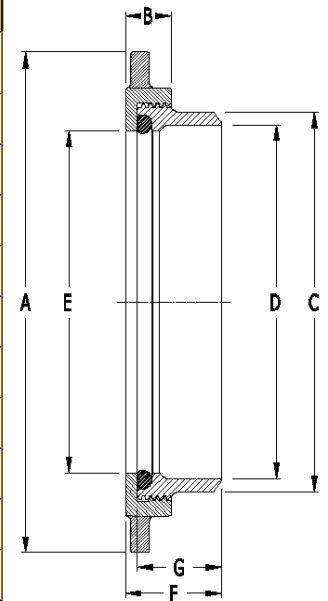
Seal-O-Grip™ Unions are used for speedy connect-and-disconnect of mud suction and return lines or other low-pressure fluid lines. A tight seal is maintained even if the pipe is mis-aligned, within certain limits. Available in popular oilfield line pipe sizes: 4, 6, 8, 10, 12 and 16-inch.

The Seal-O-Grip™ body (ASTM A216 Grade WCB carbon steel) welds in place on mud tanks, manifold pipe and other fittings. The oil-resistant inflatable tube is heavy duty, abrasion-resistant and is designed for 200-psi maximum air pressure. (Note: Tube inflation pressure must exceed fluid line pressure by 50-psi to seal line pressures up to 150-psi.)

Note: See tables on next page for HammerSeal™ and Seal-O-Grip™ dimensional information.

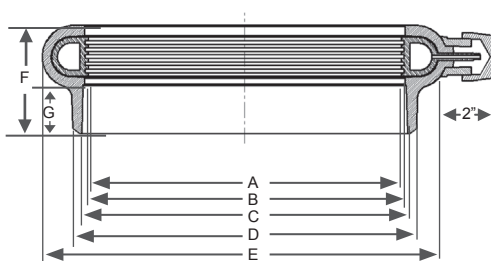
Hammerseal™ Union Dimensions

Connects Nominal Size Oilfield Pipe:	Female Component Welds To:	Complete Assembly		O-Ring Only		Dimensions in Inches						
		Assembly P/N	Approx Weight lbs.	O-Ring P/N	Approx Weight lbs.	A	B	C	D	E	F	G
3-Inch (3 1/2" O.D.)	4-Inch	PS300A	19.6	PS30OR	0.38	8.38	2.00	4.50	3.94	3.75	3.50	3.00
4-Inch (4 1/2" O.D.)	6-Inch	PS400A	23.0	PS40OR	0.5	9.50	2.00	6.63	5.88	4.81	3.69	3.00
6-Inch (6 5/8" O.D.)	8-Inch	PS600A	33.2	PS60OR	0.75	11.68	2.00	8.63	7.88	6.88	5.19	4.50
8-Inch (8 5/8" O.D.)	10-Inch	PS800A	39.5	PS80OR	1.0	13.75	2.00	10.75	10.00	8.88	5.19	4.50
10-Inch (10 3/4" O.D.)	12-Inch	PS100A	55.3	PS10OR	1.25	18.00	2.00	12.75	12.00	11.00	5.19	4.50
12-Inch (12 3/4" O.D.)	14-Inch	PS120A	62.0	PS12OR	1.5	19.75	2.00	14.00	13.13	13.00	5.19	4.50
13-Inch (13 3/8" O.D.)	13-Inch (Casing)	PS130A	53.0	PS130OR	1.6	19.75	2.00	14.13	13.50	13.50	5.19	4.50
14-Inch (14" O.D.)	16-Inch	PS140A	71.2	PS14OR	1.75	21.38	2.00	16.00	15.00	14.25	4.69	4.00
16-Inch (16" O.D.)	18-Inch	PS160A	92.4	PS16OR	2.0	24.00	2.00	18.00	16.50	16.25	4.85	4.00
18-Inch (18" O.D.)	20-Inch	PS180A	100.9	PS18OR	2.25	26.00	2.25	20.00	18.81	18.25	4.56	4.00
20-Inch (20" O.D.)	22-Inch	PS200A	129.3	PS20OR	3	28.00	2.25	22.00	20.81	20.25	5.63	5.00



Non-Freeze Tank Valve Dimensions

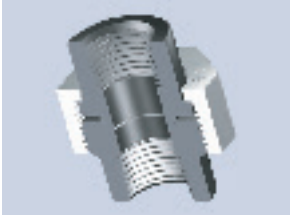
Complete Valve	Non-Freeze Valve Dimensions in Inches									
Part No.	Valve Size	A	B	C	D	E	F	G	H	I
N-F200	2	22	10 5/8	9 1/4	2	2 1/8	5	13 1/4	2 1/8	2 3/8
N-F300	3	25	12	10	3	3 1/8	5	15 1/4	3 1/8	3 1/2



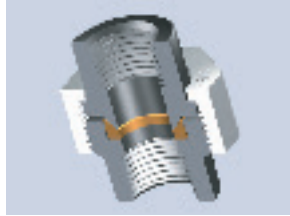
Seal-O-Grip™ Connector Dimensions

Line Pipe Size (inches)	Seal-O-Grip Assembly Complete		Inflatable Tube Only		Maximum Mis-Alignment Tolerance	Seal-O-Grip Dimensions (Inches)						
	Part No.	Approx. Wt (lbs)	Part No.	Approx. Wt (lbs)		A	B	C	D	E	F	G
4	P480	5.3	P480T	.8	7	4 19/32	4 19/32	5 1/6	5 3/4	6 5/8	3	1 1/2
6	P680	23.0	P680T	1.4	14	6 3/4	6 15/16	8	8 5/8	10 1/4	4	2
8	P880	27.0	P880T	1.6	14	8 3/4	8 15/16	10 1/8	10 3/4	12 1/4	4	2
10	P1080	31.0	P1080T	2.4	14	10 15/16	11 1/8	12 1/8	12 3/4	14 1/2	4 1/4	2
12	P1280	38.5	P1280T	3.2	14	12 15/16	13 1/8	13 3/8	14 1/4	16 1/2	4 1/4	2
14	P1480	42.0	P1480T	3.3	14	14 1/8	14 1/4	15 1/4	16 1/4	18 1/4	4 1/2	2
16	P1680	46.5	P1680T	3.5	14	16 1/8	16 1/4	17 1/4	18 1/4	20 1/4	5 1/8	2

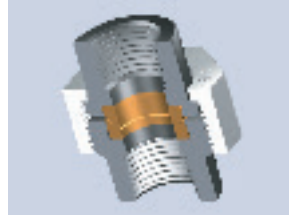
INDUSTRIAL UNIONS - 1/2" thru 3" Nominal Pipe Sizes



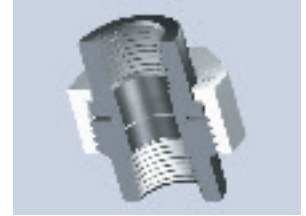
3000# "AAR" Unions
Steel-to-Steel
Threaded or Socket Weld



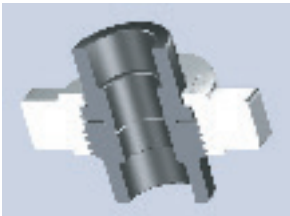
3000# Unions
Bronze-to-Steel
Threaded or Socket Weld



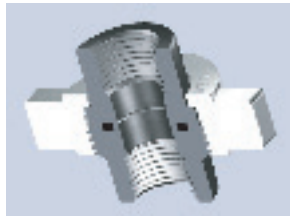
3000# Unions
Bronze-to-Bronze
Threaded or Socket Weld



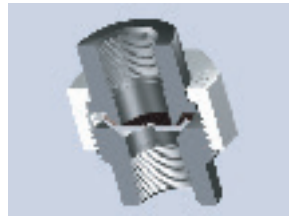
3000# Hi-Speed Unions
Steel-to-Steel
Threaded or Socket Weld



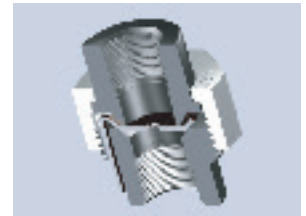
3000# Hi-Speed Hammer-Lug
Nut Unions
Steel-to-Steel
Threaded or Socket Weld



3000# Hi-Speed Hammer-Lug
Nut Unions
Flat-Face to O-Ring
Threaded or Socket Weld

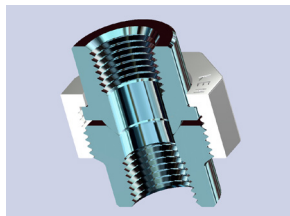


3000# Hi-Speed Orifice Plate
Unions
Steel-to-Plate-to-Steel
Threaded or Socket Weld



3000# Hi-Speed "Tabbed"
Orifice Plate Unions
Steel-to-Plate-to-Steel
Threaded or Socket Weld

ASTM A182 3000# "AAR" Style Unions in Austenitic Stainless Steel Grades 316, 316L, 304, 304L are available. Other A182 grades can be produced for special requirements. Please consult factory directly for pricing and delivery.



3000# "AAR" Unions
ASTM A182 Stainless
Steel-to-Steel
Threaded or Socket Weld



3000# "AAR" Unions
Steel-to-Steel
Threaded Male X Female

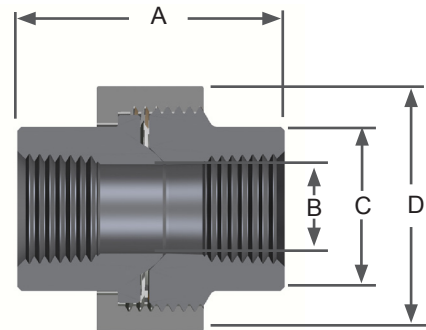


3000# Insulated Unions **Flat-Face to O-Ring**
Threaded

Kemper 3000# Forged Steel Industrial Unions conform to one or more of the following specifications:

- ASTM A105 “Forgings, Carbon Steel, for Piping Components”
- ASTM A182 “Forged or Rolled Alloy-Steel Pipe Flanges, Forged Fittings, and Valve and Parts for High-Temperature Service”
- MSS SP-83 “Carbon Steel Pipe Unions, Socket Welding and Threads”
- MSS SP-25 “Standard Marking Systems for Valves, Fittings, Flanges and Unions”
 - ANSI/ASME B1.20.0 “Pipe Threads, General Purpose”
 - ANSI/ASME B1.8 “Stub Acme Screw Threads”
 - ANSI/ASME B1.1 “Unified Inch Screw Threads”
- NACE MR01-75 “Sulfide Stress Cracking Resistant Metallic Materials for Oilfield Equipment”

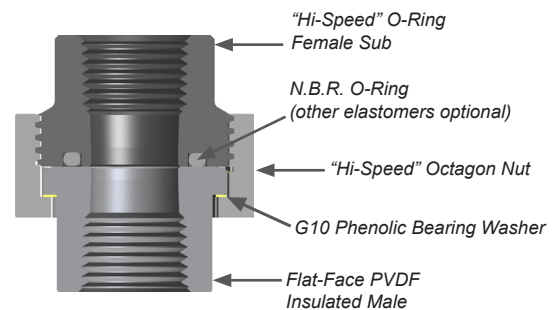
MSS SP-83 Dimensions and Weights					
Size	A	B	C	D	lb / 100
1/4	1.65	.380	.78	1.38	34
3/8	2.00	.540	1.09	1.75	72
1/2	2.13	.680	1.25	1.81	69
3/4	2.35	.850	1.50	2.20	117
1	2.60	1.10	1.81	2.56	167
1 1/4	3.00	1.38	2.17	3.06	250
1 1/2	3.19	1.63	2.44	3.42	325
2	3.53	2.06	2.97	4.09	500
2 1/2	4.13	2.54	3.63	4.88	815
3	4.50	3.05	4.31	5.75	1175



Kemper “Insulated” Flat-Face O-Ring Industrial Unions

Kemper Insulated Unions provide galvanic corrosion protection for piping systems. A tough Polyvinylidene Fluoride polymer is chemically bonded to the flat-faced male component and a phenolic bearing washer sits between the male flange and nut shoulder. PVDF is a high molecular weight thermoplastic polymer with excellent chemical inertness, high dielectric strength and thermal stability.

Properties of Kemper Industrial Union Insulation	
Property	Capability
Temperature	-20° F to 300° F
Dielectric constant at 60Hz	(73° F, 50% RH) : 9.0
Dissipation factor at 60Hz	(73° F) : 0.06
Volume resistivity	5.0x10~14 ohm-cm
Dielectric strength	280 v/MIL
Water & Oil Absorption (%)	<0.04%
Thermal conductivity	1.32 Btu-inch/hr-ft~2- ° F
Coefficient of linear thermal expansion	7.1x10~6 Max.
Deformation under load	0.5% @ 4,000 psi





Sales & Distribution

12343 Cutten Road
Houston, TX 77066
Local: 281-781-2730
Toll Free: 800-231-2724
Fax: 281-781-2731

Sales & Service

2733 Industrial Drive
Sulphur, OK 73086
Local: 580-247-9623
Toll Free: 888-533-3722
Fax: 580-622-2058

Sales & Service

1423 4th Avenue
Grand Junction, CO 81501
Local: 970-609-5845
Fax: 970-609-5839

Manufacturing HQ

3001 Darrell Road
Island Lake, IL 60042
Local: 847-526-2166
Toll Free: 800-323-1659
Fax: 847-526-2241

Sales & Service

111 Arrowhead Drive
Unit C
Slippery Rock, PA 16057
Local: 724-790-4990
Fax: 724-738-0172

Sales & Service


1000 West 2nd Street
Odessa, TX 79763
Local: 432-301-9990
Fax: 432-301-9991

Sales & Service

180 Sherman Way
Kensett (Searcy), AR 72082
Local: 501-268-2698
Fax: 501-268-2196

Sales & Distribution

1243 East Highway 40
Unit 1
Vernal, UT 84078
Local: 435-781-8258
Fax: 435-781-3037

Canadian Sales 

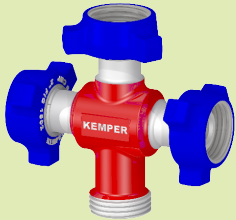
8001 Edgar Industrial Avenue
Red Deer, Alberta T4P 3S2
Local: 403-348-0872
Fax: 403-348-0873

Sales & Service

1391 County Road 429
Pleasanton, TX 78064
Local: 210-446-5863
Fax: 830-569-8236

KEMPER

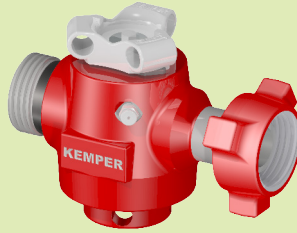
VALVE & FITTINGS CORPORATION



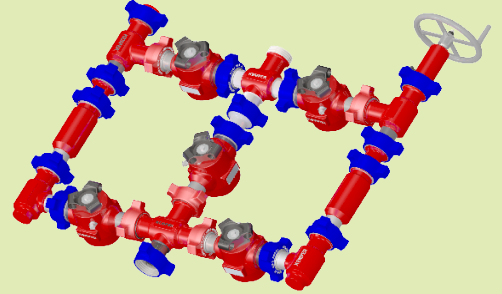
Crosses



Swivel Joints



Plug Valves



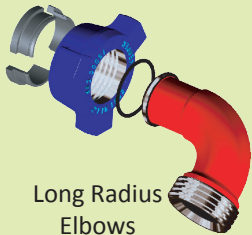
Manifolds



Extra Heavy Duty Tees



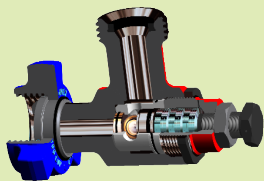
Pup Joints



Long Radius Elbows



Union Swages



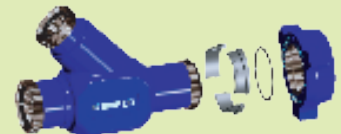
Safety Relief Valves



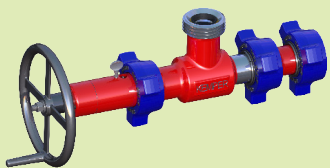
Hose Loops



Union Crossovers

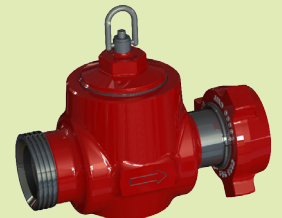


45° Laterals



Choke Valves

FLOW CONTROL PRODUCTS



Swing Check Valves

Kemper Valve & Fittings Corporation is a rapidly growing and leading provider of oilfield valves, hammer unions, swivel joints, oilfield flowline components, manifolds and complete rebuild / recertification services. This brochure outlines the products that are specifically designed and sold to the well servicing segment of the oil industry. See our companion brochure “Oilfield Service and Distribution Products” for additional products that are distributed through leading oilfield supply stores in North America.



ISO 9001 Registered
DNV Registered



INDEX

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<p>Sales & Distribution 12343 Cutten Road Houston, TX 77066 Local: 281-781-2730 Toll Free: 800-231-2724 Fax: 281-781-2731</p>	<p>Sales & Service 2733 Industrial Drive Sulphur, OK 73086 Local: 580-247-9623 Toll Free: 888-533-3722 Fax: 580-622-2058</p>	<p>Sales & Service 1423 4th Avenue Grand Junction, CO 81501 Local: 970-609-5845 Fax: 970-609-5839</p>	<p>Manufacturing HQ 3001 Darrell Road Island Lake, IL 60042 Local: 847-526-2166 Toll Free: 800-323-1659 Fax: 847-526-2241</p>	<p>Sales & Service 111 Arrowhead Drive Unit C Slippery Rock, PA 16057 Local: 724-790-4990 Fax: 724-738-0172</p>
<p>Sales & Service 1000 West 2nd Street Odessa, TX 79763 Local: 432-301-9990 Fax: 432-301-9991</p>	<p>Sales & Service 180 Sherman Way Kensett (Searcy), AR 72082 Local: 501-268-2698 Fax: 501-268-2196</p>	<p>Sales & Distribution 1243 East Highway 40 Unit 1 Vernal, UT 84078 Local: 435-781-8258 Fax: 435-781-3037</p>	<p>Canadian Sales  8001 Edgar Industrial Avenue Red Deer, Alberta T4P 3S2 Local: 403-348-0872 Fax: 403-348-0873</p>	<p>Sales & Service 1391 County Road 429 Pleasanton, TX 78064 Local: 210-446-5863 Fax: 830-569-8236</p>

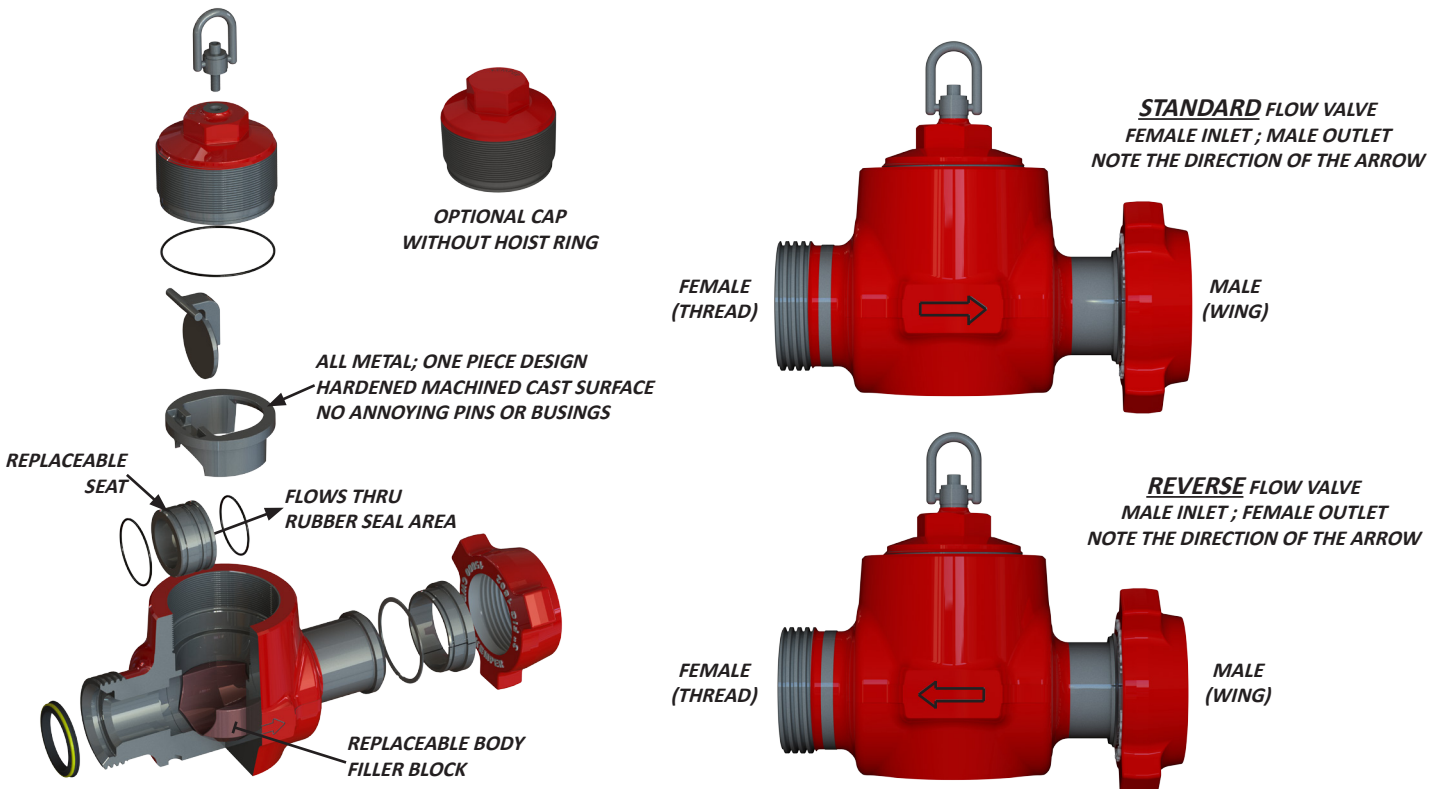
SWING CHECK VALVES

Kemper Swing Check Valve (KSCV), also known as a Flapper Check, provides directional fluid flow control to many oil-field applications where flow direction is critical in applications without large and or hard solids. Fluid may flow into the valve **ONLY** in the direction of the **FREE FLOW ARROW (FFA)** as the flapper is then pushed open and out of the way of the incoming flow. If fluid tries to enter the valve in the opposite direction of the FFA, the flapper will swing backwards until it hits the seal seat causing it to stop fluid flow. A properly sized and installed Relief Valve is recommended to eliminate system over pressure.

The **KSCV** is rugged in design and construction. Machined from forged (not cast) low carbon alloy steel, the body is designed with top entry access to allow quick and easy servicing of all internal components. The internal flapper is machined from a hardened all metal casting. There is no elastomer on the flapper that can be damaged because it is in the fluid flow path. Thus there are no premature seal failures resulting in leaking valves that need to be repaired. The one piece flapper design means that there are no little pins or bushings to lose, break or to wear out. Just a smooth acting durable flapper. A replaceable low carbon alloy steel seat is precision machined to hold a commercially available o-ring to act as a valve seal and shields the o-ring from the harmful direct fluid flow. This means longer seal life. No more worries that an elastomer seal will wash out and end up downstream stuck in other system components causing needless system shutdowns. Another feature that contributes to the long life of the valve is the replaceable filler block. The filler block fits into the bottom of the valve body and serves to collect and redirect the flow to the outlet, as well as protecting the bodies internal surfaces from wear. In the unlikely event that the cast filler block becomes worn, it can easily be replaced with no special tools or processes and the valve can quickly be placed back into service. No need to scrap an expensive valve / body. Just reuse the body over and over until the inlet and outlet wall thicknesses approach their minimum values.

This **KSCV** has been field tested proving out its rugged design and low cost ease of serviceability.

Kemper Swing Check Valves are available in 3" FIG 1502 Standard or Reverse Flow assemblies with or without a Hoist Ring in the cap. The Hoist Ring is used for ease of placement in applications or general movement of the valve from location to location. Not to be used for lifting anything other than the weight of the valve.



PLUG VALVES - LOW TORQUE

Kemper Low Torque (LT) Plug Valves are field tested and provide flow control for oilfield applications such as: Cementing, Fracturing, Acidizing, Coiled Tubing, Sand Control and Manifold Trailers. The valves are offered with industry standard Male and Female End connections and have a Standard Service Rating of 15,000-psi NSCWP. Additionally, Heavy Duty Connections are available for only the 3" valve. Other connections are available - consult factory.

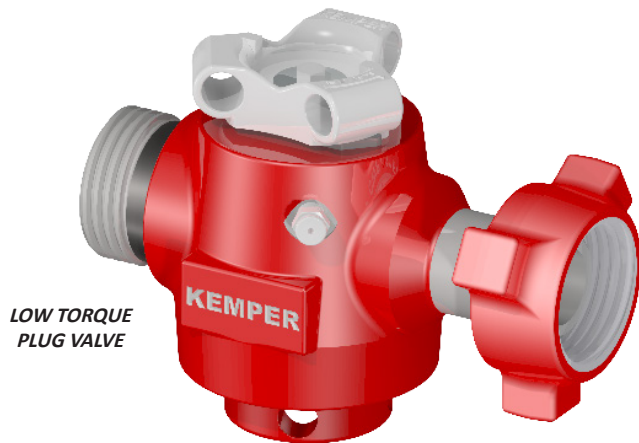
The valve incorporates a bottom entry design that allows for maintenance of the valve without having to remove the valve from the existing piping.

Note: This should only be done after system pressure has been relieved otherwise serious injury can result.

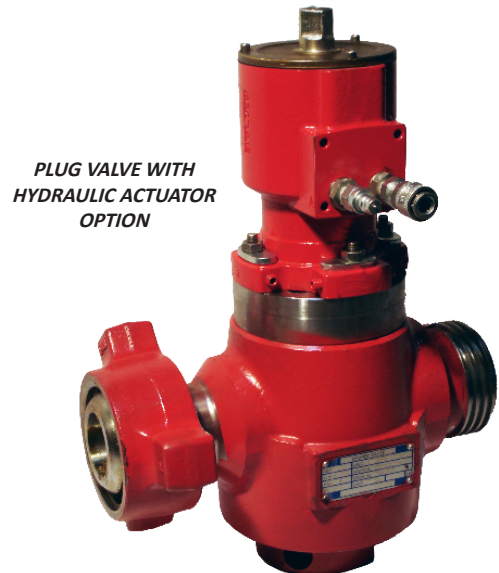
The valve is designed with repair in mind for even the harshest applications. Each valve uses a set of replaceable wear inserts (2). This minimizes body erosion, allowing the valve to be inexpensively repaired with replacement wear items (Inserts, Plug and Seals) and for re-use of the costly valve body. Repair Kits, Seal Kits and individual parts are stocked throughout the Kemper's distribution network.

Each valve is serialized and pressure tested to 1.5 times NSCWP. All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for *no additional cost*.

Kemper Low Torque Plug Valves are available in **1", 2", 3", 3" Heavy Duty** and **4" Figure 1002 and 1502** available. Valve actuation options – Bar Nut, Gear Op, Hydraulic and Pneumatic. Hydraulic Power units are also available for remote valve actuation for safety and emergency situations. Consult the factory for availability.



**LOW TORQUE
PLUG VALVE**



**PLUG VALVE WITH
HYDRAULIC ACTUATOR
OPTION**

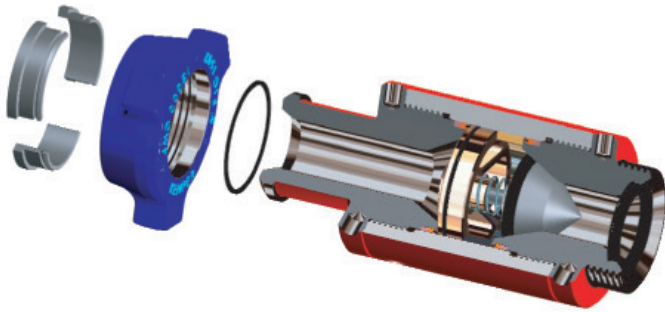


**PLUG VALVE WITH
GEAR ACTUATOR
OPTION**



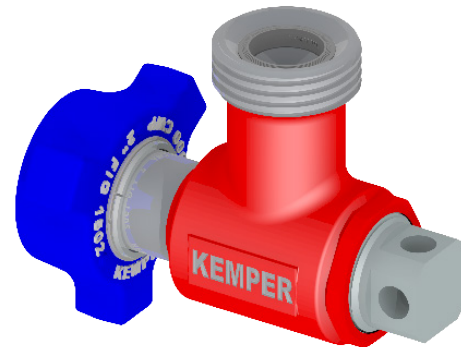
**HYDRAULIC
POWER UNIT**

FLOWLINE CHECK, PRESSURE RELIEF AND RUPTURE DISC VALVES

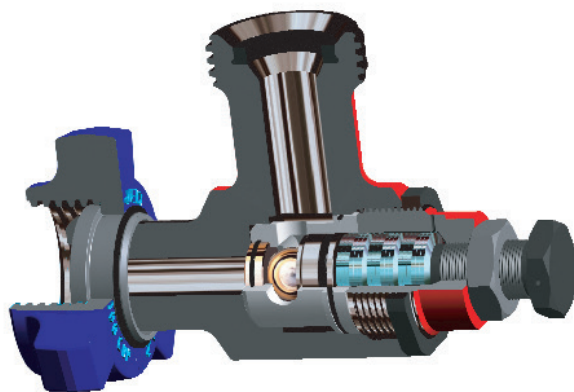


Kemper Dart Style Check Valves provide flowback protection in well service applications such as: Acidizing, Cementing, Fracturing, Sand Control and Well Kill. Available in **1"**, **1½"**, **2"** and **3"** models with pressure ratings from 6,000-psi to 15,000-psi NSCWP. These spring-loaded dart checks assure flow back protection up to 15,000-psi. Kemper's unique, modular design allows the valve to be assembled for standard or reverse flow. Easy replacement of worn component parts increase the service life of the valve.

Kemper Pressure Rupture Disc Valves provide safe, over-pressure protection for treating lines, reciprocating pumps, pressure vessels and other equipment operating under high pressure. Available in **2"** models only with operational pressure ranges from 150 to 15,000-psi for standard service.



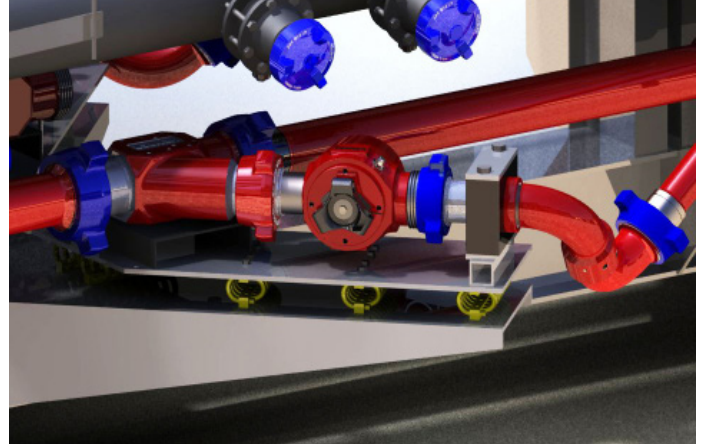
Kemper Pressure Relief Valves provide safe, over-pressure protection for reciprocating pumps, treating lines, pressure vessels and other equipment operating under high pressure.



These valves make use of the systems own hydraulic forces to open at the preset pressure. They will stay open while fluid flow is gradually diverted out the discharge port until the system pressure drops below the preset limit. When the predetermined and adjustable blowdown pressure is reached, the valve will automatically and smoothly close. Exclusive Kemper discharge flow recirculation design assures minimal hydraulic shock to the pumping device or treating iron during valve closure.

Kemper Relief Valves are available in **1½"**, **2"** and **3"** models with operation pressure ranges from 150 to 15,000-psi for standard or sour service.

MANIFOLD TRAILERS

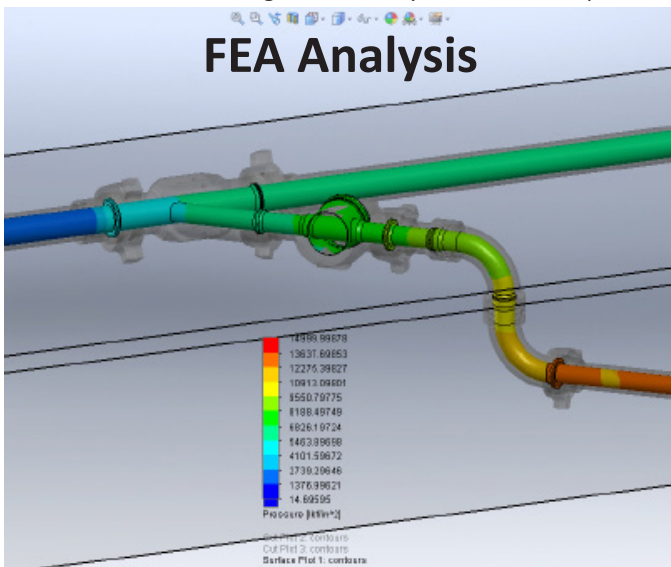


Kemper Well Service Manifold Trailers dramatically reduce the hookup and breakout labor of any frac job, with time savings of up to 50% over conventional hook-ups. Manifold Trailers can be chosen from a set of standard models or fabricated to exact customer specifications. They can be equipped with Kemper Hammer Union Integral or Non-Pressure Seal Flowline, Swivel Joints, Tees, Laterals, Check Valves, Butterfly Valves and Hammer Unions. All Union End Connections are supplied with blanking caps for protection of the environment during transit.

NEW - Kemper now offers manifold trailers with **Helical Wire Rope Isolators** (see picture above right) in an improved mounting configuration that in conjunction with Kemper's exclusive Extra Heavy Duty Union connection, results in a new mounting system that offers longer life and smoother operation. This is ideal for the vigorous Frac pump wing up connection. Kemper has many successful field installations both new build and retro-fits. Kemper strongly recommends the use of this system for Manifold Trailers with extreme service conditions.

Kemper Manifold trailers are available in ratings of 6,000-psi, 10,000-psi and 15,000-psi and have proven to be effective in a variety of field applications. Trailer lengths include **30'**, **42'** and **53'** in 1 and 2 axle configurations. They can have from 3 to 8 pump hook-ups per side, depending on length. Piping is available in **3"** and **4"** nominal pipe diameters. Components are also available in the **3" Heavy Duty** configuration (*recommended*).

Every trailer comes with Hose Racks, but many other options are available – including Pup Joint Racks, Swivel Joint Racks, Solar Powered Lights, Cranes and Hydraulic Feet. All these options help you to customize the trailer to your specific needs. Each component on the trailer is serialized and pressure tested to 1.5 times NSCWP. In addition, after assembly, each trailer is tested for 30 minutes at NSCWP to insure the integrity of the connections and proper sealing of the components. All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for *no additional cost*.



DUAL CHOKE AND GROUND MANIFOLDS

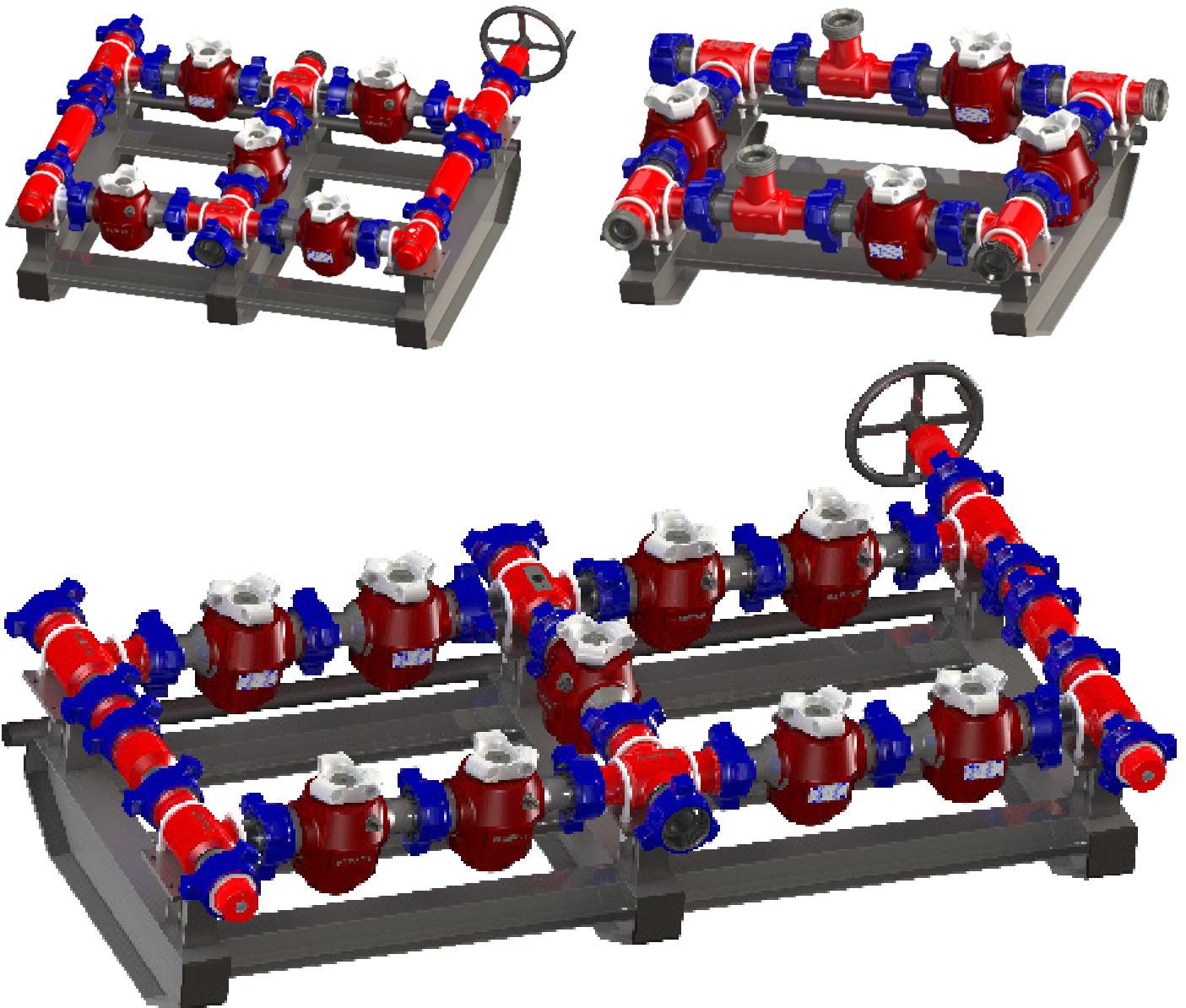
Dual Choke Manifolds (DCM) are available in 2" & 3" Figure 1502, 5 and 9 valve configurations. Other Figures and sizes available – consult factory for availability. A variety of manifolds are offered in many configurations: two (2) Adjustable Chokes, one (1) Adjustable Choke and one (1) Positive Choke; with or w/out gage ports, 1" or 3/4" Adj Choke; 1" or 2" Plug Valves; other valves.

Ground Manifolds (GDMD) are available in 2" & 3" Figure 1502 in either a 4, 5 or 9 valve configuration. Other Figures, sizes and valve quantities available - consult factory for availability.

Skid mounted Manifolds also available - consult factory for availability.

Every component used in the Manifolds, as well as the **DCM** & **GDMD** assemblies themselves, are serialized and pressure tested to 1.5 times NSCWP (2 tests).

All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for *no additional cost*.

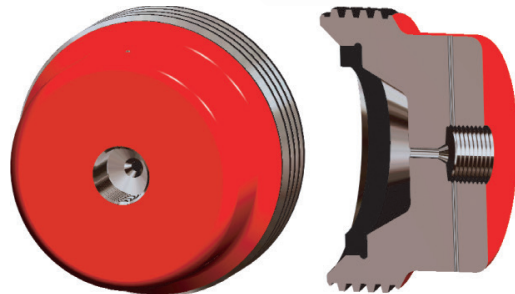
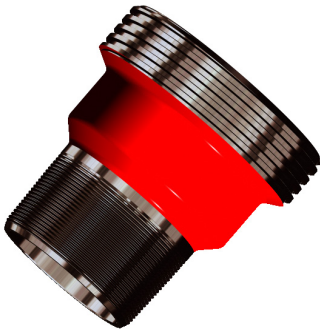
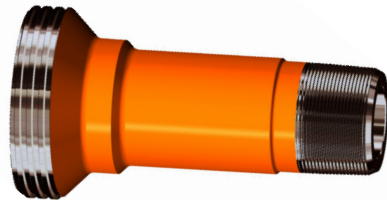


HAMMER UNION BULLS, CROSSOVERS, SWAGES

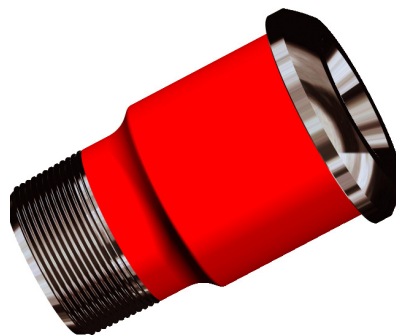


Kemper Integral Hammer Union Bulls and Crossovers are manufactured to the same stringent specifications for material, heat treatment and dimensional tolerance as our Kemper Hammer Unions. Standard lengths and Union Figure number combinations are stocked for immediate delivery. Custom combinations or lengths can be delivered to order with minimal lead times.

Kemper Integral Hammer Union Swages can replace couplings or nipples in oilfield service, stimulation and test systems where Hammer Union pipe connector modularity is essential. Standard API thread types and Union Figure Number combinations are stocked for immediate delivery. Custom combinations can be delivered to order with minimal lead times.

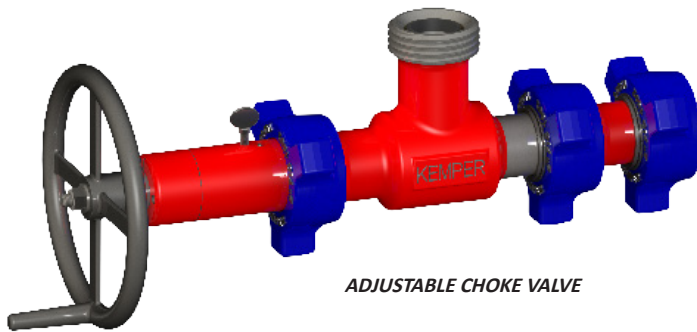


Union Bulls with Integral Autoclave™ AE High Pressure coned-and-threaded 9/16" standard connection.

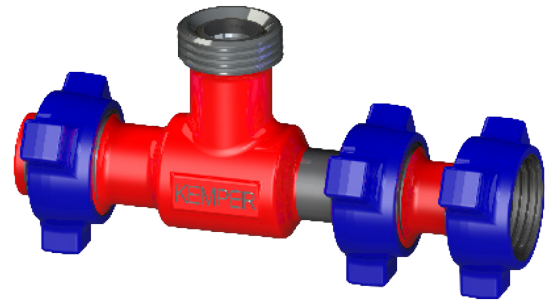


NOTE: Kemper Hammer Union Crossovers and Swages with Male Union Ends are sold with the Hammer Lug Nut and / or Segmented Rings at no extra charge.

ADJUSTABLE AND POSITIVE CHOKE VALVE ASSEMBLIES



ADJUSTABLE CHOKE VALVE



POSITIVE CHOKE VALVE

Kemper Adjustable and Positive Choke Systems are field tested and provide control in Fracturing and Flowback applications up to 15,000-psi CWP. Both chokes are offered with **2"** industry standard Male and Female End connections, have a Standard Service Rating of 15,000-psi NSCWP and are suitable for many types of manifold applications.

For the **Adjustable Choke**, a simple clockwise turn of the hand wheel increases fluid flow restriction/pressure while a counterclockwise turn decreases fluid flow restriction/pressure. The Adjustable Chokes hand wheel is rotated until the desired system pressure is reached and can be verified from gages directly installed in the "T" of the Adjustable Choke. Finding the equivalent bean size at this point is as easy as directly reading (in 64ths) the value from the indicator hub on the stem at the top of the bonnet.

Note: The Adjustable Choke is not to be used as a shut off valve.

The **Adjustable Choke** contains a bonnet assembly that can easily be removed while the choke is still installed. This allows the replacement of a worn seat or stem with minimal effort.

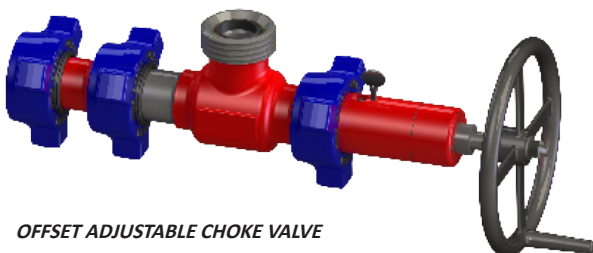
Note: This should only be done after system pressure has been relieved otherwise serious injury can result.

The **Positive Choke** maintains a constant flow restriction based on the installed seat size (or more commonly called the bean). If a different restriction is desired, the bean must be changed out by removing the choke's bull plug, unscrewing the undesired bean, screwing in the desired bean and then reinstalling the bull plug. This same procedure applies to replacing a worn out bean. As is true for the Adjustable Choke, all this can be done to the Positive Choke with the choke still installed provided the system pressure has been relieved.

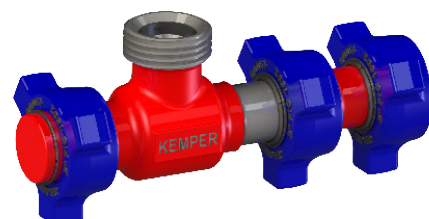
Note: Gages are installed in the bull plug of the choke. As a result, the gage port may easily be changed from one type or size to another by just changing the inexpensive bull plug instead of replacing the more costly choke "T".

Chokes are serialized and pressure tested to 1.5 times NSCWP. All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for *no additional cost*.

Both Kemper **Adjustable and Positive Chokes** are available in **2"** connections. **3"** is possible – consult factory. Fully-lined carbon seats/beans; Gage ports available in NPT or Autoclave. Complete chokes and repair parts are stocked throughout Kemper's distribution network. Adjustable Choke – **1"** & **¾"** seats. Positive Choke – various bean sizes available in 64th increments.



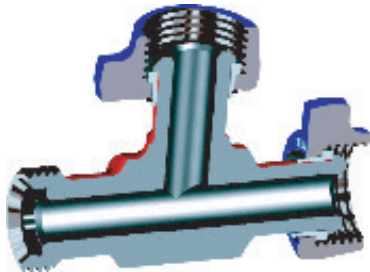
OFFSET ADJUSTABLE CHOKE VALVE



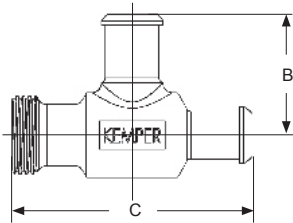
OFFSET POSITIVE CHOKE VALVE

INTEGRAL FLOW LINE FITTINGS

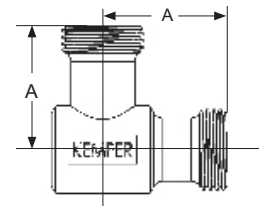
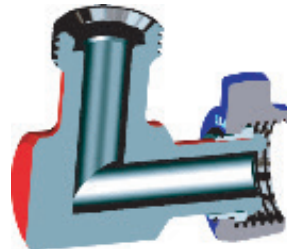
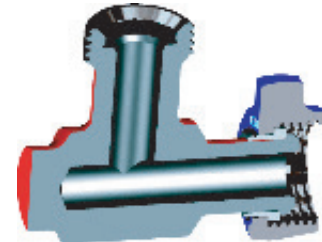
**FIG 1502 FLOW TEES
THREAD X NUT X NUT**



SIZE	A	B	C
1"	6.38	6.38	12.75
1½"	6.38	6.38	12.75
2"	6.38	6.38	12.75
3"	8.13	8.13	16.25
4" 602/1002	8.25	8.25	16.50
4" 1502	9.09	9.09	18.18



**FIG 1502 CUSHION ELLS
THREAD X NUT**

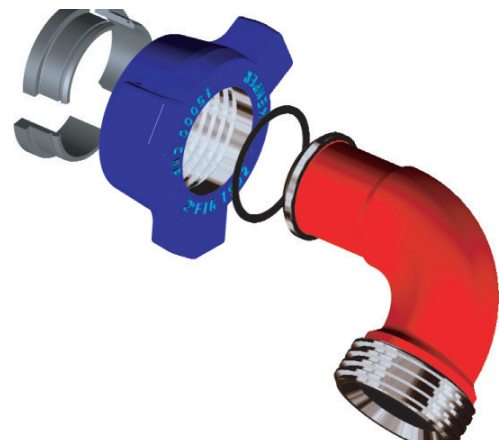


**FIG 1502 INTEGRAL ELLS
THREAD X NUT**

Forged alloy steel body precision machined with integral 1", 1½", 2", 3" or 4" Figure 1502 Kemper hammer union ends available for standard service (15,000-psi CWP) or sour gas service (10,000-psi CWP). Also available in Figure 602 or 1002 union connections. Both Tees and Ells are supplied with seals and detachable hammer lug nuts. Cushion Ells can be ordered for flowback service from the factory. All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for *no additional cost*.

**LONG RADIUS INTEGRAL ELLS
1", 1 1/2", 2", 3" & 4"**

For applications where fluid turbulence or abrasiveness can be a problem through short radius 90° ells. Our one piece hammer union integral Long Radius Elbow will turn these fluids easily. Using the same centralized bore as our Long Radius Swivel Joints assures an even wall thickness through the bend for maximum erosion resistance. These elbows can be made with hammer union thread-to-nut, nut-to-nut or thread-to-thread ends in any combination of Figure 602, 1002 or 1502. Also available prepped for sour gas service compliant to N.A.C.E. MR-01-75.



INTEGRAL FLOW LINE FITTINGS (CONT'D)

FIG 1502 FLOW CROSSES 2" . 3" & 4"



Kemper Crosses are field tested and provide the necessary connections for demanding applications. They are manufactured from high strength alloy steel and heat treated to exacting requirements for strength and longevity.

Crosses are available in 2" industry standard Male and Female End connections Figure 1502, 1002 and 602 configurations with corresponding standard service ratings of 15,000-psi, 10,000-psi and 6,000-psi. Sour gas service is also available at de-rated pressures.

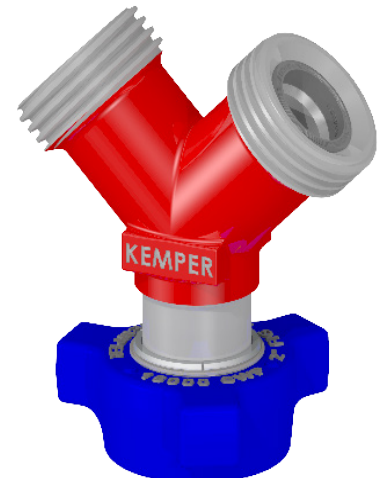
Crosses are serialized and pressure tested to 1.5 times NSCWP. All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for no additional cost.

FIG 1502 FLOW WYES 2" & 3"

Kemper Wye's are field tested and provide a utility for applications where flow needs to be split. They are manufactured from high strength alloy steel and heat treated to exacting requirements for strength and longevity.

Wye's are available in 2" with industry standard Male and Female End connections in Figure 1502, 1002 and 602 configurations with corresponding standard service ratings of 15,000-psi, 10,000-psi and 6,000-psi. Sour Gas service is also available at de-rated pressures.

Wyes are serialized and pressure tested to 1.5 times NSCWP. All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for no additional cost.

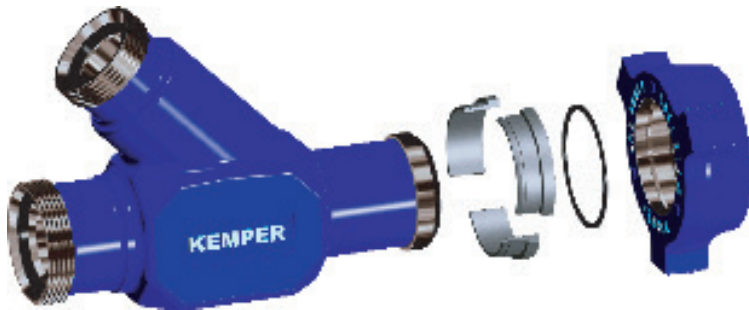


INTEGRAL MANIFOLD FITTINGS

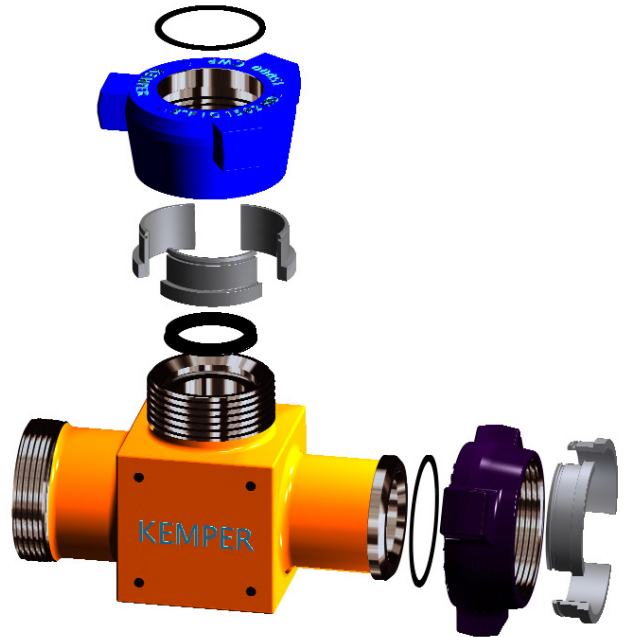
Kemper integral manifold Tees and Laterals are ideally suited for ground and truck manifold applications. These large bore integral fittings are made from forged alloy steel and have integral union end connections. The end connections are precision machined to fit industry common Kemper Hammer Unions and are available in sizes: 2", 3" and 4" and figures: 602, 1002, and 1502. Many combinations of size and figures are available. **EXTRA HEAVY DUTY** connections are available but only for 3" 1502. See below for more information on this connection.

Kemper integral manifold fittings are available for either standard service (up to 15,000-psi CWP) or sour gas service (up to 10,000-psi CWP). All integrals are 100% hydrostatic pressure tested before leaving factory and have material traceability. All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for *no additional cost*.

EXTRA HIGH PRESSURE INTEGRAL 45° LATERALS



EXTRA HEAVY DUTY INTEGRAL 3" X 4" TEE



EXTRA HEAVY DUTY CONNECTION (EHD) – Kemper has engineered an exclusive large bore connection that can easily be used on both integral manifold Tees, Laterals and Plug Valves. The 3" 1502 EHD can stand up to the forces derived from the frac pump inlet that normally overstresses standard 3" 1502 connections used in 4" trailer mounted manifolds. The added strength of the 3" 1502 EHD is a direct result of the 75% increase in critical wall thickness along with the extended thread length of the Hammer Lug Nut connection. The Extra Heavy Duty connection will outperform the standard 3" 1502 connection AND is strongly recommended for truck manifold applications. The EHD is available in both standard and sour gas service but **ONLY** in 3" 1502 connections.

Note: When connecting the EHD connection to a 3" Code Red Swivel Joint, an EHD no. 8 pc Swivel Component must be used to mate with the EHD Lateral, Tee, or Plug Valve. Plug Valves and other fittings are available with EHD connections to allow direct connection and increased strength to all trailer mounted connections attached to the frac pump. See page 5 with the heading "Manifold Trailers and Dual Choke Manifolds" for recommended frac pump hookups.

PUP JOINTS

NON-PRESSURE SEAL PUP JOINTS



Kemper **Non-Pressure Seal Pup Joints** are available in **1", 1½", 2", 3"** and **4"** nominal sizes. All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for *no additional cost*.

Standard lengths range from 1 foot up to 20 feet at CWPs of 6,000-psi (Code Silver), 10,000-psi (Code Black) and 15,000-psi (Code Red).

Non-standard lengths in any quantity are available with minimal lead time for custom requirements. Please consult the factory for details.

UNION INTEGRAL PUP JOINTS



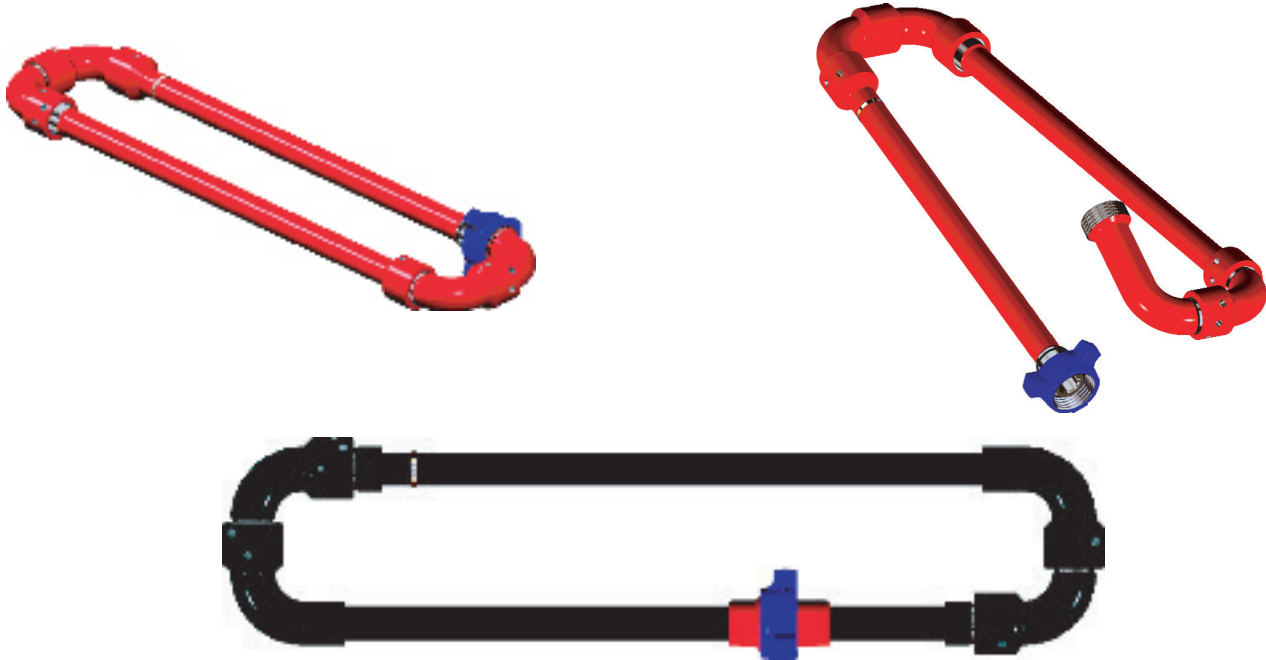
Kemper **Integral Pup Joints** feature an entirely one piece, seamless upset-forged construction and are utilized when welded or threaded connections are cause for concern. They are available in **2", 3"** and **4"** 15,000-psi (Code Red) in lengths up to 10 feet. These Pups can be used with the complete range of high pressure and abrasive oilfield fluids.

2"	1.0'	2.0'	3.0'	4.0'	5.0'	6.0'	8.0'	10.0'
Wt. lbs.	23.0	31.5	40.0	48.5	57.5	65.5	82.5	99.5
3"	1.0'	2.0'	3.0'	4.0'	5.0'	6.0'	8.0'	10.0"
Wt. lbs.	41.5	57.5	73.5	89.5	105.5	121.5	153.5	185.5
4"	1.0'	2.0'	3.0'	4.0'	5.0'	6.0'	8.0'	10.0"
Wt. lbs.	74	115	156	196	234	287	360	440

CEMENTING / CIRCULATING STEEL HOSE LOOPS

**FIGURE 1502, CODE RED
INTEGRAL (15,000 CWP)**

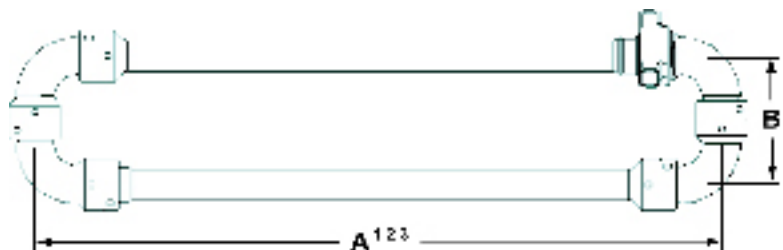
**FIGURE 1502, CODE RED
EXTRA LEVERAGE INTEGRAL**



**FIGURE 1502, CODE BLACK
LPT THREADED (10,000 CWP)**

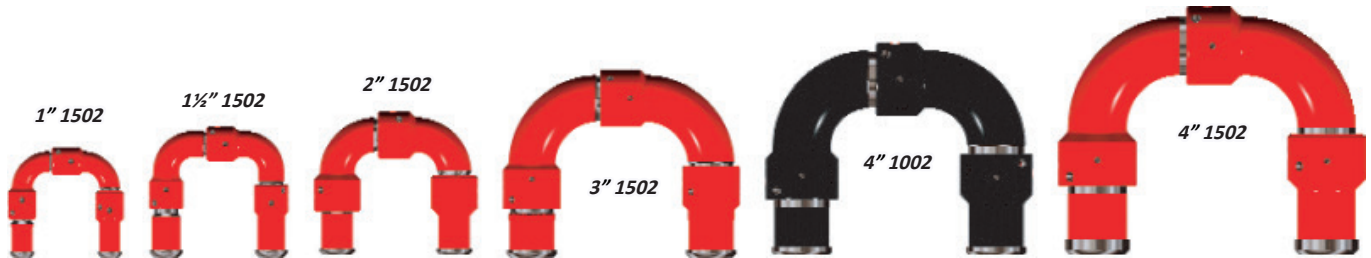
- Extra High Pressure Cementing/Circulating Hose Loops, Figure 1502 & 1002, in 2" and 3" sizes.
- For test lines, fracturing, acidizing, cementing and well servicing up to 15,000-psi CWP.
- Our "Extra Leverage" Hose Loop features an extended (No. 7) piece to accomplish breaking, positioning and making the swivel connection with less effort than standard hose loops.
- Hose Loops can be custom ordered in non-standard lengths with minimal lead time for custom requirements.
- Manufactured to the highest quality standards in the industry.
- Optimal combination of core strength and case hardness without sacrificing ductility.
- All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for *no additional cost*.
- Maintenance, rebuild and recertification is available through our Service locations.

SIZE	A1	A2	A3	B
2"	57"	60"	72"	10.69"
3"	57"	60"	N/A	16.38



SWIVEL JOINTS - 10,000 & 15,000 CWP

SWIVEL JOINTS - CODE RED FIGURE 1502 1", 1½", 2", 3", and 4"



- Extra High Pressure Long Radius Swivel Joints, Figure 1502 & 1002, in 1", 1½", 2", 3" and 4" sizes.
- For test lines, fracturing, acidizing, cementing and well servicing up to 15,000-psi CWP.
- Swivel Joints can be custom configured in any style for quick delivery.
- Manufactured to the highest quality standards in the industry.
- Optimal combination of core strength and case hardness without sacrificing ductility.
- All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for *no additional cost*.



Note: All Male Union Ends are supplied with Detachable Hammer Lug Nuts.

SWIVEL JOINTS, HOSE LOOPS - 6,000 CWP

CODE SILVER, STYLE 50



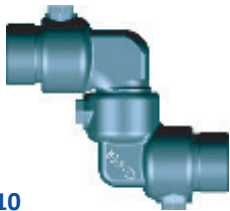
CODE SILVER, STYLE 70



- High Pressure Swivel Joints - 6,000-psi CWP (Cold Working Pressure) in ¾", 1", 1¼", 1½" and 2" LPT sizes.
- For test lines, fracturing, acidizing, cementing and well servicing up to 6,000-psi CWP.
- Swivel Joints can be custom configured in any style for quick delivery.
- All supporting documentation, including MTRs and Hydrostatic test reports, are available at time of order for *no additional cost*.
- Hose Loops factory built to customer specification and certified for service.
- Maintenance, rebuild and recertification is available through our Service facilities.



Code Silver Hose Loops
Two Style 50 Swivel Joints and one
Figure 602 Hammer Union



Style 10
3 Swivels, 2 Elbows



Style 20
1 Swivel



Style 30
1 Swivel, 1 Elbow



Style 40
1 Swivel, 2 Elbows



Style 50
2 Swivels, 2 Elbows



Style 60
2 Swivels, 1 Elbow



Style 80
3 Swivels, 3 Elbows



Style 70
2 Swivels, 3 Elbows

OILFIELD HAMMER UNIONS

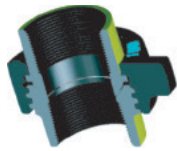


Figure 100

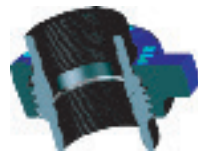


Figure 200



Figure 300



Figure 400

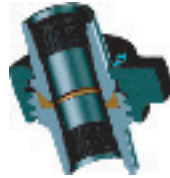


Figure 600



Figure 1002

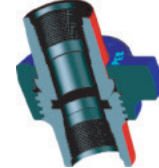


Figure 1502

Figure Number	Standard Service Color Code (Subs - Nut)		Non-Shock Cold Working Pressure Rating (psi)				Nominal Pipe Size (Inches)											
			Standard Service		H ₂ S Service (3)		1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12
			CWP	Test	CWP	Test												
100	1	Yellow	Black	1000	1500						●	●	●	●	●	●		
101		Yellow	Orange	1000	1500									●				
200		Grey	Blue	2000	3000		●	●	●	●	●	●	●	●	●	●	●	
201		Grey	Orange	2000	3000					●	2	●						
206		Grey	Blue	2000	3000		●	●	●	●	●	●	●	●	●	●	●	
207		Grey	Blue	2000	3000						●	●		●				
211		Blue	Grey	2000	3000					●		●						
300		Yellow	Grey	2000	3000					●								
400		Pink	Black	4000	6000	4000	6000				●		2	2	*	*		* * *
402		Brown	Black	4000	6000	4000	6000				●							
600		White	Black	6000	9000			●	●	●	●		●					
Figure G		Yellow	White	6000	9000	6000	9000			●	●							
602		Orange	Black	6000	9000	6000	9000	●	●	●	●		●	2	●	●		
1002		Blue	Pink	10000	15000	7500	12000	●	●	●	●		●	●	*	*		
1003		Green	Black	7500	12000	5000	7500						●	●	*	*		
1502		Pink	Blue	15000	22500	10000	15000	●		●	●		●	●	●			
2002		White	Green	20000	30000						●							
2202		Green	Green			15000	22500				●							

* Indicates reduced Cold Working Pressure due to Pipe Size or other design factor - Reduction as shown below;

5", 6", 10", 12" Figure 400 - CWP = 2500 psi - Test = 4000 psi

5" Figure 1002 w/ LPT Ends - CWP = 5000 psi - Test = 7500 psi

5", 6", Figure 1002 B/W - CWP = 7500 psi - Test = 12000 psi

5", 6" Figure 1003 B/W - CWP = 7500 psi - Test = 12000 psi

Sour Gas Service Prepped 5", 6" Figure 1002 B/W - CWP = 5000 psi - Test = 7500 psi

Sour Gas Service Prepped 5" Figure 1003 B/W - CWP = 5000 psi - Test = 7500 psi

1 - ALSO AVAILABLE IN 16" FIGURE 100 w/ BUTTWELD SCHEDULE 80 ENDS

2 - ALSO AVAILABLE IN API 8 OR 10 ROUND THREADED ENDS

3 - MINIMUM ORDER QUANTITIES MAY BE REQUIRED FOR UNIONS PREPPED FOR SOUR GAS SERVICE, OR OTHER NON-STANDARD UNION CONFIGURATIONS
PLEASE CONSULT MANUFACTURING, DISTRIBUTION OR STIMULATION SALES FOR AVAILABILITY, MINIMUM ORDER QUANTITIES, AND PRICING

KEMPER REBUILD - RECERTIFICATION FACILITIES

Kemper Rebuild and Recertification Facilities provide complete management, rebuild and recertification of frac iron, such as: Swivel Joints, Pup Joints, Plug Valves, Check Valves and Relief Valves. These services will significantly increase the life of your equipment and maximize the return on your original investment. Kemper can provide programs for periodic managed inspection and refurbishment of all flow and manifold iron. We utilize our **Iron Management System** to record all the details of the service work we perform, providing you with detailed reports upon completion of the job. Please contact us for quotations regarding your inspection and maintenance requirements at any of the following locations:

Sales & Service

2733 Industrial Drive
Sulphur, OK 73086
Local: 580-247-9623
Toll Free: 888-533-3722
Fax: 580-622-2058

Sales & Service

1423 4th Avenue
Grand Junction, CO 81501
Local: 970-609-5845
Fax: 970-609-5839

Sales & Service

180 Sherman Way
Kensett (Searcy), AR 72082
Local: 501-268-2698
Fax: 501-268-2196

Sales & Service

1000 West 2nd Street
Odessa, TX 79763
Local: 432-301-9990
Fax: 432-301-9991

Sales & Service

111 Arrowhead Drive
Unit C
Slippery Rock, PA 16057
Local: 724-790-4990
Fax: 724-738-0172

Sales & Service

1391 County Road 429
Pleasanton, TX 78064
Local: 210-446-5863
Fax: 830-569-8236



MOBILE REBUILD - RECERTIFICATION TEAMS

Kemper's Mobile Rebuild Teams provide flowline and valve maintenance, repair, UT and hydrostatic testing at whatever location required to return your iron investment to productivity. These teams are scheduled out of our Sulphur, OK location and we will spend as much time on-site as needed. Every piece of your equipment will be properly assessed, rebuilt and recertified for service. Equipment not suitable for rebuild service will be documented and segregated for your disposition.



KEMPER LOCATIONS



MANUFACTURING HEADQUARTERS

3001 DARRELL ROAD
ISLAND LAKE, IL 60042
PH: 847-526-2166
FAX: 847-526-2241
TOLL FREE: 800-323-1659



ROCKY MOUNTAIN SALES

1423 4TH AVENUE
GRAND JUNCTION, CO 81501
PH: 970-609-5845
FAX: 970-609-5839



MID-CONTINENT SALES

2733 INDUSTRIAL DRIVE
SULPHUR, OK 73086
PH: 580-247-9623
FAX: 580-622-2058
TOLL FREE: 888-533-3722



WEST TEXAS SALES

1000 WEST 2ND STREET
ODESSA, TX 79763
PH: 432-301-9990
FAX: 432-301-9991



PENNSYLVANIA SALES

111 ARROWHEAD DRIVE, UNIT C
SLIPPERY ROCK, PA 16057
PH: 724-790-4990
FAX: 724-738-0172



UTAH SALES

1243 EAST HIGHWAY 40, UNIT 1
VERNAL, UT 84078
PH: 435-781-8258
FAX: 435-781-3037



NATIONAL SALES HEADQUARTERS

12343 CUTTEN ROAD
HOUSTON, TX 77066
PH: 281-781-2730
FAX: 281-781-2731
TOLL FREE: 800-231-2724



CANADA SALES

8001 EDGAR INDUSTRIAL AVENUE
RED DEER, ALBERTA T4P 3S2
PH: 403-348-0872
FAX: 403-348-0873



SOUTH TEXAS SALES

1391 COUNTY ROAD 429
PLEASANTON, TX 78064
PH: 210-446-5863
FAX: 830-569-8236



ARKANSAS SALES

180 SHERMAN WAY
KENSETT (SEARCY), AR 72082
PH: 501-268-2698
FAX: 501-268-2196



Sales & Distribution

12343 Cutten Road
Houston, TX 77066
Local: 281-781-2730
Toll Free: 800-231-2724
Fax: 281-781-2731

Sales & Service

2733 Industrial Drive
Sulphur, OK 73086
Local: 580-247-9623
Toll Free: 888-533-3722
Fax: 580-622-2058

Sales & Service

1423 4th Avenue
Grand Junction, CO 81501
Local: 970-609-5845
Fax: 970-609-5839

Manufacturing HQ

3001 Darrell Road
Island Lake, IL 60042
Local: 847-526-2166
Toll Free: 800-323-1659
Fax: 847-526-2241

Sales & Service

111 Arrowhead Drive
Unit C
Slippery Rock, PA 16057
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Fax: 435-781-3037

Canadian Sales 

8001 Edgar Industrial Avenue
Red Deer, Alberta T4P 3S2
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Fax: 403-348-0873

Sales & Service

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