



LESSON NOTES

School: Ba Sangam College
Subject: Basic Technology

Year/Level: 10
Worksheet 14

Name: _____
Year: _____

Strand	Joints and Processes
Sub Strand	Metalworking joints
Content Learning Outcome	Know the types of rivets

RIVETING

Riveting is a simple way to join metal parts together. Rivets are made of soft iron for general engineering; aluminum alloy for aircraft work and soft aluminum or copper for non-metallic substance. A wide range of special rivets are available.



Rivets are fasteners, like nails and screws. Rivets themselves are smooth, metal cylindrical shafts with a head on one end and a buck-tail on the other.

Rivets are described according to:

Shank - solid, tubular, or special type such as Riv-Nut

Metals - copper, aluminum alloy and soft steel,

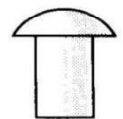
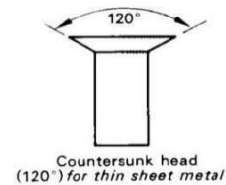
Shape of head.

Diameter of shank.

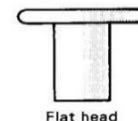
Length of shank.

Solid shank rivets are the type commonly used for most purposes in sheet metal work.

Countersunk rivets are useful where streamlining is needed, as in air-planes. The countersinking is done as for bolts and screws. It permits the head of the rivet to be placed flush with the surface of the metal.



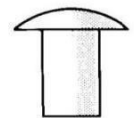
Snap or round head



Flat head



Pan head



Mushroom head

Roundhead rivets are used where a strong union is required but where the projection of the head causes no concern.

Flathead rivets are used in such constructions as fuel tanks.

Mushroom head rivets are used where it is necessary to shorten the height of the rivet head above the metal surface, as for example in aircrafts.

Pan head rivets are very strong, and are, therefore, widely used for girders and heavy constructional engineering.

To use a rivet, it is placed through a hole (same size as rivet) drilled through two flat objects (usually metal). A ball peen hammer is used to smash one end of the rivet, which expands to about one and a half times the width of the rivet in order to hold the rivet in place and objects together.

REVIEW QUESTIONS (10 marks)

1. Define Riveting?

(2 marks)

2. List the 5 things according to which rivets are described?

(3 marks)

3. Give the use of Flathead rivet?

(1 marks)

4. Sketch a Countersunk head and Pan head rivets?

(4



marks)