STAMOS® | WELDING GROUP

BEDIENUNGSANLEITUNG

USER MANUAL | INSTRUKCJA OBSŁUGI | NÁVOD K POUŽITÍ | MANUEL D'UTILISATION | ISTRUZIONI D´USO | MANUAL DE INSTRUCCIONES

S-WIGMA 200P UK
S-MMA-250-PI UK

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USER MANUAL

	The operation manual must be read carefully.
	The product must be recycled.
	Satisfies requirements of applicable safety standards
	Use full body protective clothes.
	ATTENTION! Wear protective gloves.
	Safety goggles must be worn.
	Protective footwear must be worn.
	ATTENTION! Hot surface may cause burns.
	ATTENTION! Risk of fire or explosion.
	ATTENTION! Harmful fumes, danger of poisoning. Gases and vapours may be hazardous to health. Welding gases and vapours are released during welding. Inhaling these substances may be hazardous to health.
	Use a welding mask with appropriate filter shading.
	CAUTION! Harmful welding arc radiation.
	Do not touch the parts that are under voltage/ power.

⚠ **PLEASE NOTE!** Drawings in this manual are for illustration purposes only and in some details may differ from the actual product.

The original operation manual is in German. Other language versions are translations from German.

1. TECHNICAL SPECIFICATIONS

Parameter	S-WIGMA 200P UK
Supply voltage (V)	AC 230 V±10%
Frequency (Hz)	50
TIG DC welding current [A]	5 – 200
MMA welding current [A]	5 – 200
Welding current at 100% duty cycle [A]	154
Welding current at 60% duty cycle [A]	200
Pulse current [A]	5 – 200
Pulse frequency in DC mode [Hz]	0,5 – 25
Gas post-flow time [s]	3
Current down slope [s]	0 – 5
TIG electrode diameter [mm]	1 – 3,2
MMA electrode diameter [mm]	1 – 4
TIG ignition	HF
ARC FORCE	✓
HOT START	✓
ANTI STICK	✓
Insulation class	F
Protection class	IP21S
Weight (kg)	13,15
Parameter	S-MMA-250-PI UK
Supply voltage (V)	AC 230 V±10%
Frequency (Hz)	50
MMA welding current [A]	20 – 250
Welding current at 100% duty cycle [A]	220
Welding current at 80% duty cycle [A]	250
MMA electrode diameter [mm]	1-4
ARC FORCE	✓
HOT START	✓
ANTI STICK	✓
Insulation class	F
Protection class	IP21S
Weight (kg)	5,6

2. GENERAL DESCRIPTION

The user manual is designed to aid safe and troublefree use. The product is designed and manufactured in accordance with strict technical guidelines, using state of the art technologies and components and in compliance with the most stringent quality standards.

DO NOT USE THE DEVICE UNLESS YOU HAVE THOROUGHLY READ AND UNDERSTOOD THE PRESENT USER MANUAL.

To extend the shelf life of the device and to ensure trouble free operation, use it and perform maintenance tasks in accordance with this user manual. The technical data and specifications in this user manual are current. The manufacturer reserves the right to make changes associated with quality improvements. Taking into account technological progress and noise reduction opportunities, the device was designed to reduce noise emission risk to the minimum.

3. SAFETY OF USE

⚠ **ATTENTION!** Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in an electric shock, fire and/ or serious injury or death.

3.1. GENERAL NOTES

- Take care of your own safety and the one of third parties by reading and strictly following the instructions, included in the operating manual of the device.
- Only qualified and skilled personnel can be allowed to start, operate, maintain and repair the machine.
- The machine must never be operated contrary to its intended purpose.

3.2. PREPARATION OF WELDING WORK SITE

WELDING OPERATIONS MAY CAUSE FIRE OR EXPLOSION!

- Strictly follow the occupational health and safety regulations applicable to welding operations and make sure to provide appropriate fire extinguishers at the welding work site.
- Never carry out welding operations in flammable places that pose the risk of material ignition.
- Never carry out welding operations in an atmosphere containing flammable particles or vapours of explosive substances.
- Remove all flammable materials within 12 meters from the welding operations site and if removal is not possible, cover flammable materials with fire retardant covering.
- Use safety measures against sparks and glowing metal particles.
- Make sure that sparks or hot metal splinters do not penetrate through the slots or openings in the coverings, shields or protective screens.
- Do not weld tanks or barrels that contain or have contained flammable substances. Do not weld in the vicinity of such containers and barrels.
- Do not weld pressure vessels, pipes of pressurised installations or pressure trays.
- Always ensure adequate ventilation.
- It is recommended to take a stable position prior to welding.

3.3. PERSONAL PROTECTION EQUIPMENT

ELECTRIC ARC RADIATION CAN CAUSE DAMAGE TO EYES AND SKIN!

- When welding, wear clean, oil stain free protective clothing made of non-flammable and nonconductive materials (leather, thick cotton), leather gloves, high boots and protective hood.
- Before welding remove all flammable or explosive items, such as propane butane lighters or matches.
- Use facial protection (helmet or shield) and eye protection, with a filter featuring a shade level matching the sight of the welder and the welding current. The safety standards suggest colouring No. 9 (minimum No. 8) for each current below 300 A. A lower shield colouring can be used if the arc is covered by the workpiece.
- Always use approved safety glasses with side protection under the helmet or any other cover.
- Use guards for the welding operation sites in order
- to protect other people from the blinding light radiation or projections.
- Always wear earplugs or another hearing protection to protect against excessive noise and to avoid spatter entering the ears.
- Bystanders should be warned to not look at the arc.

3.4. PROTECTION AGAINST ELECTRIC SHOCK

ELECTRIC SHOCK CAN BE LETHAL!

- The power cable must be connected to the nearest socket and placed in a practical and secure position. Positioning the cable negligently in the room and on a surface which was not checked must be avoided, as it can lead to electrocution or fire.
- Touching electrically charged elements can cause electrocution or serious burns.
- The electrical arc and the working area are electrically charged during the power flow.
- The device's input circuit and inner power circuit are also under voltage charge when the power supply is turned on.
- The elements under the voltage charge must not be touched.
- Dry, insulated gloves without any holes and protective clothing must be worn at all times.
- Insulation mats or other insulation layers, big enough as not to allow for body contact with an object or the floor, must be placed on the floor.
- The electrical arc must not be touched.
- Electrical power must be shut down prior to cleaning or electrode replacement.
- It must be checked if the earthing cable is properly connected or the pin is correctly connected to the earthed socket. Incorrectly connecting the earthing can cause life or health hazard.
- The power cables must be regularly checked for damage or lack of insulation. Damaged cables must be replaced. Negligent insulation repair can cause death or serious injury.
- The device must be turned off when it is not in use.
- The cable mustn't be wrapped around the body.
- A welded object must be properly grounded.
- Only equipment in good condition can be used.
- Damaged device elements must be repaired or replaced. Safety belts must be used when working at height.
- All fittings and safety elements must be stored in one place.
- From the moment of turning on the release, the handle end must be kept away from the body.
- The chassis ground must be mounted to the welded element or as close to it as possible (e.g. to a work table).

THE DEVICE CAN STILL BE UNDER VOLTAGE UPON FEEDER DISCONNECTION!

- The voltage in the input capacitor must be checked upon turning off the device and disconnecting it from the power source. One must make sure that the voltage value is equal to zero. Otherwise, the device elements must not be touched.

3.5. GASES AND FUMES

PLEASE NOTE! GAS MAY BE LETHAL OR DANGEROUS TO HUMAN HEALTH!

- Always keep a certain distance from the gas outlet
- When welding, ensure good ventilation. Avoid inhaling the gas.
- Chemical substances (lubricants, solvents) must be removed from the surfaces of welded objects as they burn and emit toxic smokes under the influence of temperature.
- The welding of galvanised objects is permitted only when efficient ventilation is provided with filtration and access to fresh air. Zinc fumes are very toxic, an intoxication symptom is the so-called zinc fever.

4. OPERATION

4.1. GENERAL NOTES

- The device must be applied according to its purpose, with observance of OHS regulations and restrictions resulting from data included in the rating plate (IP level, operation cycle, supply voltage, etc.).
- The machine must not be opened as it will cause warranty loss and, in addition, exploding. Unshielded elements can cause serious injuries.

- The producer does not bear any responsibility for technical changes in the device or material losses caused by the introduction of the said changes.
- In case of incorrect device operation, contact the service centre.
- Louvers must not be shielded – the welder must be positioned at 30 cm distance from the objects surrounding it.
- The welder must not be kept under your arm or near your body.
- The machine must not be installed in rooms with aggressive environments, high dustiness and near devices with high electromagnetic field emission.

4.2. DEVICE STORAGE
- The machine must be protected against water and moisture.
- The welder must not be positioned on heated surfaces.
- The device must be stored in a dry and clean room.

4.3 CONNECTING THE DEVICE
4.3.1 CONNECTING THE POWER
- The connection of the device must be performer by a qualified person. In addition, a person with required qualifications should check if the earthing or electrical installation with protection system is in line with the safety regulations and if they operate correctly.
- The device must be placed near the work station.
- Connecting excessively long conduits to the machine must be avoided.
- One-phase welders should be connected to the socket fitted with an earthing prong.
- Welders powered from a 3-Phase network are delivered without a plug, the plug must be obtained independently and installation should be assigned to a qualified person.

PLEASE NOTE! THE DEVICE MAY ONLY BE USED UPON CONNECTION TO AN INSTALLMENT WITH A PROPERLY FUNCTIONING FUSE.

4.3.2 CONNECTING GAS
- Gas tanks must be placed far from the welded object and be protected against falling.
- Gas connector of the welder must be connected with the tank or gas installation by means of the correct pipe and regulator with gas flow regulation. Please note! Connection of line regulators to the tank and
- the other way round is prohibited. Such a change can result in regulator damage and serious injuries.
- Economical gas use extends the welding time.

5. DEVICE USE
S-WIGMA 200P UK



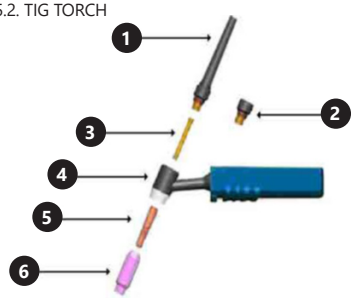
S-MMA-250-PI UK



1. On/off switch.
2. LED – Display.
3. STARTING CUR. - value of output current upon arc striking.
4. PULSE FREQ - impulse frequency during PULS mode welding.
5. WELDING CUR. – welding current.
6. PULSE WD - PULSE WIDTH - this is the relation of the impulse duration to the impulse period.
7. BASE CUR. - current sustaining the arch in the PULS mode.
8. POST TIME - gas post-flow time Function used in order to cool down the weld and to protect it against oxidation.
9. FALL TIME (Down Slope) - time over which the value of the output current decreases from the welding current value to the initial current value.
10. CRATER - FINAL AMP. - output current value prior to welding completion.
11. CLEAN WD - percentage difference of positive time and negative current direction in a single period of welding current.
12. THERMAL OVERLOAD CONTROL LAMP - in case of overheating, the lamp lights up and the device is switched off. Do not attempt to start welding again, leaving the device with fans switched on. The lamp switches off automatically after the device is cooled down. Note the rated operating cycle.
13. Pulsation function switch-key.
14. Operation mode switch TIG / MMA.
15. "AC/DC SWITCH" – TIG welding is divided into AC (alternating current) and DC (direct current) welding.
16. "4T/2T SWITCH" – when welding in TIG mode, the user can select "2T" mode (without sustain) and "4T" mode (with sustain).
17. Switch-key (Foot pedal).
18. Mass conduit connector.
19. Foot switch socket.
20. TIG control cable socket.
21. TIG current – gas socket.
22. MMA connection.
23. Gas connector.
24. Earthing = at the rear side of each and every welder there is a bolt with earthing marking. Before starting, the device has to be earthed with the conduit which cross section can not be smaller than 6 mm.
25. Power supply indicator = after switching on the machine, this control lamp lights-up.

5.1. PREPARING THE DEVICE FOR USE / DEVICE USE
Each unit is equipped with a main power cable, which is responsible for providing current and voltage to the device. If the device is connected to power which exceeds the required voltage, or if the wrong phase is set, it may lead to severe damage to the unit. This is not covered by the warranty for the equipment and the user will be responsible for such situations.

5.2. TIG TORCH



1. Long cap, rear
2. Short cap, rear
3. Collet
4. Blowpipe handle
5. Collet in housing
6. Ceramic nozzle

6. DISPOSING OF PACKAGING
The various items used for packaging (cardboard, plastic straps, polyurethane foam) should be kept, so that the device can be sent back to the service centre in the best possible condition in case of any problems!

7. TRANSPORTATION AND STORAGE
Shaking, crashing and turning upside down of the device should be prevented while it is transported. Store it in a properly ventilated surrounding with dry air and without any corrosive gas.

8. CLEANING AND MAINTENANCE
- Disconnect from electricity when cleaning equipment.
- Use cleaner without corrosive substances to clean surface.
- Dry all parts well after cleaning before the device is used again.
- Store the unit in a dry, cool location, free from moisture and direct exposure to sunlight.

9. REGULAR CONTROL OF THE DEVICE
Check regularly that the device doesn´t present any damage. If there is any damage, please stop using the device. Please contact your customer service to solve the problem.
What to do in case of a problem?
Please contact your customer service and prepare following information:
- Invoice number and serial number (the latter is to be found on the technical plate on the device).
- If relevant, a picture of the damaged, broken or defective part.
- It will be easier for your customer service clerk to determine the source of the problem if you give a detailed and precise description of the matter. The more detailed your information, the better the
- customer service will be able to help you with your problem rapidly and efficiently!

CAUTION: Never open the device without the authorization of your customer service. This can lead to a loss of warranty!

NOTES/NOTIZEN

NOTES/NOTIZEN

STAMOS® | WELDING GROUP

Umwelt – und Entsorgungshinweise

Hersteller an Verbraucher

Sehr geehrte Damen und Herren,

gebrauchte Elektro – und Elektronikgeräte dürfen gemäß europäischer Vorgaben **[1]** nicht zum unsortierten Siedlungsabfall gegeben werden, sondern müssen getrennt erfasst werden. Das Symbol der Abfalltonne auf Rädern weist auf die Notwendigkeit der getrennten Sammlung hin. Helfen auch Sie mit beim Umweltschutz. Sorgen Sie dafür, dieses Gerät, wenn Sie es nicht mehr weiter nutzen wollen, in die hierfür vorgesehenen Systeme der Getrenntsammlung zu geben.



In Deutschland sind Sie gesetzlich **[2]** verpflichtet, ein Altgerät einer vom unsortierten Siedlungsabfall getrennten Erfassung zuzuführen. Die öffentlich – rechtlichen Entsorgungsträger (Kommunen) haben hierzu Sammelstellen eingerichtet, an denen Altgeräte aus privaten Haushalten ihres Gebietes für Sie kostenfrei entgegengenommen werden. Möglicherweise holen die rechtlichen Entsorgungsträger die Altgeräte auch bei den privaten Haushalten ab.

Bitte informieren Sie sich über Ihren lokalen Abfallkalender oder bei Ihrer Stadt – oder Gemeindeverwaltung über die in Ihrem Gebiet zur Verfügung stehenden Möglichkeiten der Rückgabe oder Sammlung von Altgeräten.

[1] RICHTLINIE 2002/96/EG DES EUROPÄISCHEN PARLAMENTS UND DES RATES ÜBER ELEKTRO – UND ELEKTRONIK – ALTGERÄTE

[2] Gesetz über das Inverkehrbringen, die Rücknahme und die umweltverträgliche Entsorgung von Elektro – und Elektronikgeräten (Elektro – und Elektronikgerätegesetz – ElektroG).

For the disposal of the device please consider and act according to the national and local rules and regulations.

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