

1. [~~F~~] Temper rolling or skin pass rolling of low carbon steel sheets is used to eliminate orange peel defect in forming of these sheets.
2. [~~T~~] The distortion due to hardening is higher in water hardening tool steels than in air hardening tool steels.
3. [~~F~~] For large productions, high carbon high chromium tool steel is commonly used for manufacturing dies because it has highest machinability among the cold work tool steels.
4. [~~F~~] Hardenability of tool steels is a measure of maximum hardness that can be obtained during quenching.
5. [~~F~~] In the hot work tool steels, the Cr-base tool steels possess higher red hardness than W-base tool steels.
6. [~~T~~] Shock resisting tool steel is a suitable material for forging hammers.
7. [~~F~~] In deep drawing, wrinkling is due to excessive blank holding pressure.
8. [~~F~~] Earing in deep drawing can be eliminated by increasing the clearance between the die and the punch.
9. [~~T~~] The maximum possible reduction in diameter in deep drawing of cylindrical cups from isotropic sheets in a single stage is theoretically 63%.
10. [~~T~~] Sheet materials with average plastic strain ratio more than one are preferred for high drawability.
11. [~~T~~] The extent of thinning in stretch forming is usually higher than in deep drawing.
12. [~~F~~] Stretch forming is commonly used for parts with large depth and small radius of curvature.
13. [~~T~~] The state of stress in stretch forming is biaxial tension in the entire region of deformation.
14. [~~T~~] Better uniformity of strain distribution can be obtained in stretch forming of annealed sheets than as-rolled sheets of same material and thickness.
15. [~~T~~] If the reduction in area in a tensile test of a sheet material is 25%, the minimum bend radius of this sheet will be equal to sheet thickness.
16. [~~F~~] Springback in bending increases with increase in elastic modulus.
17. [~~F~~] As a result of springback, the residual stress at the inner surface of the bent specimen will be compressive.
18. [~~F~~] Force required in V-bending increases with increase in die opening width if all the other parameters remain same.
19. [~~F~~] The punch-die clearance in shearing decreases with increase in ductility of the sheet.
20. [~~F~~] In blanking, punch penetration is independent of ductility of the sheet metal.