

Mechanism of Metal Transfer when electric arc is

4 consumable electrode ^{produces} ^{blow the workpiece} solvent melting in the form of spherical shape, hangs downwards the job and finally a drop down on the workpiece therefore from electrode to workpiece is define "metal transfer process".

By three ways transferred metal-

- 1) By dip transfer
- 2) By free drop. (Large Drop)
- 3) By spray. (Small Drop)

- In dip transfer a globul of molten metal is formed at the end of the electrode during arcing in the first stage
- Subsequently it enlarge & elongates, touches the molten pool & separates from the electrode.
- The process repeats several time to complete weldy
- spray or small drop transfer small drop transfer is the best among the three

