

## SUBMERGED METAL ARC WELDING (SMAW)

- Joining of high thickness objects in a single pass, this technique can be used.
- Arc is generated b/w consumable electrode + w/p.
- Through the welding torch, granular flux will be continuously supplied. It will cover the arc such that arc will be submerged under the flux material. Due to this, heat transfer losses from arc will be minimum & heat concentration on w/p is very high.
- Weld spatter and slug inclusion is reduced.
- No splashing of liquid metal.
- Depth of penetration, welding speed, deposition rate is very high.
- Generally used for flat position only.

### Application :

Welding of bridge girders, railroads, structural shapes, pressure vessels, pipes and structure of railway coaches and locomotives.

