



## **HPI – Hendrix Polyethylene Insulator FAQ Sheet #2**

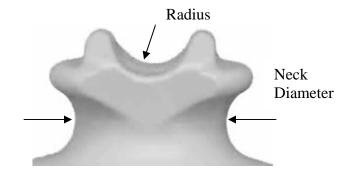
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## **Questions on Tie Top Insulators:**

Question: Why are there different "Neck Sizes" and what are the differences between them?

Answer: Neck sizes on Medium Voltage Distribution Tie Top Pin Insulators were historically developed by NEMA (National Electrical Manufacturers Association) and then presented, accepted, and set as an industry standard by ANSI (American National Standards Institute). The neck sizes are classified as "C", "F", and "J" and the basic difference between them is the radius of the "Saddle" and the diameter of the Neck itself. The below chart shows the various dimensions for the Neck and Saddle of each ANSI Class of medium voltage pin insulators:

| ANSI Specified Dimensions |      |          |            |            |
|---------------------------|------|----------|------------|------------|
| ANSI                      | Neck | Neck     | Top Saddle | Pin Thread |
| Class                     | Size | Diameter | Radius     | Size       |
| 55-3                      | С    | 2 1/4"   | 9/16"      | 1"         |
| 55-4                      | F    | 2 7/8"   | 1"         | 1"         |
| 55-5                      | F    | 2 7/8"   | 1"         | 1"         |
| 55-6                      | J    | 3 1/2"   | 1"         | 1"         |
| 55-7                      | J    | 3 1/2"   | 1"         | 1 3/8"     |
| 56-1                      | J    | 3 1/2"   | 1"         | 1 3/8"     |



The history of "Why there are multiple Neck Sizes" is not clearly defined. Two reasons that have been discussed are 1) additional puncture strength in thicker necks and 2) a larger bending radius for conductors.

It is worth mentioning that Hendrix Molded Products makes all of the above ANSI Classes of insulators.

<u>Question:</u> Can all types of Bare Wire Conductors be used on Hendrix Polyethylene Insulators? <u>Answer:</u> YES – all types of Bare Conductors (aluminum, alloys, copper, etc) and/or Covered Conductors can be used on HPI Insulators without concerns.

Question: What types of conductor "ties" can be used with HPI Insulators?

<u>Answer:</u> Conductor Ties of any design and/or material can be used with HPI Insulators – preformed style, bare hand ties (copper or aluminum), covered hand ties, "jelly jar" style, or any other conductor tie style that is available.