

MasterWeld 300

MMA Digital Inverter Welder

Product Overview

The **MasterWeld 300** is a European-manufactured, heavy-duty **300 amp three-phase inverter welder** for professional MMA stick welding, including cellulosic electrodes, and Lift TIG DC applications.

Designed for demanding fabrication, construction, shipyard and maintenance work, it combines robust construction with precise digital control.

Adjustable Hot Start and Arc Force support reliable ignition and a stable arc. Built-in VRD reduces idle voltage, while **200 A at 100% MMA duty cycle at 40°C** provides sustained industrial welding capacity.



300 A OUTPUT | MMA CELL | LIFT TIG DC | VRD

MMA & Cellulosic Welding

A dedicated **MMA CELL mode** provides responsive current control for stable cellulosic electrode welding, including pipework and oil and gas applications. MMA output spans **10-300 A**, with electrodes up to 6 mm depending on type and application.

Adjustable Arc Control

Hot Start boosts starting current for reliable ignition. **Arc Force** supports the arc as it shortens, helping reduce sticking. **Anti-Sticking** assists electrode release after accidental contact.

Digital Control

A clear digital display makes settings easy to read and repeat. Microprocessor control manages welding parameters in real time.

Industrial Construction

Robust construction and a built-in wind tunnel help protect the electronics from dust and salt contamination. Suited to fabrication, structural steelwork, machinery repairs, shipyards and offshore maintenance.

Voltage Reduction Device

VRD reduces open-circuit voltage from **76 V to 9 V** when the machine is idle, supporting applications where reduced idle voltage is required by site procedures.

Lift TIG DC & Pulse

A **5-300 A** TIG range suits mild steel and stainless steel work. Adjustable pulse frequency and background current help control heat input and distortion. Lift ignition helps reduce tungsten contamination compared with scratch starting.

Technical Specifications

Welding processes	MMA / stick, MMA cellulosic and Lift TIG DC
Input supply	400 V three-phase AC, $\pm 15\%$, 50-60 Hz
Specified supply fuse	T20 A time-delay fuse
Maximum input power	13.3 kVA / 10.7 kW
Welding current range	MMA: 10-300 A TIG: 5-300 A
Open-circuit / VRD voltage	76 V / 9 V
Electrode capacity	Up to 6 mm, subject to electrode and application
Protection rating	IP23S
Dimensions	460 × 230 × 325 mm
Weight	20.8 kg
Manufacture / warranty	European manufactured / three years with UK support

Welding Output & Duty Cycle

Process	Ambient	Output and duty cycle
MMA	40°C	300 A at 40%; 230 A at 60%; 200 A at 100%
TIG DC	40°C	300 A at 50%; 250 A at 60%; 210 A at 100%
MMA	25°C	300 A at 60%; 250 A at 100%
TIG DC	25°C	300 A at 80%; 270 A at 100%

Duty cycle is measured over 10 minutes at the stated temperature. At 40%, weld for four minutes and allow six minutes for cooling at the specified output.

Accessory Options

Electrode holder with 4 m, 35 mm² lead; work return clamp with 4 m, 35 mm² cable; 4 m Type 26 valve-controlled TIG torch; remote current control; transport trolley.

TIG requires shielding gas and associated equipment. Select a torch rated for the intended current and duty cycle. Contact us to confirm compatibility and package contents.

Three-Year Warranty & Full UK Support

European manufactured and backed by a **three-year warranty with full UK support**. Contact MasterWeld for a quotation, accessory advice or help specifying your welding package.