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# MODULE M

## Safety at work welding trade atmospheres

Basics of welding technology MAG, MIG, TIG



## Basics of welding technology MAG, MIG, TIG

- ▶ The shielded welding MIG, MAG uses a consumable electrode in the form of a wire wound on a bobbin.
- ▶ Welding Method 135 is used in MAG welding of structures, it is suitable for welding of unalloyed and low-alloyed metals.
- ▶ Welds In active gas eg. CO<sub>2</sub>.
- ▶ Method MIG weld 131 is again melting electrode in the form of wire. Use of highly alloyed steel, non ferrous metals, the protective gas is an inert e.g., argon or mixtures thereof.
- ▶ For both methods of welding heat source is an electric arc.



# Basics of welding technology MAG, MIG, TIG

- ▶ The principle of MIG and MAG is that the arc burns between the consumable electrode and melting the material in shielding gases.
- ▶ Settings Parameters governing the different types of welds, the welding position and the thickness of welding.
- ▶ Technology Welding may be forward (the axis of the torch forms with the direction that is welded, an obtuse angle) backward or welding technology, where on the contrary the axis of the torch forms with the direction that is welded acute angle.
- ▶ Technology forward welding is often used when welding the root, and at positions PF and PB.
- ▶ For welding of fillet welds MAG welding usually used ahead where the axis of the burner is set at an angle between  $110^\circ$  and  $120^\circ$ .