



User manual for aseke U-bolt Clips

Assembly and use of U-bolt clips

Steel wire clips must be inspected before use to ensure that:

- ID-marking is correct.
- The correct size of clip is used in relation to the wire.
- Nuts cannot loosen due to vibration.
- There are no deformations or cracks.
- U-bolt clip is not modified during machining, welding, bending with heat treatment as this may impair the operation and quality of the clip.
- Make sure that the wire rope is clean, dry, and free of grease as the tightening torque in Table 1 is based on it.

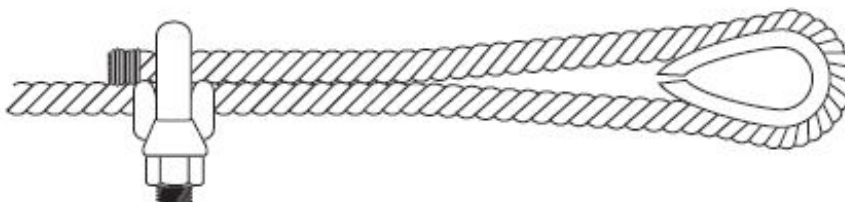


Steel wire clips should be mounted on the steel rope as shown in the figure below:

The "bridge" on the clip must always be located on the load-bearing side of the wire rope. The U-bolt itself must be mounted with the arch on the side where the wire rope end is, also known as the dead end of the wire rope.

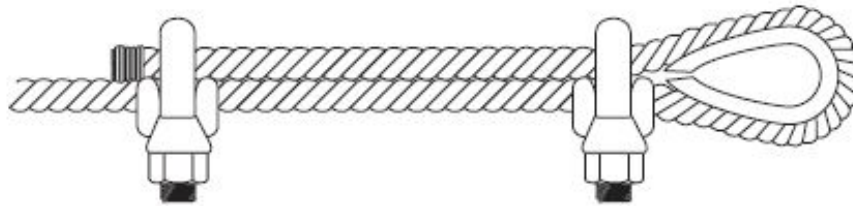
Pull the dead end of the wire rope back so far that there is room for the number of clips that must be mounted according to Table 1.

The first clip is mounted as shown in figure 1. Tighten it to the torque specified in table 1, to correct the steel rope dimension.



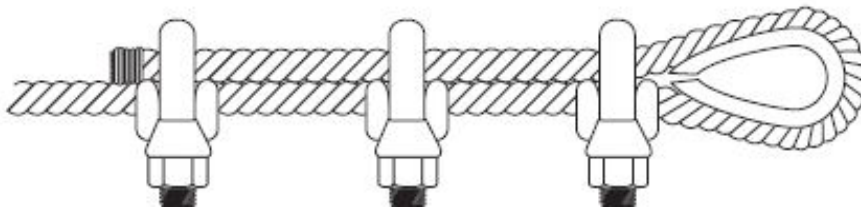
(Figure 1)

The second clip must be mounted directly after the thimble. Make sure that tightening the clips does not damage the cords in the wire rope (figure 2). Tighten the clip, but do not tighten with the full torque yet.



(Figure 2)

The next clip must be fastened between the first and last clip so that there is a distance of at least 1 ½ times the width of the steel wire clip or a maximum of 3 times the width of the clip according to figure 3.



(Figure 3)

- Apply a light load to the wire rope and tighten all the nuts evenly and alternately until the specified torque is reached.
- After mounting and before using the wire rope, nuts must be tightened further to the prescribed torque.
- After the load has been applied to the wire rope for the first time, the torque value must be checked and corrected if necessary.
- Retightening of the nuts must be done at 10,000 cycles (heavy use), 20,000 cycles (moderate use) or 50,000 cycles (easy use). If cycles are unknown, a competent person can set a time interval, i.e., every 3 months, 6 months, annually.

The torque values and the minimum number of steel rope clamps to be used for a specific size of steel rope are given in the following table:

EXTRA STRONG TYPE U-BOLT CLIP (Product Group G40 Components)								
US FED SPEC FF-C-450 AND ACC TO EN 13411-5, TYPE B.								
HOT DIP GALVANIZED BOW, FORGED PART AND NUTS.								
THE BOW IS ADDITIONALLY DEEP ORANGE PAINTED								
ITEM NO	MAX WIRE DIA	WIRE DIA	LENGTH			TORQUE/ NUMBER	PACK UNIT	
			h1	THREADS	b1			
912045	40-45 MM	1 3/4"	175 MM	74 MM	49 MM	134 MM	800Nm/8	5
912052	46-52 MM	2"	195 MM	78 MM	54 MM	152 MM	1017Nm/8	4
912058	54-58 MM	2 1/4"	208 MM	81 MM	67 MM	162 MM	1017Nm/8	3
912065	60-65 MM	2 1/2"	227 MM	87 MM	73 MM	168 MM	1017Nm/9	3
912072	66-72 MM	2 3/4"	243 MM	91 MM	79 MM	174 MM	1017Nm/10	2
912078	74-78 MM	3"	271 MM	104 MM	83 MM	194 MM	1627Nm/10	2
912090	80-90 MM	3 1/2"	311 MM	115 MM	101 MM	212 MM	1627Nm/12	1

Table 1: The values and number of clips is acc. to NS EN 13411-5.

The efficiency of a wire connection made with steel wire clips depends on the correct placement of the clips on the steel wire as well as the correct mounting and tightening of the clips.

With insufficiently tightened nut or insufficient number of steel wire clips on the end of the wire, this can cause the steel wire to slip through the clips during use. **REMEMBER TIGHTENING!**

N.B. The steel wire stretches during use, and especially after initial installation until the steel wire "sets", therefore it is very important to have regular control of the tightening torque in the clips.

Do a test load after installation to ensure that the installation is correct. The test load should be equal to or slightly higher than the expected load in use. After the test load, the clips must be truncated and checked for tightening torque.

Mounting the clips on steel wires can be affected by various conditions, such as:

- Threads on the hoops allow the nut to be tight, but not tight against the bridge
- Threads on the brackets are full of dirt, oil, or rust, which can prevent proper tightening of the nut.

Steel wire clips should not be used in the following situations:

- Hoist ropes in mines.
- Steel wire connections for cranes in steelworks and rollers.
- Fixed fastening of steel wires onto other steel wires.
- Steel cable connections for load suspension devices when operating lifting equipment, except for lifts where these are manufactured for a special application and only used once.

Wire clips must be inspected regularly in accordance with the safety standards in the users country. It is required because the products in use can be affected by wear, misuse, overload, etc. which can lead to deformation and change in the material structure. The inspection must take place at least every six months and more often when the products are used in serious operating conditions.

Rules for disposal

Clips must be discarded if any of the points below can be detected:

- Threads are damaged.
- The clip is deformed.
- Clip has welding splashes
- Cracks and wounds
- Grave rust
- The clamp has been subjected to heat / heat treatment or general modification.

WARNING

U-bolt clips must not be used on plastic-coated steel ropes.

If you have any questions about these installation instructions or the product, please contact us at aseke on TLF: +47 22 13 02 00 E-mail: post@aseke.no