IS 638 : 2024 Sheet Rubber Jointing and Rubber Insertion Jointing SPECIFICATION (Third Revision)

In industrial applications, particularly in the construction, engineering, and manufacturing sectors, reliable sealing materials are essential to ensure safe, efficient, and long-lasting operations. Among the most commonly used sealing solutions are sheet rubber jointing and rubber insertion jointing. These materials, often utilized in piping systems, gaskets, and other sealing applications, need to meet strict performance standards to ensure their reliability. **Rubber insertion jointing** involves the use of a rubber sheet that has been reinforced with an insert, typically made of fabric or mesh, to provide added strength and durability. This type of jointing is commonly used in applications where additional mechanical strength is needed, such as high-pressure systems, heavy-duty industrial machinery, and piping systems. The product is used in various utilities in Railways, PHED, other State & Central Governments Departments, etc.

Rubber sheets are made from different elastomers, including natural rubber, nitrile rubber, EPDM, and neoprene.

This standard covers the two types of sheet rubber jointings and rubber insertion jointings depending upon the hardness of rubber, namely:

a. Type A — 50 to 65 Hardness in IRHD, and

b. Type B — 66 to 80 Hardness in IRHD.

This standard prescribes two grades, namely, Grade 1 and Grade 2 for each of the two types, differing in the requirements for various physical characteristics prescribed in the standard.

The important Tests for ensuring conformance of the product to the Indian Standards are:

a) Tensile Strength and Elongation at Break

b) Accelerated Ageing

c) Compression Set

d) Hardness

The standards for sheet rubber jointing and rubber insertion jointing are essential for ensuring the reliability, durability, and safety of these sealing materials in a variety of industrial applications, helping manufacturers provide high-quality products that meet the demands of their customers.