



STANDARD ARC EQUIPMENT

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Standard Arc Equipment

MMAW TIG MIG SAW

PLASMA CUTTING

MMAW / SMAW





Shielded metal arc welding (SMAW), also known as manual metal arc welding (MMA or MMAW), flux shielded arc welding^[1] or informally as stick welding, is a manual <u>arc welding</u> process that uses a consumable <u>electrode</u> covered with a <u>flux</u> to lay the weld. An <u>electric current</u>, in the form of either AC or DC from a <u>welding</u> power supply, is used to form an <u>electric</u> arc between the electrode and the <u>metals</u> to be joined.

TIG / GTAW







Gas tungsten arc welding (GTAW), also known as tungsten inert gas (TIG) welding, is an arc welding process that uses a nonconsumable tungsten electrode to produce the weld. The weld area and electrode is protected from oxidation or other atmospheric contamination by an inert shielding gas (argon or helium), and a filler metal is normally used.

MIG / GMAW



GMAW weld area. (1) Direction of travel, (2)Contact tube, (3) Electrode, (4) Shielding gas, (5)Molten weld metal, (6) Solidified weld metal, (7)Workpiece



MIG / GMAW





Gas metal arc welding (GMAW) or metal inert gas (MIG) welding or metal active gas (MAG) welding, is a welding process in which an electric arc forms between a consumable wire electrode and the workpiece metal(s), which heats the workpiece metal(s), causing them to melt and join. Along with the wire electrode, a shielding gas feeds through the welding gun, which shields the process from contaminants in the air.

The process can be semi-automatic or automatic. A constant voltage, direct current power source is most commonly used with GMAW..





TRANSFORMER DIODE THYRISTOR INVERTER

MMAW / SMAW



TRANSFORMER



Salient Features

- Higher metal recovery ensures lower consumption of electrodes.
- Superior dynamic characteristics gives soft and smooth arc, minimum spatter.
- Robust and compact construction ability to withstand rough handling at sites.

- TRANSWELD 400
- THH630
- XPERT 400

MMAW / SMAW DIODE

ESAB MODEL

- LHJ425
- LHJ750



Salient Features

- The rectifier has an option to fix ESAB digital V/A meter for showing the welding voltage and current.
- Fan cooled three phase rectifier connected to a three phase power.

MMAW / SMAW



TRANSFORMER

Salient Features

- True, vertical welding current characteristics with higher open circuit voltage.
- Immunity from AC input voltage fluctuation, with built-in overload and thermal cut-out protections.
- Stable arc with regular droplet transfer and elimination of spatter generation.
- Hot start facilities for easy arc striking.
- Effective prevention of electrode freezing.
- Single range current control with remote control facilities.
- Excellent reliability with high performance suitable for outdoor, onsite use.
- Ideal for precise TIG welding with necessary
- accessories.



- SSR400
- SSR600

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MMAW / SMAW

INVERTER

Salient Features

- Robust and Powerful
- MMA & TIG Welding Process
- Voltage Reduction Device VRD
- Energy Efficient
- Safety and Reliability
- Light weight
- Adjustable hot start & Arc Force
- Wide mains voltage tolerance
- Generator Complaint

- BUDDY ARC 200
- ARC 250
- BUDDY ARC 400
- ARC 630i









THYRISTOR INVERTER

TIG / GTAW



THYRISTOR



- ESAB SSR400T
- ESAB TIG 400 P





ANALOG INVERTER

DIGITAL INVERTER



ESAB MODEL

- BUDDY TIG 400
- TIG 400i P



- RENEGATE 300i P
- ORIGO TIG 4000i W
- ARISTO MIG u 4000iW





DIODE THYRISTOR INVERTER

MIG / GMAW DIODE





30 - 250A



Migmatic 250 40 - 250A Migmatic Wire Feeder 5/10m, 0.8 - 1.2mm

- POWER COMPACT 255
- MIGMATIC 250

MIG / GMAW THYRISTOR



60 - 400/600A Servo-I/Servo-II

Servo-I Wire Feeder : 5/10/15/20m, 0.8 - 1.2mm Servo-II Wire Feeder : 5/10/15/20/30m, 0.8 - 1.6mm



SCR 400S / 500S 60 - 400/500A Servo-I/Servo-II

- AUTO K 400 / 600
- SCR 400 / 500





MIG / GMAW



ANALOG INVERTER

DIGITAL INVERTER



• BUDDY MIG 400 / 500

• MIG 400i CC/CV



- ARISTO MIG 4000 / 5000
- ORIGO MIG 4002 / 5002

SUBMERGED ARC WELDING









ESAB MODEL

• CPRA 1200S / 1200T / 1250i

PLASMA CUTTING MACHINE



INVERTER



ESAB Cutmaster 100

ESAB MODEL

• CUT MASTER 40 / 60 / 100i



THANK YOU



esab.com

