

**Best Practice Category:**

General Work

**Document #:**

BP080GW

Category the document will be located on the Intranet under Best Practices

BP + Sequential Number = Category

**Document Title:**

Removing / Assembling of Cable in Becket

**Owner:**

Construction Manager

**Effective**

**Date:**

07/05/2023

**Revision #:**

0

BUL of Originating Business Unit

**Business Unit Designation:**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> BU 01 - Infrastructure              | <input type="checkbox"/> BU 02 - BR Civil        | <input type="checkbox"/> BU 04 - Houston Civil |
| <input checked="" type="checkbox"/> BU 15 - Deep Foundations | <input type="checkbox"/> BU 23 - Marine          | <input type="checkbox"/> BU 29 - BR Mechanical |
| <input type="checkbox"/> BU 30 - Houston Mechanical          | <input type="checkbox"/> Pipe Fab Facility       | <input type="checkbox"/> Form Fab Facility     |
| <input type="checkbox"/> Westport Operations                 | <input type="checkbox"/> Cajun Office Facilities |  |

*A check next to a Business Unit indicates this best practice is required by that business unit and therefore is a mandatory Standard Operating Procedure (SOP) for that business unit.*

**PURPOSE:**

There are many hazards to consider when working with wire rope. The rope is made up many wires that are tightly wound to make a strand. The strands are wound around the core of the cable. Wire ropes are made with either fiber cores or steel wire core. This design will produce stored energy anytime the cable is not in its normal position.

**PROCESS:**

The cable will retain a memory of its position and will try to adjust itself to that position if it is altered. One example would be when installing a new wire rope on the drum of a crane, always wrap the cable on the drum, in the same direction as it comes off the spool. Another example would be taking a piece of cable and making a sharp bend, as you would do when securing the cable to a becket. Once the cable is released from the becket, the stored energy will flex the cable to its original straight position.

**Removing Cable from becket**

Lay the becket flat on the ground and remove the cable clamp(s)



Pick up cable using both hands. Holding dead and live ends of cable together, above the becket

Strike socket end of becket on the ground to loosen cable and remove the wedge

\*If wedge is too snug to be removed by this method the use 2-4lb maul to lightly tap-assist in loosening wedge for removal from the becket. \*



Lay becket flat on the ground with the dead end away from your body



Put pressure on the becket with your knee to alleviate movement



Hold dead end of cable at the loop, next to becket, with both hands



Pull the dead end of the cable out of the becket  
Maintain margin of safety, keep out of the line of fire

You will encounter stored energy when you install and secure the wire rope to a becket.

### **Assembly of Cable in Becket**

Use only with standard 6 to 8 strand wire rope of designated size. For intermediate size rope, use next larger size socket (eg. 9/16" wire rope use a 5/8" socket). Welding of the tail on standard wire rope is not recommended. The tail length of the dead end should be a minimum of 6 rope diameters but not less than 6 inches. (1/2 cable = 6 to 10")

To use with Rotation Resistant wire ropes ensure that the dead end is welded, brazed or seized before inserting the wire rope into the wedge socket to prevent core slippage or loss of rope lay. The tail length of the dead end should be a minimum of 20 rope diameters but not less than 6 inches. (1/2 cable = 6 to 10")

Properly match socket, wedge and clip to wire rope size

Place becket on its side on the ground with dead end away from your body

Align live end of rope, with center line of pin and install the becket

Use both hands to hold dead end of cable as you insert the dead end into the becket, stopping not less than 6” past end of becket

Install wedge, pulling both live and dead ends of cable to take up slack of cable in becket

One person holds the wire rope, dead and live, above the becket firmly

Another person using a hammer, striking becket, to pre seat the wedge in the becket as deeply as possible

Attach cable clamps to prevent cable from slipping

Apply first load to fully seat the wedge and wire rope in the becket. This load should be of equal or greater weight than loads expected in use



Approvals		
<u>Title</u>	<u>Signature</u>	<u>Date</u>
BU 15 Vice President		07-05-2023
BU 15 Senior Construction Manager		07-05-2023
BU 15 Manager of Safety		07-05-2023

Revision History				
<u>Rev #</u>	<u>Date</u>	<u>Reason for Changes</u>	<u>Originator</u>	<u>Effective Date</u>

**Note: SOP Requirement**

*Work must be performed in accordance with the information in this Best Practice. If it is determined, that work cannot be done as required in the document or that it presents additional risk, you must obtain authorization for variance from the Business Unit Sr. Construction Manager and Business Unit Manager of Safety.*