

C-393  
UP

### SYNOPSIS

	Number and Title of the Indian Standard	IS 17418 : 2020/ISO 16842 : 2014 Metallic materials — Sheet and strip — Biaxial tensile testing method using a cruciform test piece
a)	Scope	This Indian Standard specifies the method for measuring the stress-strain curves of sheet metals subject to biaxial tension using a cruciform test piece fabricated from a sheet metal sample. The applicable thickness of the sheet shall be 0,1 mm or more and 0,08 times or less of the arm width of the cruciform test piece (see Figure 1). The test temperature shall range from 10 °C to 35 °C. The amount of plastic strain applicable to the gauge area of the cruciform test piece depends on the force ratio, slit width of the arms, work hardening exponent (n-value) (see Annex B), and anisotropy of a test material.
b)	Salient features of content	This Standard Stipulate Terms, Normative references, Terms and definitions, Principle, Test Piece, Testing method, Determination of biaxial stress- strain curves and Test Report.
c)	Type/Grade/Class if any, covered in Indian Standard Specification	-
d)	Disclaimer	NIL