

Basics of Welding

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- T-Joint
- Uses fillet weld



- Edge/parallel joint



- Corner Joint



- Butt joint
- Uses groove weld



- Lap joint

Joint Types

Arc Welding

-Uses electrode to conduct current to workpiece.

-Types:

- Shielded metal arc welding (SMAW)/stick
 - Uses inexpensive, portable equipment
 - Used to weld base metals made of ferrous metals and some non ferrous metal
- Gas metal arc welding (GMAW)/mig
 - Uses external shielding gas
- Gas tungsten arc welding (GTAW)/TIG
 - Uses nonconsumable electrode made of tungsten and inert shielding gas
 - Clean and precise



Illustration: Shows example of (SMAW)

Safety

- Welding mask
 - Darkens to prevent eye damage from brightness
 - Protects head from debris
- Welding Jacket
 - Heat resistance protects skin
- Welding gloves
 - Protects hands from hot surfaces and debris
- Respirator (can be substituted for fume extractor)
 - Protects lungs from harmful fumes
- Boots
 - Protects feet from falling objects



Citations

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