



## CERROWIRE SLiPWire™ THHN USER GUIDE

### CUTTING AND HANDLING

- Footage Counters – Because of the slick surface of Cerrowire SLiPWire™ THHN, the wheels of footage counters on older or worn equipment may slip resulting in inaccurate footages. Check to make sure that the surface of the counter wheels is not worn smooth and that the wheel turns easily on its shaft. The counter should be routinely cleaned and lubricated to ensure free movement of all parts. The wheel should press against the wire with adequate tension. Springs used to maintain firm contact between the counter wheel surface and the wire surface should be replaced according to the manufacturer's recommendations or as needed.
- Tying off Coils – Electrical tape is useful in securing coils of wire because it can be stretched, applying tension to the wire it is wrapped around. The tape should be applied to the ends of the coiled wire, half lapping and stretching the tape as it is wound several wraps from each end. The entire coil can then be wrapped tightly at the points where the ends are. The tape over the ends will keep the overall tape wrap from sliding around the coil and the coil becoming loose. The coil should be taped in a couple of additional places using the same half-lapping and stretching technique.
- Securing the Conductor End To A Reel – If wire has been wound onto a wooden reel and the end needs to be secured to the reel, staples may be used. If a rope is being used to secure the conductor to a reel, tying the conductor at multiple points may be sufficient. An application of half-lapped, tightly stretched friction tape will also provide a non-slip surface to attach the rope to the conductor.

### INSTALLING CABLE

- Pulling Tension Calculations – When calculating pulling tensions for a pull using Cerrowire SLiPWire™ THHN, coefficients of friction of 0.28 for EMT and 0.24 for PVC are recommended. The coefficient of friction for Cerrowire SLiPWire™ THHN has been shown to be less than these numbers which are typical for commercially available pulling lubes but these conservative numbers allow a margin of error in the case of unexpected conditions in the conduit.

## INSTALLING CABLE (Continued)

- Phase Taping Conductors – Phase taping can be accomplished such that it will not come off during pulling by doing the following: Half-lap the tape and stretch the tape as it is being applied. Position the tape near the end of the conductor so that it will be covered by the pulling head and not drag against the conduit during the pull.
- Slipping in Cable Feeders – If slipping occurs in the drive tires of the cable feeder, the following items should be checked:
  - Tires are under inflated
  - Pinching force between tires is not adequate. The ratchet should be tightened.
  - Upper drive unit is not working because it is not plugged in.
  - There is too much tension on the wire being fed. Check reels to make sure they are turning freely.
- General Installation Practices – All recommended practices for installation of standard THHN must be followed for damage free installation of Cerrowire SLiPWire™ THHN. The practices include but are not limited to:
  - Design of the pull to make sure the max pull tension, max sidewall pressure, and minimum bending radius are not exceeded. See “Installation Info” under “Technical Info” at cerrowire.com.
  - Taking measures to assure that the conduit is clean and free of damage, burrs, or obstructions.
  - Use of rollers and sheaves to insure proper entry of the wire into and out of the conduit along with grommets on the conduit ends so that the cable is not damaged.