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| **Electrical Applications** | Instructor Verified: |  |
| **Hands On Test #8** | **CLO#5** |  |
| **Conduit Bending** | Grade: |  |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Objective:**

Given the necessary materials, the student will perform all bends to the specifications listed, as evidenced by scoring a minimum of 75% on this performance test.

**Description of the Test:**

Given 2 sticks of ½” EMT, the student shall bend each of the following:

* Five inch Box Offset @ 30°
* Four-Bend Saddle @ 30°
* Back-to-Back Bend
* Two box offsets on one piece of conduit
* Three-Bend Saddle

**Time Limit:**

You are allowed one class period to complete the bends. Five points for every five minutes over the allotted time will be deducted from the score. The maximum overtime allowed is fifteen minutes.

**Points Breakdown and Description:**

A -15 point deduction one extra piece of 10’ conduit if needed. You may receive 2 points back for 60” or longer stick of conduit not used when complete. Students may not share unused conduit with classmates. Scoring: +/- ¼” on the height and +/-4° on the angle.

***30° True Offset****: 5” height worth 20 points. Obstruction is 30” away.*

\_\_\_\_\_\_\_\_\_\_ Bend is at the required height. (4 points)

\_\_\_\_\_\_\_\_\_\_ Bends are at the required angle and not kinked. (4 points)

\_\_\_\_\_\_\_\_\_\_ End is appropriate distance for obstruction. (4 points)

\_\_\_\_\_\_\_\_\_\_ Conduit has been cut square and is reamed. (4 points)

\_\_\_\_\_\_\_\_\_\_ Conduit does not have a “dog leg”. (4 points)

***Four-Bend Saddle****: 30°, 5” tall, 5” wide worth 20 points. Obstruction is 30” away.*

\_\_\_\_\_\_\_\_\_\_ Top of saddle is at the required height. (4 points)

\_\_\_\_\_\_\_\_\_\_ Saddle bends are at the appropriate width. (4 points)

\_\_\_\_\_\_\_\_\_\_ Bends are at the required angle and not kinked. (4 points)

\_\_\_\_\_\_\_\_\_\_ Both horizontals are on the same plane lying flat. (4 points)

\_\_\_\_\_\_\_\_\_\_ Conduit does not have a “dog leg”. (4 points)

***Back-to-Back****: 10” 90° Stub-up on one end, a 30” span worth 20 points.*

\_\_\_\_\_\_\_\_\_\_ Stub-up is at the required height. (4 points)

\_\_\_\_\_\_\_\_\_\_ Bends are at the required distance apart. (4 points)

\_\_\_\_\_\_\_\_\_\_ Both bends are at 90° and are not kinked. (4 points)

\_\_\_\_\_\_\_\_\_\_ Conduit does not have a “dog leg”. (4 points)

\_\_\_\_\_\_\_\_\_\_ Conduit has been cut square and reamed. (4 points)

***Two Box Offsets****: 20” piece of conduit worth 20 points.*

\_\_\_\_\_\_\_\_\_\_ Bend is at the required height. (4 points)

\_\_\_\_\_\_\_\_\_\_ Bends are at the required angle. (4 points)

\_\_\_\_\_\_\_\_\_\_ Conduit is not kinked. (4 points)

\_\_\_\_\_\_\_\_\_\_ Conduit has been cut square and is reamed. (4 points)

\_\_\_\_\_\_\_\_\_\_ Conduit does not have a “dog leg”. (4 points)

***Three-Bend Saddle****: 45°, 3” saddle worth 20 points. Obstruction is 30” away.*

\_\_\_\_\_\_\_\_\_\_ Bend is at the required height. (4 points)

\_\_\_\_\_\_\_\_\_\_ Bends are at the required angle and in not kinked. (4 points)

\_\_\_\_\_\_\_\_\_\_ Both horizontals are on the same plane lying flat. (4 points)

\_\_\_\_\_\_\_\_\_\_ Conduit has been cut square and is reamed. (4 points)

\_\_\_\_\_\_\_\_\_\_ Conduit does not have a “dog leg”. (4 points)