



IS 3513 (Part 3):1989 Specification for Resin Treated Compressed Wood Laminates (Compregs) - For General Purposes (First revision)

Resin-treated compressed wood laminates, known as compregs, are made from thin wood layers bonded with thermosetting resins like phenol or cresol formaldehyde. Comparing to solid wood, the compregs are manufactured to have enhanced mechanical properties, dimensional stability, machinability, moisture-proof properties, resistance to corrosive agents and termite attack. Compregs are manufactured in various shapes and sizes, such as sheets, rods, moulded shapes and also machined components.

Owing to enhanced properties and durability, compregs are used in many applications for general purposes, electrical purposes and chemical purposes. This Indian Standards covers Compregs for General Purposes. General purpose compregs are used in general engineering, textile industry, jute industry and also in atomic energy plant installations as neutron shielding material.

As compregs are suitable for machining, compregs are used for manufacturing textile machinery components, such as, picking sticks for looms, for slay bases, race boards, swells, picking levers stick wedges etc; in automobile industry for manufacturing silent gears, spinning chucks etc.

This Indian Standard specifies requirements for timbers, veneers and resins. Based on nature of impregnation of resins, compression and density compregs for general purposes are graded; based on grain orientation in fibres of veneers each grade, compregs are classified into types. Following are the grades and types:

1. GH: General Purpose High Density: partially impregnated high density material suitable for textile and jute mill accessories and tools, engineering and general engineering applications; this grade has four types, namely, Type II, III, V and VI.
2. GM: General Purpose Medium Density: partially impregnated medium density material suitable for general purposes; this grade has four types, namely, Type II, III, V and VI.

To facilitate selection of compregs for specific applications requirements of physical and mechanical properties have been specified, such as, specific gravity, moisture content and volatile matter; Tensile strength, Static bending strength, Compressive strength, Shear strength, Hardness and Impact strength. Indian Standards for following relevant method of tests have been stated. Dimensions (length, width and thickness of sheets and diameter of rods) with tolerances have been stated.

According to the notification by Department for Promotion of Industry and Internal Trade (DPIIT), a Quality Control Order has been issued bringing Compregs for General Purposes under mandatory compliance for manufacturers to IS 3513(Part 3) ensuring availability of compregs meeting the specified requirements.

IS 3513(Part 3) was first published in 1966 and revised in 1989.