COMMON APPLICATIONS

Columbus McKinnon carries a large selection of hoist and rigging products designed to be used for a variety of utility transportation and distribution applications. Whether dead ending, sagging or splicing lines, we have what you need to safely complete the task at hand. See how our products can be used in a few of the most common utility applications below.

SAGGING USING A DYNAMOMETER
1. To begin, arrange your ratchet lever hoist, wire grip and dynamometer as shown in the diagram to the left. Use shackle connections where necessary.
2. Tension the strap hoist until the dynamometer reaches the tension required. Reference the necessary procedures and specifications set forth by your company to ensure the appropriate tension is reached.
3. To complete the job, alleviate the tension using the lever hoist handle. A drum knob can also be used to fully release the tension.

DEAD-ENDING
1. To begin, arrange your ratchet lever hoist and wire grip as shown in the diagram to the left. Use shackle connections where necessary.
2. Tension the strap hoist until the cable is aligned with the cable's ending point.
3. After reaching the appropriate level of tension, tighten the strap a bit more to account for loss of tension after the hoist is removed. Be sure to reference technical information to ensure the cable is not tensioned tighter than recommended by the manufacturer.
4. To complete the dead ending, alleviate the tension using the lever hoist handle. A drum knob can also be used to fully release the tension.

SPlicing
1. To begin, arrange the ratchet lever hoist and wire grips as shown in the diagrams to the left. Use shackle connections where necessary.
2. Attach the ratchet lever hoist to each wire grip. Tension the strap hoist until you reach the desired tension before splicing. Once you reach this tension, splice the wire in line with your company’s procedures and guidelines.
3. To complete the job, alleviate the tension using the lever hoist handle. A drum knob can also be used to fully release the tension.
USING GRIPS IN TANDEM

In some applications, it may be necessary to use two wire grips in tandem to ensure the safe working load of a single grip is not exceeded. Working together, the weight of the load is shared between the two grips, increasing the safe load of each grip by 1-1/2 times the working load limit of the lower capacity grip.

You may also need to use two wire grips in tandem in applications where there is a chance that the cable could become deformed. We suggest using two grips with ACSR or AAC conductors if the load will exceed either 12,500 lbs. (5,670 kg) or 40 percent of tensile strength of the conductor – whichever is lesser. If using ACSS conductors, we suggest using two wire grips if the load will exceed 10,000 lbs. or 40 percent of the strength of the conductor, again whichever of the two is lesser.

To use wire grips in tandem:

1. Secure the two grips to the conductor. They should be attached approximately five feet apart. Use shackle connections where necessary.

2. Attach a pulley block to each grip. The pulley block should be attached to the eye of the wire grip. This will ensure that the grips share the load equally.

3. As shown in the image to the left, attach a chain hoist to the pulley block. Ensure the hoist is the appropriate capacity to handle the load.

4. Next, tension the hoist to the appropriate tension as shown in the image on the left.