

Key

Elements in Keyed Joint

1. Shaft
2. Hub
3. Key

Keys are used as temporary fasteners subjected to crushing and shear stresses

Material Used for key : Mild steel

[image]

Function of Key

1. Transmit the torque from shaft to the hub of the mating element and vice versa
2. To prevent relative rotational motion between the shaft and the joined machine element

Effect of keyways on shaft

- Stress concentration due to abrupt change in cross sectional area and lowers the strength of the shaft