

# Automatic Submerged Arc Welding Machine

**MZ-series** products are automatic submerged-arc welding machines with IGBT inverter technology, which consist of large capacity arc welding power source and welding tractor. They are suitable for all kinds of steel

## Main Functions

- Alternation of characteristic of constant voltage/current.
- Wide range of output current.
- Welding current and welding voltage as well as travel speed of welding tractor can all be preset and welding voltage.
- Remote/panel control selection.
- MMA welding and air carbon arc gouging with suitable carbon electrode.
- Protective functions: over-current, under-voltage and over-load, etc.
- Tractor traveling mode and direction control function.
- Welding head site adjustment function.
- A311 - 1000 is digital control.



## Technical Specifications

**MZ-630/1000/1250**

| Model                                | MZ-630<br>(A310-630)         | MZ-1000<br>(A310-1000/A311-1000) | MZ-1250<br>(A310-1250) |
|--------------------------------------|------------------------------|----------------------------------|------------------------|
| Rated input voltage                  | 3-380V ± ( 15-20 ) % 50-60Hz |                                  |                        |
| Rated input current ( A )            | 50                           | 80                               | 100                    |
| Rated input power ( KW )             | 33                           | 52                               | 65                     |
| Voltage adjusting range ( V )        | 20 - 50                      | 20 - 50                          | 20 - 50                |
| Current adjusting range ( A )        | 120 - 630                    | 150 - 1000                       | 150 - 1250             |
| Duty cycle                           | 100%                         | 100%                             | 60%                    |
| Welding tractor travel speed ( m/h ) | 6 - 72                       | 6 - 72                           | 6 - 72                 |
| Wire feed rate range ( m/min )       | 1 - 6.5                      | 0.5 - 2.5                        | 0.5 - 2.5              |
| Suitable welding wire Dia. ( mm )    | Φ1.6 - Φ2.4                  | Φ3.2 - Φ5.0                      | Φ3.2 - Φ5.0            |
| Efficiency ( η )                     | 90%                          | 90%                              | 90%                    |
| Power factor ( cos Φ )               | 0.95                         | 0.95                             | 0.95                   |
| Insulation grade                     | F                            | F                                | F                      |
| Case protection grade                | IP 23                        | IP 23                            | IP 23                  |
| Dimensions of power source ( mm )    | 810 x 345 x 1022             | 810 x 345 x 1022                 | 810 x 345 x 1022       |
| Net weight of power source ( Kg )    | 90                           | 98                               | 98                     |
| Dimensions of welding tractor ( mm ) | 1038 x 480 x 628             | 1038 x 480 x 628                 | 1038 x 480 x 628       |
| Net weight of welding tractor ( Kg ) | 51                           | 51                               | 51                     |