

Flux

Flux is a material that is expected to react with oxides present and form low density slag which would float on the top of molten metal pool protecting it from further oxidation.

During the process of welding, some metal may get oxidised. Flux is used to dissolve and remove these metal oxides. Flux like borax or a mixture of fluorides and chlorides of sodium, potassium and lithium are most commonly used. The flux reacts with metallic oxides to yield slag, which being lighter floats on top of molten metal pool. After solidification, the welder removes the flux using a chipping hammer and wire brush.

The main functions of flux is given below:

1. Provide a protective atmosphere for welding, thus prevents oxidation
2. Stabilize the arc
3. Reduce spattering.
4. Reduce the viscosity of molten metal.