

Figure 1. Typical Stress Strain Response Curves for an Intact Rock Sample Subject to Uniaxial Compression.

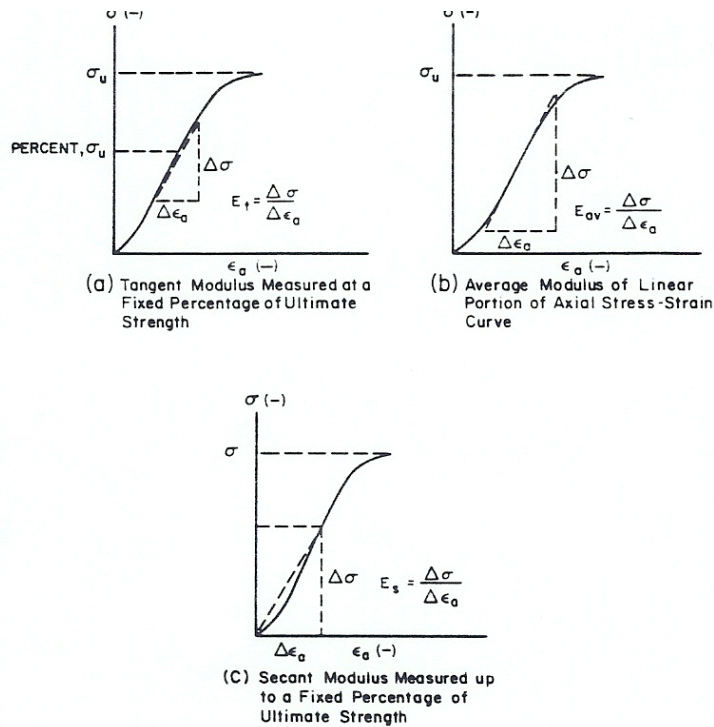


Figure 2. Methods for Calculating Young's Modulus from Axial Stress - Strain Curves (after Bieniawski and Bernede, 1979).

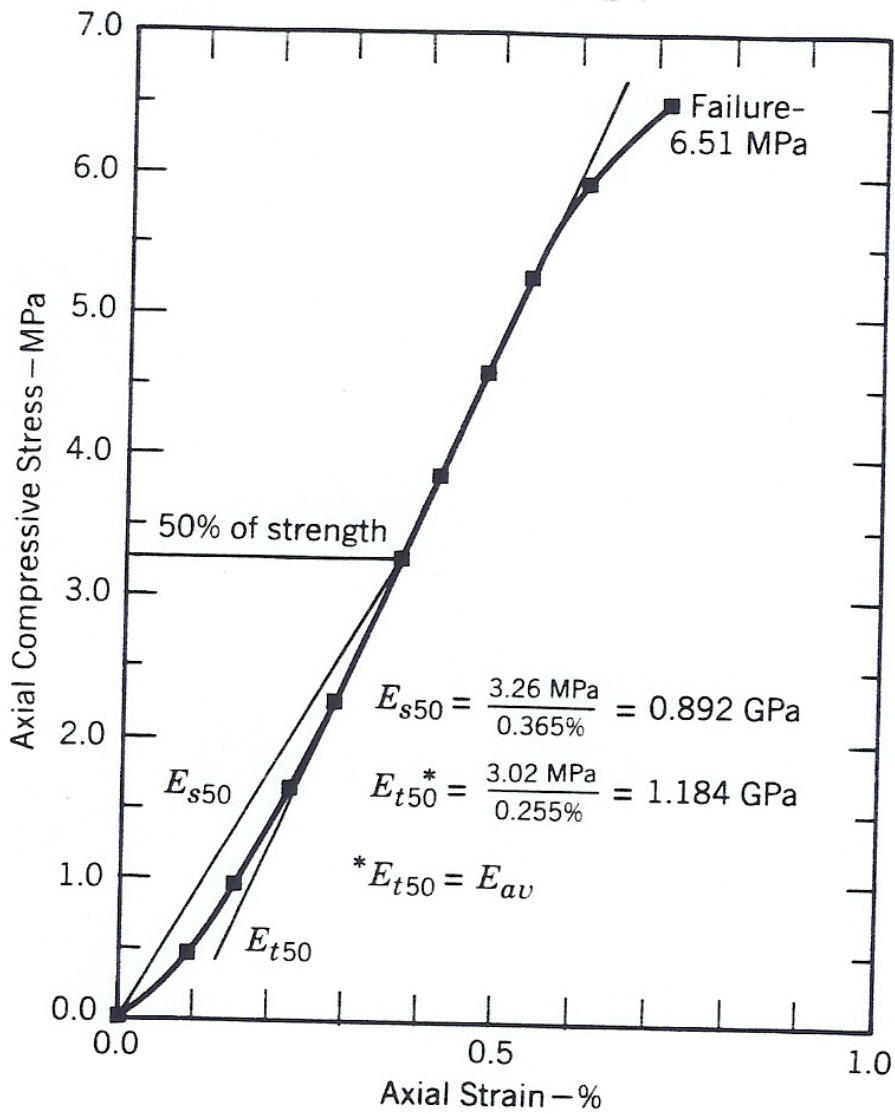


Figure 3. Example of calculation of Young's moduli (after Johnson and Degraff, 1988).

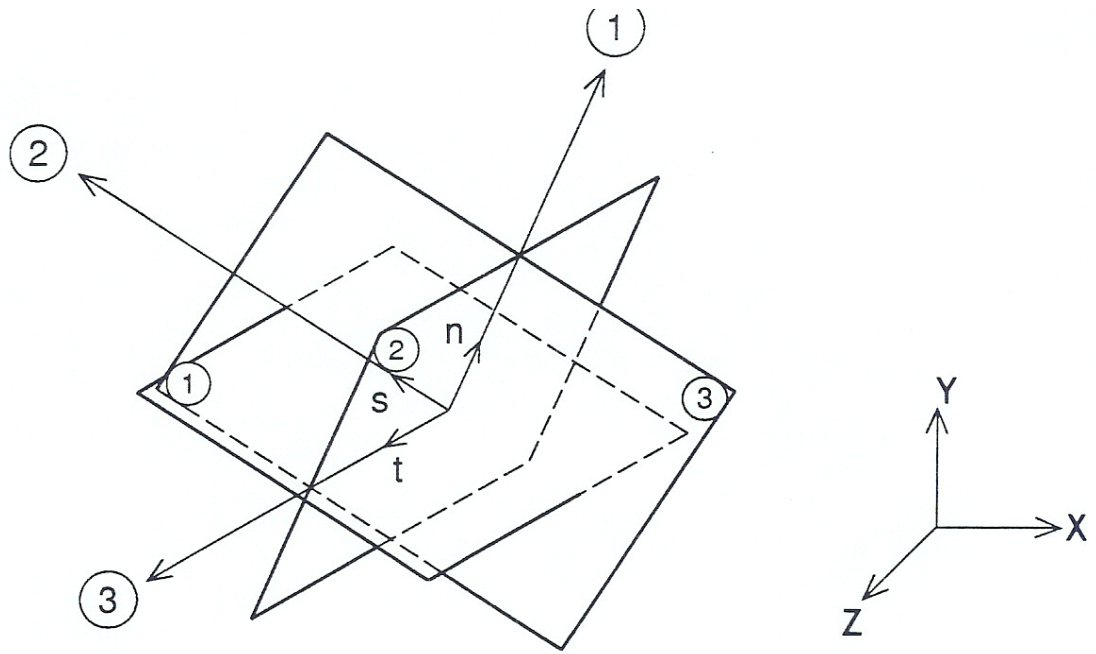


Figure 4. Orthotropic rock with three planes of symmetry normal to the n,s,t directions.

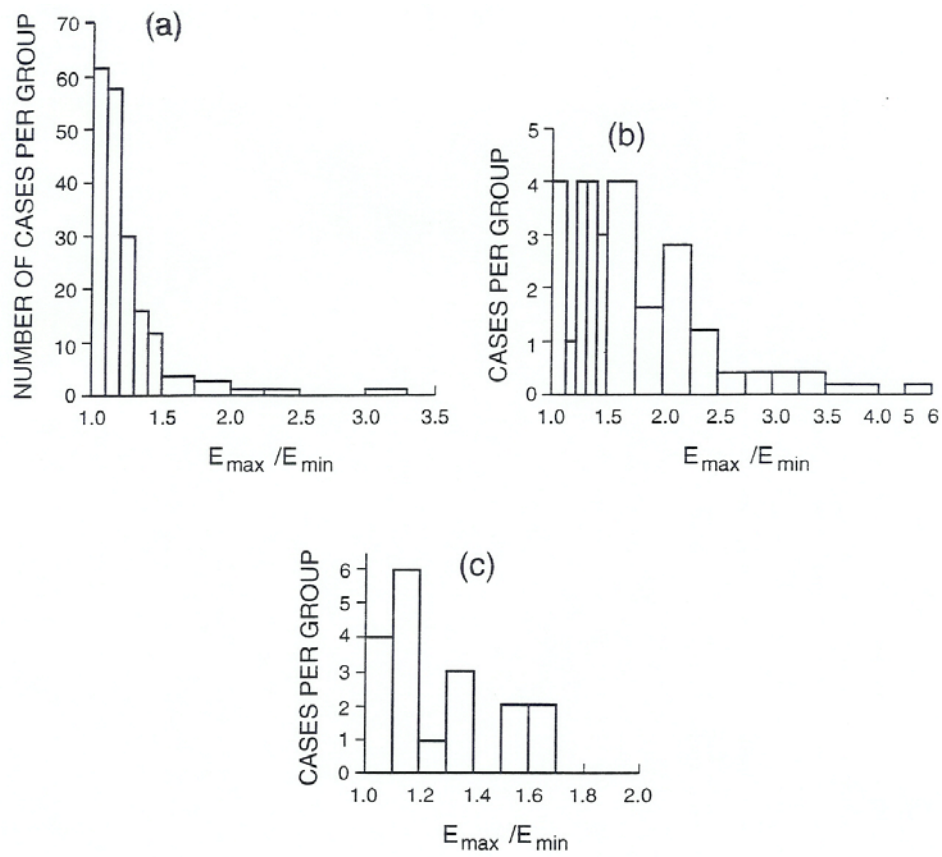


Figure 5. Histograms of E_{max}/E_{min} ratios for quartzofeldspathic and basic/lithic rocks in (a), pelitic clay and pelitic mica rocks in (b) and carbonate rocks in (c) (after Worotnicki, 1993).

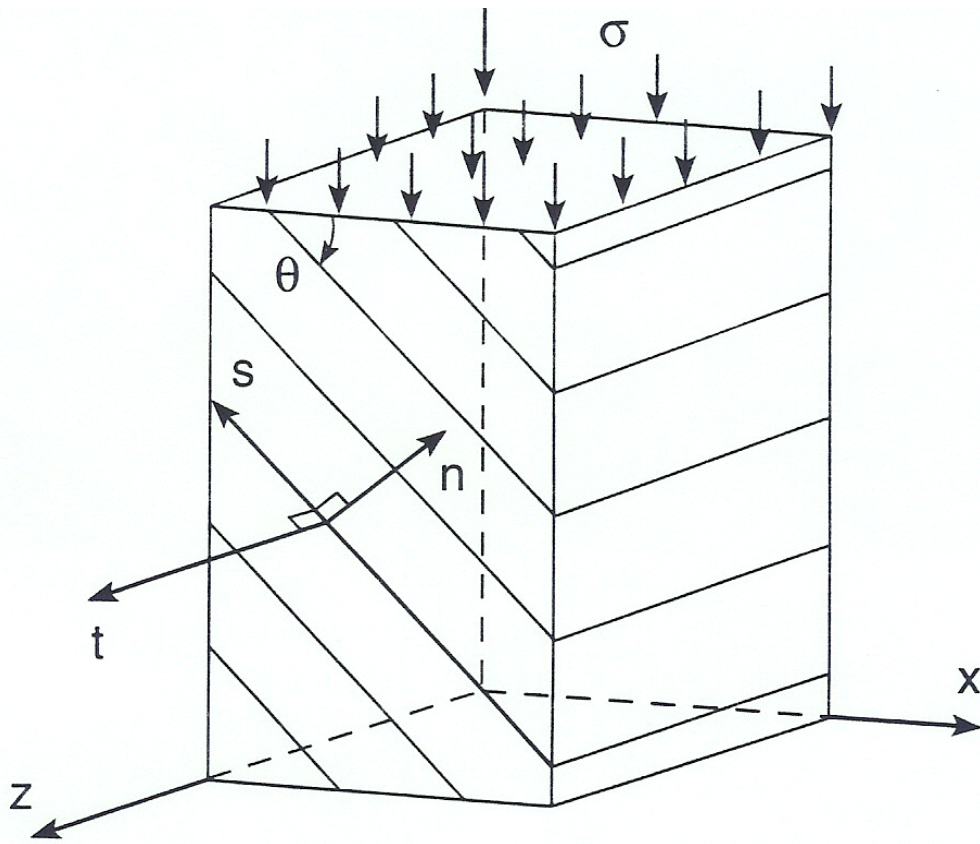


Figure 6. Transversely isotropic rock sample tested under uniaxial compression.

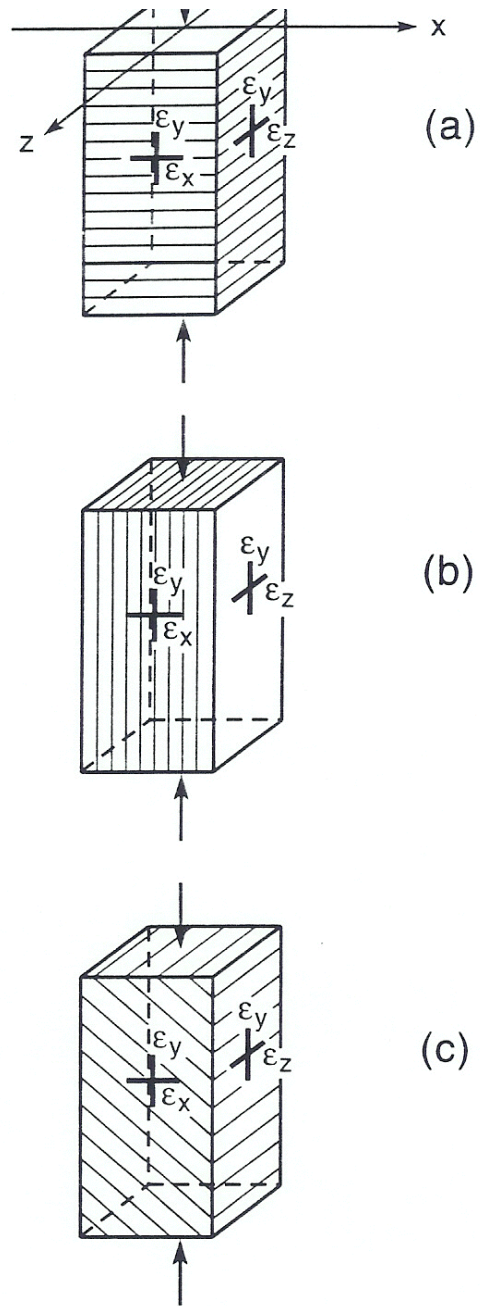


Figure 7. Three specimens of transversely isotropic rock tested in uniaxial compression with (a) $\theta = 0^\circ$, (b) $\theta = 90^\circ$ and (c) $\theta \neq 0$ and 90° .

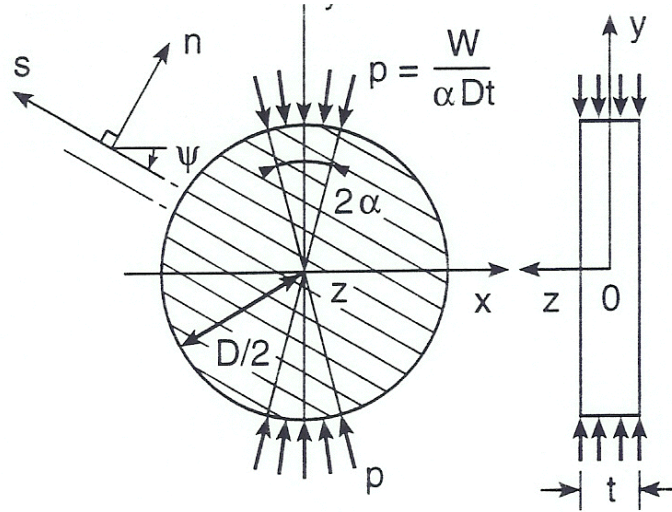


Figure 8. Diametral loading of a disc of anisotropic rock over an angular width 2α (after Amadei *et al.*, 1983).

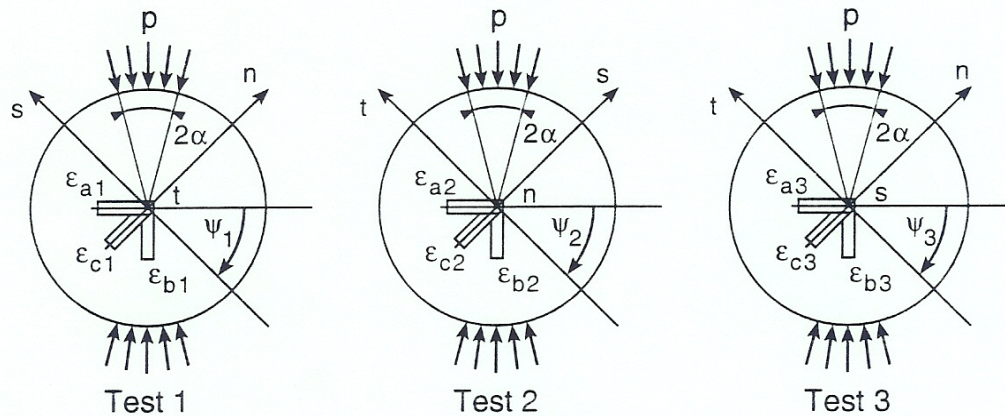


Figure 9. Measurement of the elastic properties of an orthotropic rock using three diametral compression tests. Each disc has a middle plane parallel to a plane of elastic symmetry.