



## Flame Arrester

In-line with weco connection, deflagration



#### **Product Description**

Depending on the purpose of use in the field, connection types in flame arresters can be provided with hammer unions to meet the needs of pipelines.

With these fasteners, which are used in areas where fast plug-in applications are required during operation, the maintenance of flame arresters on the relevant lines can be carried out without requiring any additional connection materials.

The oil and gas sector uses WECO couplings, also known as HAMMER LUG unions, to quickly connect pipes and flexible hose assemblies.

They are often used to transmit petroleum, gas, drilling mud, cement, water, air, and many other media on onshore and offshore drilling rigs.

No additional equipment are required to tighten and loosen HAMMER LUG unions—just a hammer, as the name implies.

The components of a HAMMER LUG union are a coupler with an inner cone and a male thread, a ball-shaped fitting with a male half and a female thread nut that secures the ball-shaped fitting to the coupler's cone.

Depending on the kind, a primary sealing (metal/metal) is performed by a tight contact of the ball end with the cone, or the sealing is accomplished by a second rubber seal (o-ring or lip seal).

The coupling's (the nut and coupler's) trapezoidal ACME thread is included (standard or modified). They either weld in connections or connect to an installation using NPT female thread end connectors.

All wing unions are manufactured in accordance with strict quality requirements, ensuring complete field interchangeability of similar components with the same size, figure number, and pressure rating.





Hammer Lug Unions are designed and manufactured in accordance with the following specifications:

API 6A Specification for Wellhead and Christmas Tree Equipment.

API RP-14E Recommended Practice for Design and Installation of Offshore Production Platform Piping.

NACE MR-01-75 Sulphide Stress Cracking Resistant Metallic Materials for Oilfield Equipment.

ASME VIII Boiler and Pressure Vessel Code.

ANSI B31.3 Chemical Plant and Petroleum Refinery Piping.

The majority of other top union manufacturers accept hammer unions as a substitute. The following pertinent industry standards are met or exceeded by all union products: NACE, ISO, DNV, API, ASTM A-105, ASTM A29, ASTM A536 Grade 65-45-12, and ASME B1.20.1.

Hammer Unions are used to join heavy-duty, high-pressure flow lines. They may frequently be found in strip mines, chemical factories, maritime dredging vessels, and the oil sector (depending on model, for sand slurry, oil, water, steam, etc).

Pressures range from 1,000 to 15,000 psi depending on the size and design; the color coding scheme on Hammer Unions represents the various configurations and pressure ratings (Fig #s are also often stamped on the union as well).

When a coupling blows out, it can cause serious injury, significant property damage, and/or significant loss of the product being conveyed.

This can happen with certain union components for the same nominal pipe size but with a different figure number, such as Figure 1502 and Figure 602.

These components may appear to mate but actually have inadequate threads that can be mistakenly overlooked. Never mix together various Fig Series.







# **Product**Recommendations



#### Flame Arrestor

End-Of-Line, With Automatic Opening Hood, Deflagration

Model: 312

Storagetech™ Flame Arrestors (End-of-line, with Automatic Opening Hood) are passive devices that prevent the propagation of a flame or fire from entering into an opening in a pipeline or vessel discharging flammable vapor. As different from model 310, Model 312 end of line flame arrestor's weather hood is designed to react fire instantly tanks to it's fusible link, which is melted during the fire and let the weather hood release the gas/fire to the atmosphere.



#### **Flame Arrestor**

Vertical, In-Line, Detonation

Model: 320

Storagetech™'s Model 320 In-line Detonation Flame Arrestor (also called flame arrestor or fire arrestor) is designed for installation in gas pipelines. Detonation occurs when a flame travelling through the pipeline reaches supersonic velocities, usually as a result of the pipeline configuration or pipeline surface roughness. Changes in gas density and pressure causes the flame velocity to metamorphose from subsonic to supersonic.

Storagetech™ manufactures storage tank equipment, such as flame arresters, breather valves, gauge hatches, floating roofs, and floating suction pipe.





### **Flame Arrestor**

Horizontal, In-Line, Detonation

Model: 321

Storagetech<sup>TM</sup>'s Model 321 In-line Detonation Flame Arrestor (also called flame arrestor or fire arrestor) is designed for installation in gas pipelines. Detonation occurs when a flame travelling through the pipeline reaches supersonic velocities, usually as a result of the pipeline configuration or pipeline surface roughness. Changes in gas density and pressure causes the flame velocity to metamorphose from subsonic to supersonic.





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#### data sheet series

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