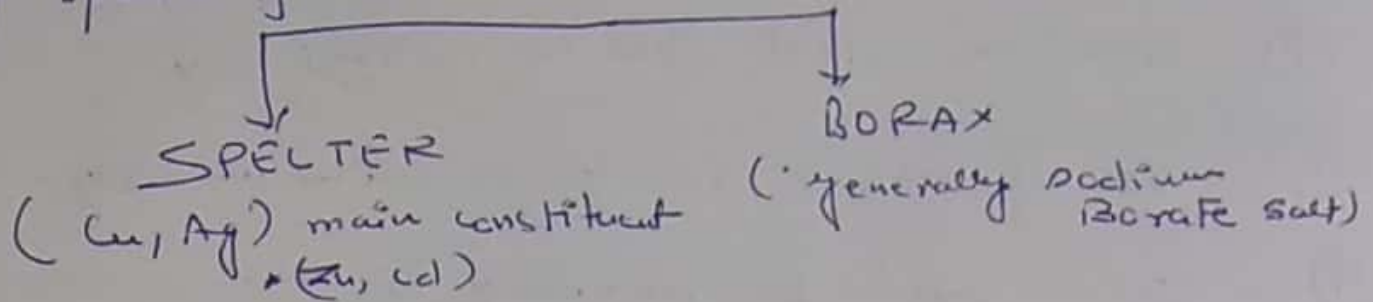


BRAZING:-

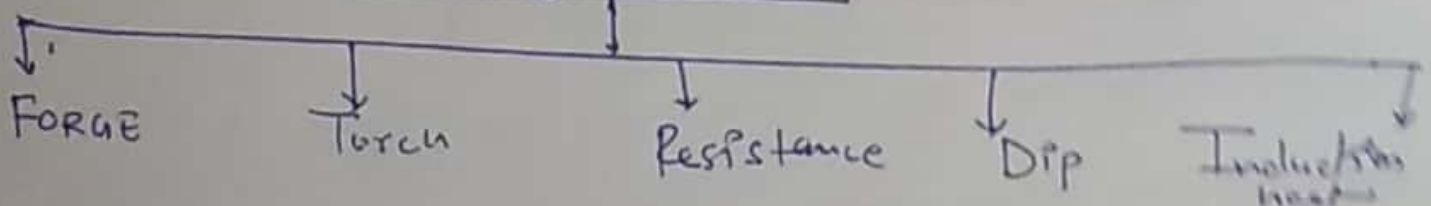
Brazing may be defined as the technique of joining two similar / dissimilar materials by addition of special filler metal.



Base Materials for Brazing:-

- ① Aluminium & its alloys.
- ② Magnesium & "
- ③ Beryllium (used in missiles, aircrafts) and nuclear reactors
- ④ Copper and its alloys
- ⑤ Nickel and its alloys
- ⑥ Tungsten, Molybdenum and Cobalt
- ⑦ Titanium, Zirconium and their alloys.

Types of BRAZING.



Brazing

Differences between Brazing & Welding

- ① Surface to be brazed is not raised to fusion point.
- ② Brazed joints are not so strong.
- ③ Brazing alloys spreads by CAPILLARY ACTION.
- ④ Dissimilar metals can be joined.
- ⑤ Brazing temperatures are low.
- ⑥ Components maintain more precision tolerance.

Welding

- ① Surface to be welded is raised to fusion point.
- ② Welded joints are very strong.
- ③ The weld solidifies almost at the same place where it melts.
- ④ Generally, similar metals are joined.
- ⑤ Welding temperatures are high.
- ⑥ Components maintain less precision tolerances.

Precautions

- ① Properly clean the joints and it should be free from external elements.
- ② Use the right flux in optimal qty.
- ③ Use of proper spelter in minimum qty.
- ④ Joint must be reasonably tight.
- ⑤ Avoid prolonged heating.

Applications of Brazing -

- ① Joining carbide tips with mild steel shanks.
- ② Joining non metals to metals.
- ③ Joining dissimilar metals.
- ④ Joining nickel and its alloys.
- ⑤ Used in fastening of pipe fittings, tanks, heat exchangers and electrical repair work.