



**Technical Description**

- Hammer unions are one of the most readily used connections in the oil and gas industry.
- Hammer Unions are designed to enjoin mud tanks instantly without having to deal with the flange connections at all.
- If the mud tanks are not aligned in the right kind of way necessary hammer unions can still be used in order to make absolutely non-leak seals that are tightened.
- They generally have three parts, a male, a female, and a nut.
- The male part is an external threaded portion that is welded on the end of a pipe already connected to a tank wall.
- The pipe continues further through the nuts towards the O-ring in order to enter into the female part
- They are then hammered and tightened together.
- KFI Hammer Unions are forged with high quality alloy steel such as AISI 4130 75K
- All processes including forging, machining, and heat treatment are strictly controlled and full trackable in accordance with API 6A, API 16c and Q1, as well as NACE-MR-01-75 (sour gas service)
- Hammer unions are available in size range from ½ " to 12" and are suitable for pressures up to 20,000 psi, and all have full material traceability.

**Industries**



**Applications**

- Oil and Gas pipelines
- Cementing, Fracturing, Acidizing, Testing, Manifolds and Pipelines
- Crude Oil, Mud and Sour Gas
- Water Flood Lines
- Choke-and-kill lines

**Materials**

AISI 4130 75K / A105. Unions are all steel constructed including precisely manufactured ball-cone (male-to-female) seats. High pressure unions are made from forged alloy steel.

**Key Features**


**KFI Hammer Unions** are fully interchangeable with most other major brands such **WECO**. They are colour coded for quick and unique identification.

Figure No.	Assembly Color Key	Pressure Rating (PSI)				Pipe Size (in mm)												
		Standard Service		Sour Gas Service		1	1.3	1.5	2	2.5	3	4	5	6	8	10	12	
		Cold Working	Test	Cold Working	Test	25	32	40	50	65	80	100	125	150	200	250	300	
50		500	750	NA	NA							⊙	⊙					
100		1,000	1,500	NA	NA				⊙	⊙	⊙	⊙	⊙	⊙	⊙			
200		2,000	3,000	NA	NA	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
206		2,000	3,000	NA	NA	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
207		2,000	3,000	NA	NA						⊙	⊙		⊙				
211		2,000	3,000	NA	NA				⊙		⊙							
400		2,500	3,750	2,500	3,750									⊙	⊙	⊙	⊙	
400		4,000	6,000	4,000	6,000				⊙		⊙	⊙						
600		6,000	9,000	NA	NA	⊙			⊙		⊙	⊙						
602		6,000	9,000	6,000	9,000	⊙	⊙	⊙	⊙		⊙	⊙						
1002		10,000	15,000	7,500	11,250	⊙	⊙	⊙	⊙		⊙	⊙	⊙	⊙				
1003		10,000	15,000	7,500	11,250				⊙		⊙	⊙	⊙					
1502		15,000	22,500	10,000	15,000	⊙			⊙		⊙	⊙	⊙					
2002		20,000	30,000	NA	NA				⊙		⊙	⊙						
2202		NA	NA	15,000	22,500				⊙		⊙	⊙						

HAMMER UNION FIGURES

**FIG 50 UNION**


Recommended for air, water, oil, or gas service to 500 PSI NSCW. Standard subs are threaded for API line pipe.



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
5	5 1/2	5 1/4	10.8

**FIG 200 UNION**


Recommended for air, water, oil, or gas service to 2000 PSI NSCW. A unions of great utility meeting most requirements in the medium pressure ranges. Precision seating surfaces assure dependable pressure seal. Standard subs are threaded for API line pipe and are Weco interchangeable. Sizes of 2" and above also available with butt weld end connection



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
1	2 3/5	2	0.8
1 1/4	2 7/9	2 1/4	1.1
1 1/2	2 7/8	2 1/2	1.4
2	3 5/8	3	2.7
2 1/2	4 1/8	3 4/7	4.5
3	4 1/2	4	5.9
4	5	4 2/3	8.2
6	6 5/8	6 1/4	19.1
8	7 1/4	7 4/9	29.5

**FIG 207 UNION**


Recommended for air, water, oil, or gas service to 2,000 PSI NSCW. A blanking cap with Buna-N 'O' ring seal provides an efficient and dependable closure. The threaded sub is interchangeable with Fig. 200 threaded sub. Also available with butt weld ends.



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
3	3 3/4	2 3/4	4.45
4	4 5/7	3 1/2	7.38
6	5 4/7	4 5/6	17.1

**FIG 100 UNION**


Recommended for air, water, oil, or gas service to 1,000 PSI NSCW. Standard subs are threaded for API line pipe and are Weco interchangeable. Also available with



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
2	3 5/8	3 1/5	2.7
2.5	4 1/4	4	4.5
3	5	4 1/2	6.4
4	5 3/4	5 1/3	10.4
6	6 7/9	7	20.2
8	7 1/4	8 2/9	30

**FIG 206 UNION**


Recommended for air, water, oil, or gas service to 2000 PSI NSCW. A unions of great utility meeting most requirements in the medium pressure ranges. Precision seating surfaces assure dependable pressure seal. Standard subs are threaded for API line pipe and are Weco interchangeable. Sizes of 2" and above also available with butt weld end connection



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
1	2 3/5	2	0.8
1 1/4	2 7/9	2 1/4	1.1
1 1/2	2 7/8	2 1/2	1.4
2	3 5/8	3	2.7
2 1/2	4 1/8	3 4/7	4.5
3	4 1/2	4	5.9
4	5	4 2/3	8.2
6	6 5/8	6 1/4	19.1
8	7 1/4	7 4/9	29.5

**FIG 211 UNION**

Recommended for production systems with electrolytic corrosion problems. Laminated insulating rings provide 35 million Ohms resistance across the unions. O-ring in male sub provides a positive primary seal. Seal ring in female sub delivers a positive secondary seal.



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
1	2 3/4	2 1/8	0.9
2	3 1/2	3 1/8	2.7
3	3 3/4	5 3/4	4.5

HAMMER UNION FIGURES

FIG 300 UNION

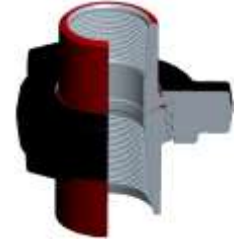
Recommended for production systems with electrolytic corrosion problems. Laminated insulating rings provide 35 million Ohms resistance across the unions. O-ring in male sub provides a positive primary seal. Seal ring in female sub delivers a positive secondary seal.



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
1	2 2/3	2	0.8
2	3 1/3	3	2.4

FIG 400 UNION

Recommended for air, water, oil, or gas service to 4,000 PSI NSCWP. Utilizes precision ball and cone seating surfaces for easy alignment and dependable pressure seal. Sizes over 4" are rated to 2,500 PSI NSCWP. Also available with a lip-type seal in 2" size only as Fig 402.



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
2	5 1/5	3 4/7	5
2 1/2	6 1/6	4	7.3
3	6 2/9	4 3/8	8.7
4	8 2/9	5	12.7
6	11	6 3/4	29
8	11 4/9	7 4/5	43.1

FIG 600 UNION

Recommended for air, oil, gas or steam service to 6,000 PSI NSCWP. Rugged and fast 2 pitch acme thread makes this the quickest unions to makeup or break out (only two turns). The threaded sub is fitted with a bronze seat insert for added effectiveness in pressure sealing.



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
1	3 1/2	2 1/3	1.6
2	6 1/4	3 3/4	6.8

FIG 602 UNION

Recommended for air, water, oil, gas or mud service to 6,000 PSI NSCWP. This unions has a replaceable lip-type seal ring of Buna-N specifically designed to minimize fluid flow turbulence. Lip-type ring provides a pressure seal and protection for metal-to-metal seating surfaces. Smaller and lighter than Fig. 600 unions and are recommended for manifold and truck mounting where size and weight are critical.



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
1	3 1/2	2 1/3	1.6
2	5 3/4	3 4/7	6.8
3	6 1/4	4 1/2	9.5
4	8	5 1/4	14

FIG 1002 UNION

Recommended for air, water, oil, gas and mud service to 10,000 PSI NSCWP. This unions has a replaceable lip-type seal ring of Buna-N specifically designed to minimize fluid flow turbulence. The lip-type ring works similarly as in the Fig. 602 unions. These unions are for use on high pressure systems and trucks.



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
1	3 1/2	2 1/3	1.6
2	5 3/4	3 4/7	7.3
2 1/2	6 1/8	3 7/8	8.2
3	6 2/9	4 3/8	9.5
4	8 2/9	5	14.5

FIG 1003 UNION

Recommended for high pressure manifolding and drilling rig use where alignment of piping components is a problem. Recommended for air, water, oil, gas or mud service to 10,000 PSI NSCWP. This unions has a ball seat that allows a total of 15 (±7½) angular adjustment. An 'O' ring seal in addition to the metal-to-metal seat assures a pressure tight connection.



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
2	4 2/3	3 1/2	9.5
3	9 1/8	4 4/5	14.1
4	11	6	36.9
5	11	6	36.9


FIGURE  
50 TO 2202

HAMMER UNION

HAMMER UNION FIGURES

**FIG 1502 UNION**


Recommended for air, water, oil, gas and mud service to 15,000 PSI NSCWP. This unions has a replaceable lip-type seal ring of Buna-N specifically designed to minimize fluid flow turbulence. The lip-type ring also provides a pressure seal and protection for metal to metal seating surface and are recommended for manifold and truck mounting or other installations where high pressure is encountered.



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
1 1/2	5 2/5	3 2/3	5.4
2	7	3 3/4	9.5
3	7 5/8	4 1/2	14.1
4	9	4 1/2	32
5	9 1/2	4 1/2	40

**FIG 2002 UNION**

Recommended for standard service to 20,000 PSI NSCWP. Available in butt weld end connections only. Available as Fig 2202 for sour service (15,000 PSI WP)



Size (in)	Length (in)	Nut Radius (in)	Weight (in Kg)
2	7 2/5	3 3/4	10.5
3	9 5/9	4 7/8	21.8
4	8 1/2	6	34.5
5	10 3/4	6 1/2	50



OIL & GAS



HAMMER UNION APPLICATIONS

OIL AND GAS | MUD TANKS | CHOKE AND KILL | SOUR GAS | WATER FLOOD

