

## WIRE ROPE END FITTINGS

### FORGED FOR CRITICAL APPLICATIONS

The proper performance of forged clips depends on proper manufacturing practices that include good forging techniques and accurate machining. Forged clips provide a greater rope bearing surface and more consistent strength than malleable cast iron clips. Fist Grip clips provide a saddle for both the "live" and the "dead" end. Fewer forged clips are required for each termination than with malleable cast iron clips. Forged clips reduce the possibility of hidden defects that are sometimes present in malleable cast iron clips. Malleable cast iron clips should only be used in non-critical applications. ASME, OSHA, and ASTM recommend only forged clips for critical applications.

#### Questions to ask your rigging provider

*Is the clip forged?*

*Is an adequate cradle provided in the clip base for the wire rope?*

Malleable cast iron clips are sometimes improperly used as replacements for forged clips.

#### Why choose Crosby

Crosby provides forged "Red" U-Bolt® Clips and forged Fist Grip clips which meet or exceed Federal Specification Number FF-C-450E and are considered the industry standard.

### FULL LINE

The proper application of forged clips requires that the correct type, size, number, and installation instructions be used (See APPLICATION INFORMATION below for more information). Availability of a full range of sizes of forged U-bolt clips and forged Fist Grip clips are essential for design flexibility.

#### Questions to ask your rigging provider

*Do they have both Fist Grip and U-bolt clips available?*

*Do they have a full range of forged wire rope clip sizes?*

Malleable No competitor has the full line of forged U-Bolt clips and Fist Grip clips that Crosby has.

#### Why choose Crosby

Only Crosby provides forged "Red" U-Bolt® Clips from 1-1/8" to 3-1/2" and forged Fist Grip clips from 3/16" to 1-1/2".

\* The 3-1/2" base is a steel casting.

### IDENTIFICATION

The clip's size, manufacturer's logo, and a traceability code should be clearly embossed in the forging of the clip. These three elements are essential in developing total confidence in the product.

#### Questions to ask your rigging provider

*Is the manufacturer's name and size of clip clearly marked?*

*Do they have a traceability system that is actively used in the manufacturing process?*

Most do not have a traceability system.

#### Why choose Crosby

Crosby clearly embosses its logo, the size, and the Product Identification Code (PIC) into all Crosby "Red" U-bolt® Clip bases and Fist Grip clips. Crosby's traceability system is actively used throughout the manufacturing of forged clips. The material analysis for each heat of steel is verified within our own laboratory.

### APPLICATION INFORMATION

Detailed application information will assist you in the proper installation of wire rope clips. This information is most effective when provided at the point of application, as well as in supporting brochures and engineering information. The manufacturer must provide this specific information. Generic information will not provide all the needed application instructions. A formal application and warning system that attracts the attention of the user, clearly informs the user of the factors involved in the task, and informs the user with the proper application procedures as needed.

#### Questions to ask your rigging provider

*Does each clip have the application and warning information?*

Most competitors do not have application and warnings information with each clip.

#### Why choose Crosby

Crosby provides detailed application and warning information for all forged clips. Each clip is individually bagged or tagged with the application and warning information. Testing and evaluation of special applications can be performed upon special request.