



Summary of IS 9295:1983: Steel Tubes for Idlers for Belt Conveyors

Steel Tubes for Idlers for Belt Conveyors are integral components used in conveyor systems, typically designed to support and guide the conveyor belt. These tubes are mounted on rollers or idlers and play a crucial role in ensuring the smooth and efficient movement of materials across industries such as **mining, manufacturing, and logistics**. Steel tubes used in idlers must be durable and capable of withstanding harsh environmental conditions, high pressure, and mechanical stress.

Steel tubes for idlers in belt conveyors must meet several key quality parameters. They should have **high tensile strength** to withstand heavy loads, wear, and mechanical stress over time. **Corrosion resistance** is crucial, especially in humid or outdoor environments, to extend the conveyor's lifespan. **Precision and straightness** are essential for smooth operation, minimizing friction. A smooth, polished surface finish helps reduce wear on other components. **Impact resistance** ensures the tubes absorb shocks during material handling. The tubes must have high load-bearing capacity without **deformation**, and welds should be clean, strong, and defect-free to prevent failures under pressure.

IS 9295:1983 outlines the requirements for steel tubes used in idlers for belt conveyors, focusing on mechanical properties and dimensional accuracy. It covers three tube types: **Hot-Finished Seamless (HFS)**, **Cold-Drawn Seamless (CDS)**, and **ERW (electric resistance welded)**, in grades YSt 210, YSt 240, and YSt 310. The standard specifies manufacturing processes, material composition, and mechanical tests to ensure strength and ductility. It also defines dimensions, **tolerances for ovality, straightness, and mass**, and mandates marking tubes with type, grade, and dimensions. The standard allows the use of the ISI Certification Mark for quality assurance and ensures tubes are free from harmful defects.