C-419

SYNOPSIS

Number and Title of the Indian Standard	MTD 22 Doc : (13395) IS 17175.: 2020/ISO 16573 : 2015 Steel – Measurement method for the evaluation of hydrogen embrittlement resistance of high strength steels
Scope:	This International Standard provides a method for the evaluation of the resistance to hydrogen embrittlement (i.e. hydrogen delayed fracture) using constant loading test with hydrogen pre-charged specimens. The amount of hydrogen content absorbed in the specimens is analysed quantitatively by thermal desorption analysis such as gas chromatography, mass spectrometry and so on. In the case of hydrogen continuous charging such as hydrogen absorption in aqueous solution at free corrosion potential, hydrogen absorption in atmospheric corrosion environments and hydrogen absorption in high pressure hydrogen gas, the evaluation method is also briefly described. This method is mainly applicable to the evaluation of hydrogen embrittlement resistance of high strength steel bolts.
Salient features	This standard include Principle, Specimen preparation, Hydrogen charging methods, Preparation of electroplating solution and electroplating condition, Constant loading test, Post-test specimen treatment, Hydrogen thermal desorption analysis and test report. .
Types/grades /classes, if any covered in this standard	-
Disclaimer (to be automatically provided by the programme/software)	-