

Warnings and Instructions for Use

General

The AQUALLINE products are the strongest on today's market and the best choice for a wire rope termination, but the pouring, use and inspection are the sole responsibility of the user.

Always carefully inspect the product before use.

- Never use a product showing nicks, gouges or cracks, or any signs of wear to the bow, pin holes, pins or bolts.
- Make sure all markings are legible.
- Do not use products after being overloaded, side-loaded or shock-loaded.
- Do not modify any part. Never do any repairs, reshaping or welding on an AQUALLINE product, but contact your supplier.
- Incorrect use may create an unsafe situation, which could result in damage to equipment and/or serious injury or even death of personnel.

Spelter Sockets

Spelter socket terminations have an efficiency of 100%, based on the strength of the wire rope, but this is limited by the minimum breaking load (MBL) of the socket. Never use a wire rope with a diameter that deviates from that stated in the product tables.

- When using white metal, never expose a socket to a temperature of more than 300 °C (570 °F).
- When using synthetic resin, read the instructions for use and the warnings provided by the manufacturer.
 - Sockets poured with synthetic resin must not be subjected to temperatures exceeding 115 °C (240 °F).
 - Make sure the broomed wires are uniformly spaced in the basket, with the wire ends at the top of the basket. The axes of the wire rope and the socket must be aligned. Seal the base of the socket prior to pouring to prevent resin leakage.
 - Poured sockets should not be moved for at least 15 minutes after the resin in the socket has gelled.
 - If possible, we recommend the assembly to be proof-tested at 2/5 of the working load limit at least 1 hour after the resin in the socket has gelled.

Wedge Sockets

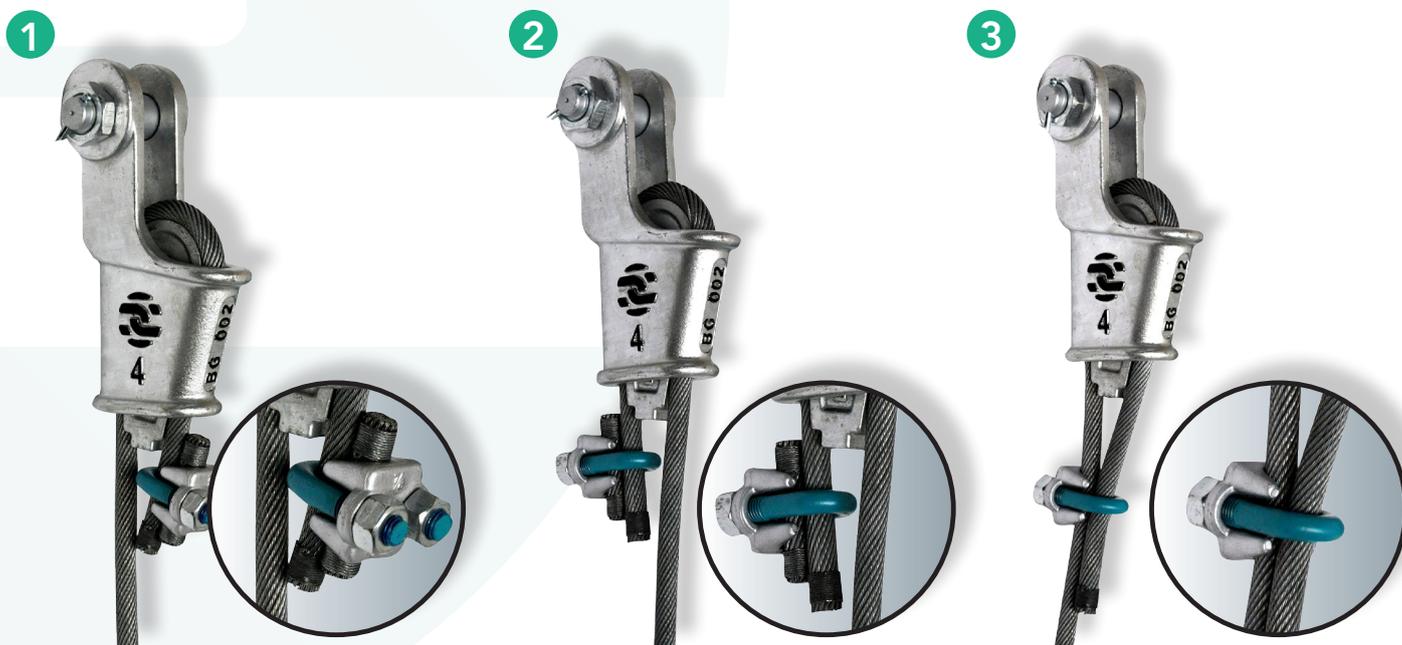
Wedge sockets have an efficiency of 80% based on the MBL of the wire rope.

Do not interchange AQUALLINE wedge sockets and wedges with non-AQUALLINE sockets and wedges.

Select the wedge socket for the correct wire rope size. Do not mix wedges with different models or sizes.

Instructions for use of the wedge sockets:

- Always mount the loaded wire rope in the centre line of the pin (see pictures below).
- Secure the dead end with a wire rope clip. Do not attach it to the loaded wire rope.
- The length of the dead end should have a minimum of 6 wire rope diameters, but also a minimum of 150 mm.
- The socket must be fixed to prevent rotation.
- After the first load, check that the wire rope and wedge are fully seated in the socket, as the load may slip if the wedge of the socket is not properly installed.



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Solid Wire Rope Thimbles

Our solid Wire Rope Thimbles have an efficiency rate of 90%.

When using a thimble, the wire rope should fit properly into the groove of the thimble.

As with other wire rope terminations, thimbles should be regularly inspected for irregularities, such as cracks or sharp edges.

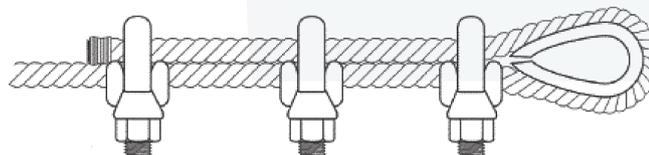
Wire Rope Clips

Always select a wire rope clip with the correct dimension and make sure to install the minimum number of clips required. For more detailed information on the required number of clips, please refer to the EN 13411-5 norm.

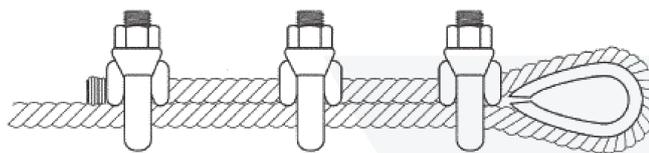
The clips must be installed correctly and must be tightened to the correct torque by using a torque wrench:

- The bridge of the wire rope clip should always be placed on the load bearing part of the rope.
- The U-bolt must be placed on the rope tail ('dead-end').
- Make sure to turn back sufficient wire rope length to ensure that the required number of wire rope clips can be installed.

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How to proceed:

1. Place the first clip one bridge width from the turned back rope tail. Tighten the nuts to the specified torque. Tighten them evenly. See Figure 1.
2. When a second clip is needed, place the second clip immediately against the thimble or loop. Turn the nuts of the second clip firmly, but do not tighten them yet. See Figure 2.
3. The following clips should be placed equally between the first two clips. The additional clips should be separated by at least $1 \frac{1}{2}$ times the clip-width with a maximum of 3 times the clip-width. Tighten the nuts on each U-bolt evenly to the recommended torque, alternating from one to the other. See Figure 3.

Figure 1.

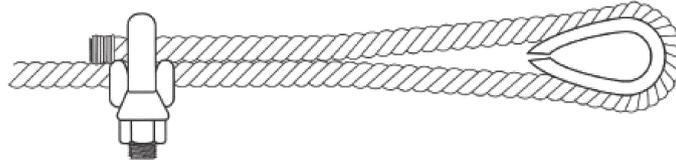


Figure 2.

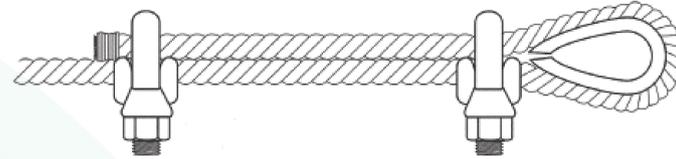
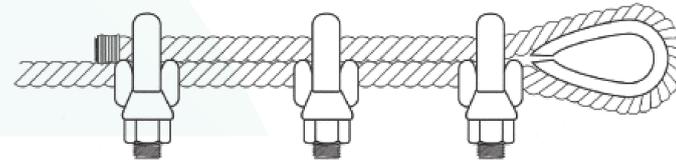


Figure 3.



To test the assembly, apply a load equal to or greater than loads expected in service. Check the torque value and retighten the nuts to the recommended torque using a torque wrench. Make sure to periodically check and re-tighten the nuts.