



IS 4882:1979 Specification for low carbon steel wire for rivets for use in bearing industry

Bearings are critical in almost every industry, ensuring smooth, efficient, and reliable motion in equipment, vehicles, and machinery. By **reducing friction and supporting various loads**, they enable energy-efficient and precise operations, ultimately enhancing product longevity and performance across countless applications.

The rivet material used in bearing applications depends on the specific requirements of the bearing, including load capacity, durability, corrosion resistance, and environmental conditions. Rivets are often used to assemble or secure components in bearing cages, shields, or housings. The materials used for manufacture of the rivets specific to their applications such as corrosion resistance, strength, Temperature resistance, weight, machinability and cost such. The rivets for bearing are preferably made with **Steel (carbon steel, alloy steel)**, Stainless steel, Brass, Aluminium, Titanium, Copper alloys, Plastic and Composite materials etc.

The Indian standard, IS 4882: 1979 specifies the requirements for in process controls such as **chemical composition, control on refining** steel making process including sufficient reduction during the process to ensure freedom from defects such as piping and segregation at initial stage of the manufacturing.

This standard not only specify the physical properties such as freedom from defects, size tolerances and physical parameters like **Tensile strength**, but also specify requirements related to the application such as **cold upsetting test** and **grain size** of the material to ensure homogeneity of the material to sustain and product at different design at appropriate applications.

Packing clause mentions the requirement in such a way that **corrosion does not attack** the material during the transit and the above standard also specify condition of delivery of the product.