Indian Standard IS 13158 : 1991 - Prestressed Concrete Circular Spun Poles for Overhead Power, Traction, and Telecommunication Lines

Prestressed concrete circular spun poles are used for supporting overhead power, traction, and telecommunication lines. These poles are required to be **lighter**, **easier to handle**, and **highly resilient** under various load conditions especially **transverse loads**. These poles are ideal for use in **Overhead Power Lines**, **Railway Traction** and **Telecommunication Lines**.

This standard defines the essential design, materials, manufacturing processes, and testing requirements for the poles to ensure their reliability in infrastructure applications.

The manufacturing of these poles involves high-precision moulds, controlled mixing, and tensioning of wires for uniform prestress, ensuring that each pole is produced without surface defects and has consistent dimensions.

These poles are designed to **resist transverse loads induced by wind and other environmental factors**, with a load factor of at least 2.5.

This standard prescribes the requirements and methods of sampling and test for Prestressed concrete circular spun poles. Apart from the tests on concrete, **Transverse Strength test** is carried out on the poles ensuring they withstand designated loads without cracking. **Consistency in dimensions and alignment** is also verified in each batch.

Each pole is marked with production details, such as **manufacturer's name and their brand name, month & year of manufacture**, and **serial number**, to aid in identification and quality verification after installation. In addition to these, the **position of the centre of gravity** of these poles are also required to be marked.

The Indian Standard IS 13158: 1991 ensures that prestressed concrete circular spun poles meet high-performance and safety requirements, making them a dependable choice for power, telecommunication, and traction applications. The poles are robustly designed, offering longevity and reliability in diverse environmental conditions.