

(PREVIEW)
Indian Standard
CODE OF PRACTICE FOR
UNIAXIAL JACKING TEST FOR MODULUS
OF DEFORMATION OF ROCK

1 SCOPE

1.1 This standard covers the method for the determination of modulus of deformation of rock mass by uniaxial loading technique in which pressures are exerted on two parallel flat rock faces on the two opposite sides of a section of a drift, gallery or tunnel by means of hydraulic jacks. The applied stress and the resulting displacements are used for the determination of the modulus of deformation by the help of the appropriate elastic theory. The modulus of deformation is not a constant parameter, its value depends upon the stress level also. The choice of the design value for the *in-situ* modulus of deformation or elastic modulus thus becomes a matter of engineering judgement.

1.2 The creep characteristics of the rock mass may be computed from the graphs of displacement versus time.

1.3 The effects of anisotropy may be determined by applying the load in any desired direction. However, in jointed rocks, the test shall be conducted in the direction conforming to design requirement.