

Forming

Module -1: Fundamental concepts relevant to metal forming technology

Lecture – 2

Materials and their structures:

Quiz - Answers

1. Mention some line defects in crystalline materials.

Dislocations – edge and screw.

2. Give examples for metals which have fcc crystal structure.

Nickel, Copper, Silver

3. In the unit cell of iron how many atoms are there?

2 – BCC

4. Distinguish between edge and screw dislocations.

Edge – Burgers vector is perpendicular to dislocation line. In screw it is parallel.

5. What is the packing factor for BCC materials?

68%

6. What is the maximum number of ways in which points can be arranged in three dimensional space satisfying the conditions of symmetry?

14 ways