



## IRONWORKS RESTRAINTS

### PERSONAL RESPONSIBILITIES:

- Safety glasses, approved safety shoes and hard hat must be worn when installing the Red Iron Sling system.
- Personnel should never hammer on any component when pressure is present. Hammering on any part or component may also cause foreign material or steel slugs to become airborne.
- It is a personal responsibility to use the proper tools when installing the Red Iron Sling system

### PRODUCT DESCRIPTION:

- The RED IRON SLING system is designed to help contain high-pressure piping and components in case of rupture during the pumping process.
- The destructive force of an unrestrained flow line rupture, regardless of the cause, can be devastating and catastrophic to both people and equipment.
- Metal components that were previously subjected up to 15,000 PSI of internal pressure are instantly forced to relieve that pressure.
- This could cause components to become airborne causing severe damage or injuries.
- Installation of the RED IRON SLING system can help producers and well service providers deliver on a commitment to safety at the well site.
- The RED IRON SLING system utilizes half-hitches on each side the hammer unions running the full length of the flow line.
- The system is anchored at each end giving 100% securement. The RED IRON SLING system is suitable for both energized and non-energized.

ALL PSI REFERENCES ARE CALCULATED USING 1502

The **Light-Duty red** can be used on multiple sizes with the following PSI ratings.

- 2" – 15,000 PSI
- 3" – 8,000 PSI
- 4" – 5,000 PSI



The **Medium-Duty blue** can be used on multiple sizes with the following PSI ratings.

- 2" – 20,000 PSI
- 3" – 15,000 PSI
- 4" – 10,000 PSI



The **Heavy-Duty orange** can be used on multiple sizes with the following PSI ratings.

- 2" – 20,000 PSI
- 3" – 20,000 PSI
- 4" – 15,000 PSI



**SYSTEM COMPONENTS:**

- The Light-Duty reds are designed for 2" – 1502.
- The Medium-Duty blues are designed for 3" – 1502.
- The Heavy-Duty orange are designed for the 4" – 1502.

Most companies only purchase the 20' slings. These engineered synthetic slings half hitch on each side of hammer unions from well-head to pumps. These components are optimized for their application and include the following features;

- Compliance with ASTM B30.20
- Tested to verify performance at -30C
- Galvanized coating per ASTM A153
- Locking mechanism to prevent shackle from disengaging
- Proof testing

**APPLICATIONS:**

The RED IRON SLING system is intended for all applications involving pressurized fluid or gas. This includes energized fluids, non-energized fluids, fixed and temporary applications.

The following is a detailed list of potential applications that are appropriate for use with the RED IRON SLING system.

**Service Type;**

- Nitrogen
- CO2
- Cementing
- Acidizing
- Slick water
- Foam frac

**Applications:**

- Treating iron lines
- Well head/riser
- Manifolds and manifold trailers
- Pump discharge bridle assemblies

Please call for safety and installation instructions