

UNIT-2

IMPORTANT 2MARK QUESTIONS

1.Mechanical working of Metal?

Mechanical working is a process of shaping of metals by plastic deformation. When a metal is subjected to external force beyond yield strength but less than fracture strength of the metal, metal is deformed by slip or twin formation.

2.Hot working and cold working of metal?

- Hot working occurs when metal is deformed above its recrystallization temperature.

- cold working occurs when metal is deformed below the recrystallization temperature.

3.What are the types of forging?

- Open-die.
- impression die.
- cold.
- seamless rolled ring.

4.What is the difference between direct extrusion and indirect extrusion?

- The direct extrusion press pushes the billet through a fixed container and die via the press ram.

- On the other hand, in the indirect extrusion process the billet is fixed while the die is pushed into the container holding the billet.

5.Sheet metal Processes?

Sheet metal fabrication is the process of turning flat sheets of steel or aluminium into metal structures or products, by cutting, punching, folding and assembling. Sheet metal can be cut, bent or stretched into nearly any shape, which is generally done by cutting and burning the metal.

6.define shearing?

Shearing is the process of removal of fleece with the top most layer of skin is known as shearing. Shearing is done in hot weather so that sheep can survive without their fur.

7.special forming Processes?

Forming is a process in which the shape of a partly finished product, for example sheet metal, is changed using plastic deformation.

8.Explosive forming?

An explosive forming is one of the techniques to form a metal plate using high shock pressure from the explosion. An explosive releases its energy instantly so that an extremely high pressure with short duration occurs at the instance of explosion.

9.Rubber pad forming?

Rubber pad forming is a deep drawing technique that is ideally suited for the production of small and medium-sized series. Deep drawing makes it possible to deform sheet metal in two directions, which offers great benefits in terms of function integration, weight reduction, cleanability and such.

10.peen Forming?

Peen forming is a cold-working method used to modify the shape of thin components. In this process, small particles are propelled towards a metallic surface at high velocities. Each impact creates an indentation in the material, inducing plastic stretching near the surface.

PART-B

1.Explain Hot working and cold working of metals near sketch?

2.Define Forging? Mention it's Types explain with neat sketch?

3.Explain difference between Direct & Indirect with neat sketch?

4.What is peen Forming? Explain with neat sketch and it's application?

5.Explain special forming Processes with neat sketch?