

## Hot-Dip Galvanized/ Galvannealed steel for automobile applications- Your driving companion for safe journey

It will not be an exaggeration to say that 'Your car is your best companion on the road'. What befalls on your car during the journey may definitely befall upon you. Therefore, using a safe and sound structural steel for manufacturing automobiles is the need of the hour for reducing the death toll in the road accidents. In this regard, specifications of IS **18385** *Hot-dip galvanized/ Galvannealed steel sheet, plate and strip for automotive applications* can come to your rescue.

Difference between **Galvanizing** and **Galvannealing** is **Zinc coating** on steel vs **Zinc-Iron alloy coating**. **Coating class** is expressed as G"XXX" and A"XXX" for galvanized and galvannealed steels respectively, where "XXX" is the coating mass in g/m<sup>2</sup>. The designation of the steel sheet, plate and strip covered in the standard involves the combination of base metal and the coating class separated by 'hyphen'. Ex- Cold-reduced carbon steel sheet base metal of carbon steel grade: IGC410LA galvanized with coating class of G070, the designation of that galvanized steel sheet will be: IGC410LA-G070.

The Standard specifies the requirement of surface finish (Dull/Bright), Chemical composition (grade of steel), Mechanical properties(Tensile test, Plastic strain ratio, Bake hardening index, Hole expansion ratio, Bend test, Coating requirements, Dimensions, shape and tolerances, Surface treatments etc.

Steel conforming to IS 18385 shall contain marking of IS no., manufacturer's name/ trademark, material identification no. such as lot, batch, or coil no., Product dimensions, no. of sheets or mass, designation of steel sheet/strip, DOM.