

What is tearing strain?

**Solution:**

During testing of a material sample, the stress strain curve is a graphical representation of the relationship between stress, derived from measuring the load applied on the sample, and strain, derived from measuring the deformation of the sample, i.e. elongation, compression, or distortion. The nature of the curve varies from material to material.

Point E: Point E indicates the location of the value of the ultimate stress. The portion DE is called the yielding of the material at constant stress. From point E on-wards, the strength of the material increases and requires more stress for deformation, until point F is reached.

Point F: A material is considered to have completely failed once it reaches the ultimate stress. The point of fracture, or the actual tearing of the material (**tearing strain**), does not occur until point F. The point F is also called **Ultimate Point** or **Fracture Point**.

