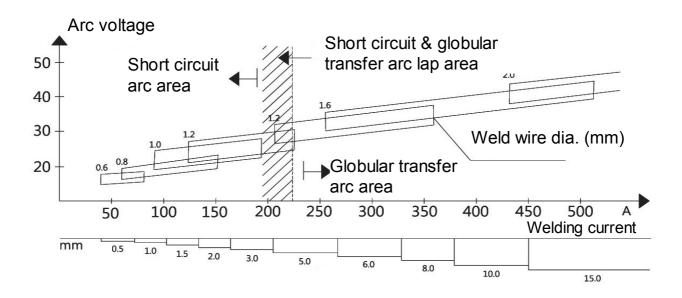
## MAG • MIG wire/rod

## **Welding Notes**

- The following shielding gases are commonly applied on GMAW :  $CO_2$ , Ar +  $CO_2$  & Ar +  $O_2$ , etc.
- 2. Shielding gas fl ow rate: 20 ~ 25 L/min.
- 3. Proper shelter is necessary on windy area to prevent air (O<sub>2</sub> & N<sub>2</sub>) trapping into arc and melting pool.
- 4. Ventilation is absolutely necessary when welding inside a limited or restricted partition.
- 5. Keep welding wire in dry condition even there is an anti rust cooper coated film on wire surface.
- 6. Shielding gas regulator, wire feeder, welding equipment, and other related accessories shall be function checked carefully before welding to prevent abnormal defects occurred.
- 7. Gas mixing rate will affect welding results (Weld metal properties such as tensile strength and toughness may be changed from one mixing rate of shielding gas to another). The mixing rate shall be specified for keeping a constant supply during welding.
- 8. Vertical and overhead positions are not recommended on main structural parts.



**9.**The following diagram is showing how to select arc transfer mode within the suitable corresponding welding current range.



Note: the welding current and voltage will affect the arc transfer mode.

10. The referenced welding parameters are as follows:

Wire size (mm)	Welding Current (A)	Welding Voltage (A)
0.6	40 — 80	12 — 18
0.8	60 — 160	15 — 23
0.9	60 — 200	19 — 27
1.0	80 — 230	19 — 29
1.2	120 — 350	20 — 34
1.4	240 — 380	26 — 38
1.6	260 — 450	28 — 40

## 11. The difference between MIG and MAG

MAG: A variation of GMAW, shielding gas can be CO<sub>2</sub>, Ar +CO<sub>2</sub> or Ar+O<sub>2</sub>

M IG: A variation of GMAW, shielding gas is 100% inert gas such as Argon or helium or Ar + He

## 12. The polarity illustration:

DCEP ( DC+ ): Electrode positive or DC reverse polarity (DCRP). DCEN ( DC- ): Electrode negative or DC straight polarity (DCSP).

