

OPERATIONS & INSTALLATION CAUTIONS & SAFETY WARNINGS

OILFIELD HAMMER UNIONS AND FLOW CONTROL PRODUCTS THAT HAVE HAMMER UNION END CONNECTIONS.

Working with or around any pressure containing pipe components or vessels requires informed common sense and heightened safety. Where circumstances of severe service, extremes of temperature, or high pressure are encountered, all personnel must use suitable protective equipment and follow all safety procedures and policies. Complete and proper make-up of union components and end connections is required to attain rated working pressure. Installers of these products are responsible for their safe installation and use. Failure to observe these precautions regarding hammer lug unions could result in property damage, personal injury or death.

When making or breaking hammer lug unions, personnel must always wear safety glasses and appropriate protective equipment.

When making up hammer lug unions, personnel must not use excessive hammering force.

When unions are pressurised, personnel must not hammer, strike or impact unions in any way.

When pressurised, unions / piping systems must not exceed the rated working pressure of the union or pipe.

When ambient temperatures are below freezing, personnel must practice extra care making or breaking union connections. Low temperatures lessen the ductility and impact strength of iron and steel. For temperatures below -25°C and above 120°C ensure correct o-rings and seals are fitted.

When using hammer unions prepped for sour gas service and exposed to sour fluids, personnel should never interchange standard service union components. Sour gas service hammer union components are marked "SG" or Sour Gas" or "H2S" and are painted olive green.

When prepped for sour gas service, hammer unions are fitted with fluoroelastomer or optional highly-saturated nitrile elastomer seal materials. However no manufacturer can or will absolutely guarantee the performance of any elastomer in sour gas service.

When installing unions / piping systems in overhead applications, appropriate piping supports and methods must be employed with sufficient factors of safety to bear the combined weight of piping and contained fluids.

When disassembling union connections, personnel must assure that piping systems are completely depressurised, and that residual fluids are properly purged with any subsequent leakage isolated and cleaned. Residual fluids should be treated as hazardous waste.

When making up pipe end union assemblies, personnel should never interchange components of different Figure Numbers or pressure ratings.

Never connect products or piping with hammer union ends unless those end connection can be positively identified to be identical union size, figure number and pressure rating.

Never assemble any combination of hammer union components, including hammer lug nut, segmented rings, male and female unless the union size, figure number and pressure rating are identical.

Products must be removed from service and disposed of when positive identification of product or component size, figure number or pressure rating cannot be made certain due to deterioration of markings or any other damage.

Should any leakage be evident during use of hammer union end products, these products should be immediately removed from service, inspected for renewal, or otherwise permanently disposed of.

When making up pipe end union assemblies, personnel should never interchange components with different brands, especially 10,000psi and 15,000psi unions unless the manufacturer in question guarantees interchangeability.

**SPECIAL WARNING ON 6,000, 10,000 & 15,000 PSI UNIONS:
(602, 1002, 1003, 1004, 1502)**

Please read the safety warnings about joining 2" 602, 1002 and 1502 unions relating to mismatching 15,000psi unions with 10,000 psi and 6,000 psi unions at:

<http://www.globalsupplyline.com.au/product-range-oilfield-equipment.html>

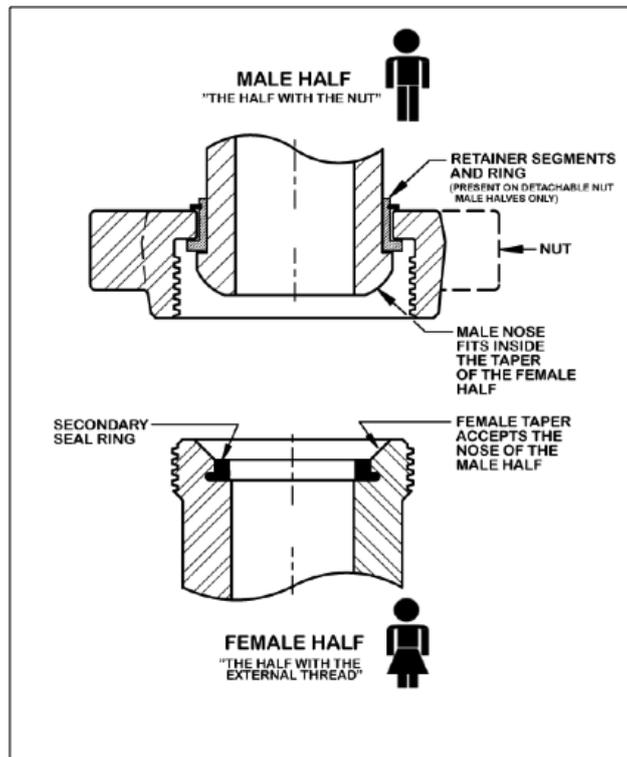
In all sizes 10,000 and 15,000psi rated hammer unions have a **lower cold working pressure rating** when used on sour / H₂S gas service. Consult manufacturers data sheets. In 5" and 6" sizes 1002, 1003, 1004 and 1502 unions, even for standard service, a lower cold working pressure applies. Consult manufacturers data sheet. (In 10,000psi the figure 1004 is available which is designed for a higher cold working pressure rating than the 1002 and 1003). In 10,000 & 15,000psi many styles of 4" and above unions are not recommended at all for sour gas service, (particularly 5" and 6") consult manufactures data sheet.

HOW TO IDENTIFY A MALE AND/OR FEMALE HALF OF A FIGURE NUMBER 602, 1002, 1502, 2002, OR 2202 HAMMER WING UNION:

The female half has an external thread (commonly recognised as a male thread). The male half has a nut with an internal thread (commonly recognised as a female thread). See illustration on the following page.

The nose of the male union half fits into the inward taper of the female union half. The nut secured to the male union half screws onto the external threads of the female union half to achieve connection of the two halves, and striking the wings of the nut with a hammer provides the force to tighten the connection to achieve a seal.

Firm close contact of the male union half nose with the taper of the female union half provides a primary metal to metal seal. Most unions have a secondary elastomeric seal as a backup to the primary seal.



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At Global Supply Line the same knowledge and effort we put into this web site goes into every product we sell. If this website helps you, please reward Global Supply Line with your business.

We stock a complete line of Hammer Unions (wing unions) from Fig 100 thru Fig 1502 in NACE, H2S 1" to 10", weld and screwed ends, API licensed manufacturer, sold in Australia for over 20 years to all majors. We stock standard and sour H2S specification. See our oilfield products catalogue at our website.

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