

# MIG-MAG / ALU welding - brazing

VW AG | VAS 821 003

Operation Manual REV 1.0

UK



CE

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# 1 INTRODUCTION

## 1.1 Product Introduction

The VAS 821 003 welding machine is a compact pulse MIG-MAG welding inverter especially developed for car body repair. The unique benefit is the double wire feed unit. This design ensures excellent welding properties for thin sheet metal as well as with aluminum and CuSi brazing. When using this VAS 821 003 machine, repairs are possible on all types of vehicles with fine quality results.

Be aware of danger resulting from welding and follow the safety and fire instructions.

It's necessary to keep the device in a dry place, to protect it against moisture. It's not advisable to use the device in the open air during rain.

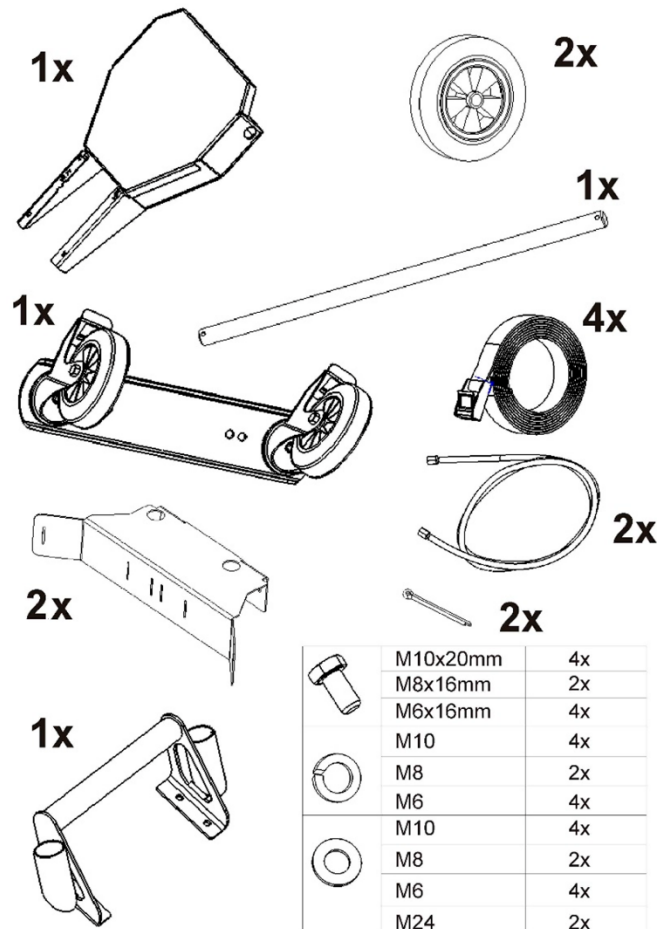
# 2 SETUP

## 2.1 Setup conditions

When welding, it's necessary to set the device in a dry, protected environment with sufficient area for cooling. The device is designed for use in a covered area (i.e. under a roof).

## 2.2 Selecting the accessories

**Before use please check the machine for any possible transport damage!**



## 2.3 Connecting to the electric network

**DANGER**

Check if the voltage stated on the device label matches the rated voltage of your electric network.

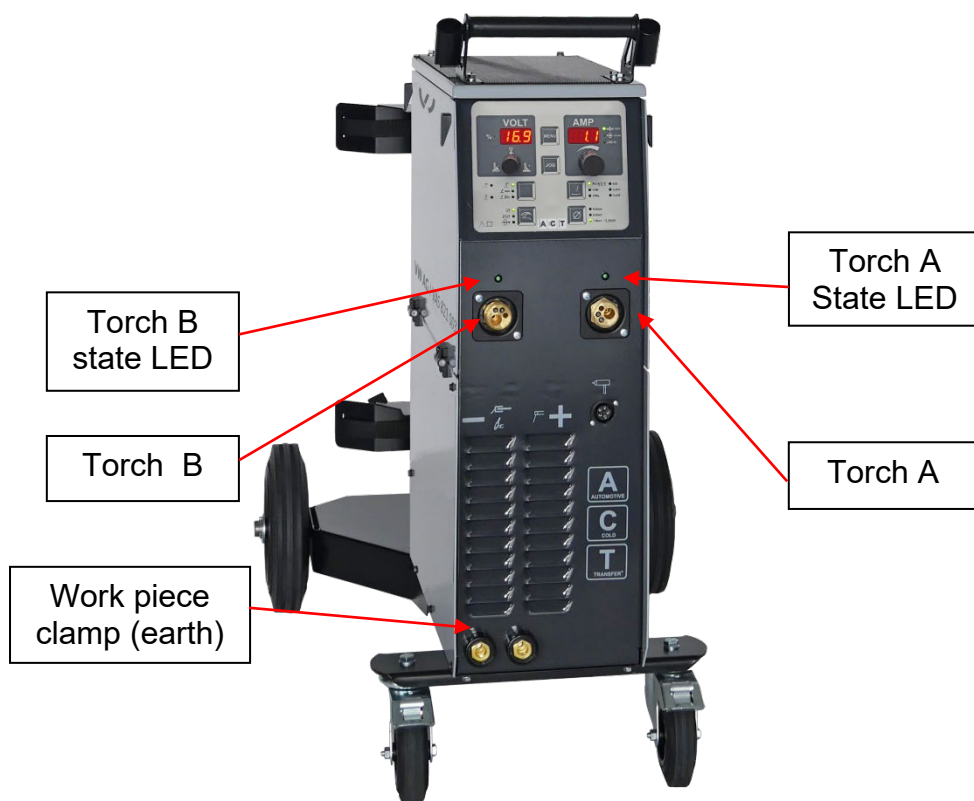
The device can be connected to an electric socket equipped with protective contact which has been installed by an authorized electrician. The current circuit of the socket must be protected with 16Amp melting safety fuse or circuit breaker.

The device is delivered without plug. Please ensure that only plugs and/or sockets are used that comply with the CEE standard.

## 2.4 Connecting the MIG/MAG torch

**CAUTION**

- The torch connection supplied is a EURO Standard torch connector.
- Please, tighten the connector well to avoid any contact resistance. A loose connection can cause damage to the machine and torch.
- Never use damaged torch.



Connect the welding conduction main connecting plug into the main socket on the front side. Secure it with the lock nut.






## 2.5 Torch wire liner

For mild steel, the wire feed liner will consist of a steel spring-like spiral. When using wire electrodes made of chromium-nickel-steel, aluminum and other metals, a liner of wear-resistant plastic (for example Teflon) is used. Plastic liners have a lower friction coefficient than steel.

Make sure the contact tips match the manufacturer's recommendations for type and diameter of the wire being used.

In case a Teflon liner is used, it is also necessary to attach a brass flexible contact neck liner to provide good current conduction to the fill wire.

Material	Wire diameter	Liner material	Liner color
Fe	0,8mm	steel spiral or Teflon	
	1,0mm		
	1,2mm		
Inox	0,8mm	Teflon	
	1,0mm		
	1,2mm		
AlMg, AlSi	1,0mm	Teflon	
	1,2mm		
CuSi3	0,8mm	Teflon	
	1,0mm		
	1,2mm		
CuAl8	0,8mm	Teflon	
	1,0mm		

Liner color:

Blue: Art.N° 337139

Red: Art.N° 337142

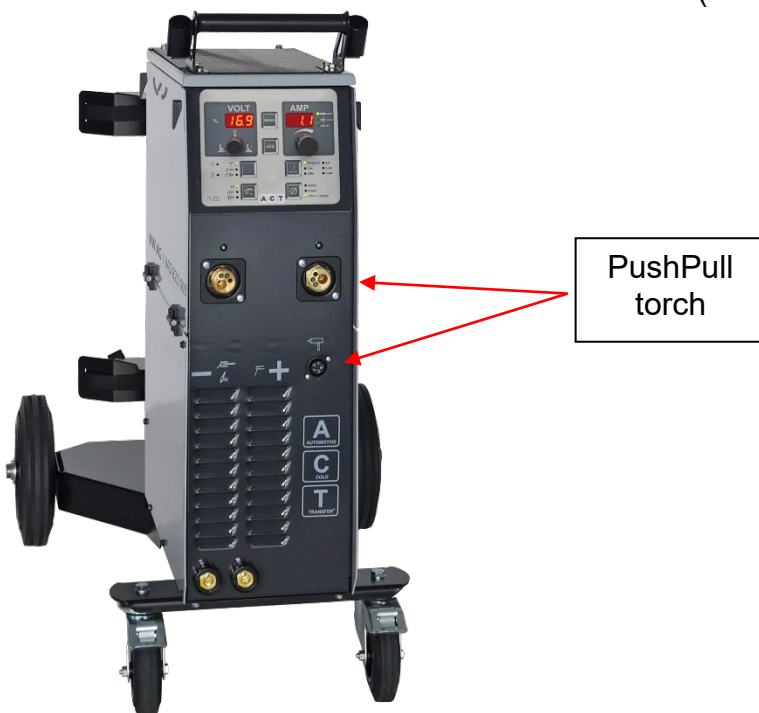
Black: Art.N° 337147

## 2.6 Optional possible / Connecting the PushPull torch

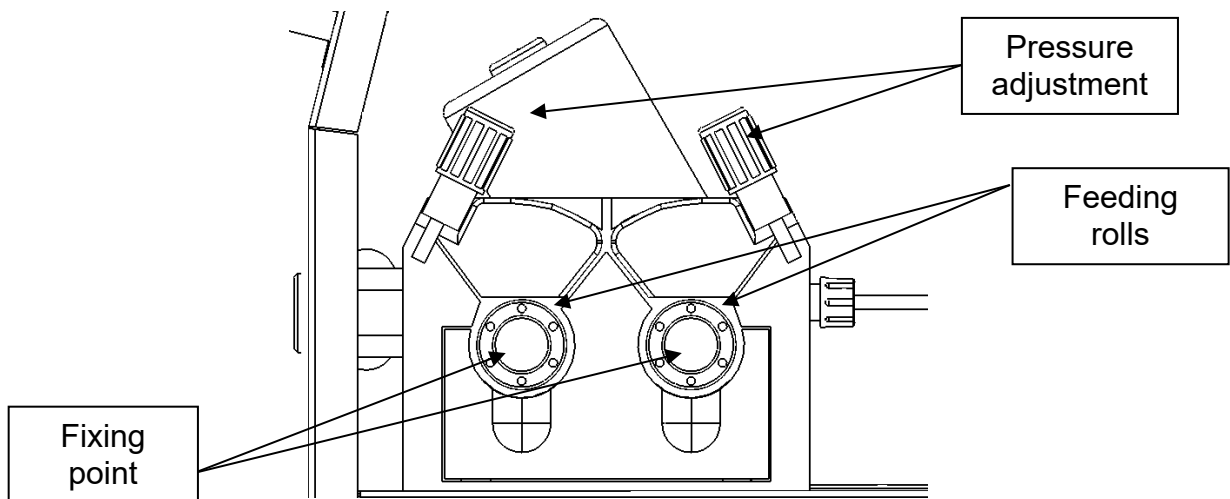


Only use the recommended torch from Wieländer & Schill. Using an incorrect torch may cause the machine damage.

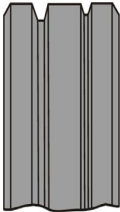
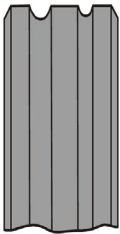
Before using the PushPull torch, the PushPull driver board must be installed to the device (not included in standard delivery).



## 2.7 The feeding unit



Please choose the wire-feeding rolls that correspond to the welding wire being used.

Material	Shape	Diameter	Article-Number
Fe Inox CuSi CuAl		0,6/0,8mm	337219
		0.8/1.0mm	337220
		1,0/1,2mm	xxx
AlMg AlSi		0,8/1,0mm	xxx
		1.0/1.2mm	337221

When the wire-feeding wheels are set up, you can see on the front side of the wheel the assigned welding wire diameter (value is in mm).

## 2.8 Connecting the pressure bottle

While adjusting the gas flow rate, the welding unit must be switched on and the torch trigger must be pressed to open the solenoid valve. To avoid unnecessary wire consumption, open the leaf spring of the wire feeder.

Determination of the gas flow rate:

Steel - 10x wire Ø

Aluminium - 12x wire Ø

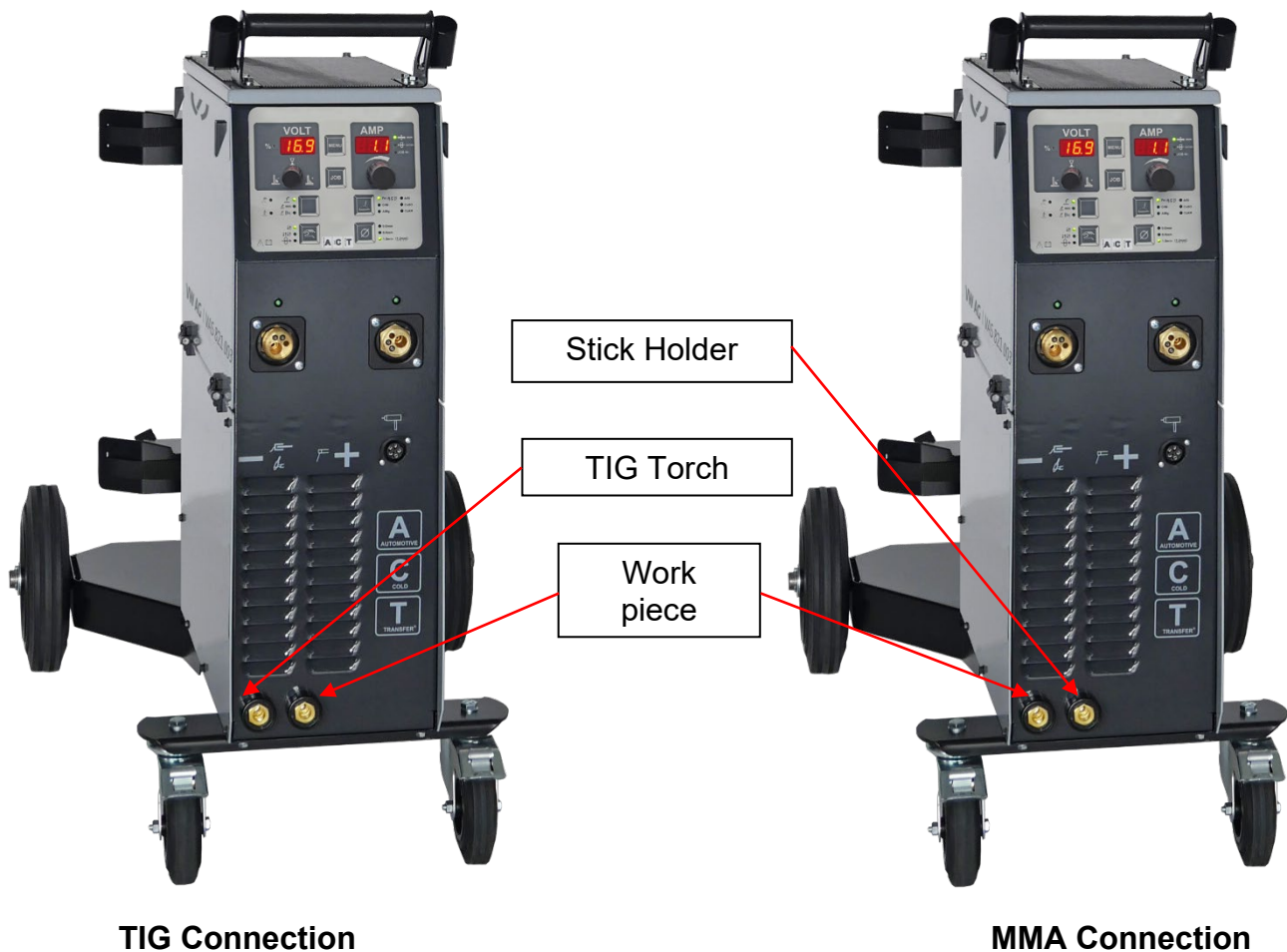
Example: Wire Ø 0,8mm x 10 = 8 Liter/minute



## 2.9 Connecting the ground cable

It's necessary to connect the grounding clamp (earth) in the near vicinity of the welded place. The transfer contact must be metallic and free from dust and paint.

## 2.10 MMA – TIG welding connection





### 3 SAFETY AND FIREINSTRUCTION

Keep this device away from children. You must follow the safety and fire instructions when you work with the welding device and for welding in a protective atmosphere. Follow all regulations for the prevention of accidents during "welding, cutting and similar working activities".

#### **DANGER**



##### **WARNING FIRE HAZARD!**

Be sure the area is safe before doing any welding.

Remove all flammable material within 10m of the welding area.

Quench hot metal or allow it to cool before handling or before letting it touch combustible materials.

Never weld containers with potentially flammable materials inside – they must be emptied and properly cleaned first.

Ventilate potentially flammable atmospheres before welding

#### **DANGER**



##### **WARNING EXPLOSION RISK!**

It's possible that harmless substances in closed containers may generate excessive pressure when heated.

Move containers with flammable or explosive liquids away from the working area!

Never heat explosive liquids, dusts or gases by welding!

#### **WARNING**



##### **CAUTION TOXIC FUMES!**

Smoke and gases can lead to breathing difficulties and poisoning

Use local exhaust ventilation to remove fumes from the air.

Remove all coatings and solvents from the metal before welding.

Wear suitable breathing apparatus if appropriate!

Never weld containers with potentially toxic materials inside. Empty and properly clean the container first.

#### **CAUTION**



##### **CAUTION Noise exposure!**

Prolonged exposure to noise from welding, cutting or similar work can damage hearing.

Use approved ear protection.

Warn others nearby about the noise hazard.

#### **WARNING**



##### **WARNING ARC RAYS CAN BURN EYES AND SKIN!**

The welding arc produces intense visible and invisible rays that can burn eyes and skin.





Wear eye protection (welding helmet) with appropriate lens shading to protect your eyes from the arc's ultraviolet and infrared rays.

Wear protective clothing to protect against burns caused by ultraviolet light, sparks and hot metal.

Flame-retardant clothing to cover all exposed areas.

Use protective screens or barriers to protect others from flash and glare.



		AMPS																								
		0.5	1	2.5	5	10	15	20	30	40	60	80	100	125	150	175	200	225	250	275	300	350	400	450	500	<
									9	10		11						12					13			14
 Fe												10	11					12					13			14
 Al												10	11					12		13						
				9	10	11						12		13										14		

ISO 4850

ISO 4850

**CYLINDERS CAN EXPLODE**

Gas cylinders contain gas under high pressure which can explode if damaged or exposed to a heat.

Regional safety regulations for pressurised gas must be followed. Due to high pressure inside the bottles (up to 200 bar) it is necessary to secure them against mechanical damage, overturning, downfall, heating up (max 50°C), against sunshine exposure for a longer time and against strong frost.

**WARNING RISK OF ELECTRIC SHOCK**

Voltages can cause potentially fatal electric shocks and burns on contact. Even low voltages can cause a shock and lead to accidents.

Install and ground this equipment according to the instruction manual and in accordance with national and local standards.

Wear the full personal protective equipment (depending on the application)!

Never touch live components such as welding current sockets or stick, tungsten or wire electrodes!

Always place torches and electrode holders on an insulated surface! The device must be placed out of higher electrical danger environment. You can be in the endangered environment with a torch only.

**CAUTION ELECTROMAGNETIC FIELDS**

Device is constructed according IEC 60974-10 class A and is intended to work only in industrial areas.

When operating welding machines, electro-magnetic interference can occur.

The user is responsible for any interference caused by welding. Pacemaker and hearing aid operation can be affected by magnetic fields from high currents. Pacemaker and hearing aid wearers should consult a doctor before going near any arc welding machines.

**SAFETY INSTRUCTIONS*****Welding in the environment with higher electrical danger***

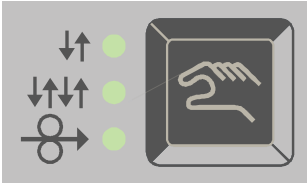
The welding device is constructed in compliance with IEC 60974 as a device suitable for welding in the environment with higher electrical danger.





### 4.2.1 Welding mode selection

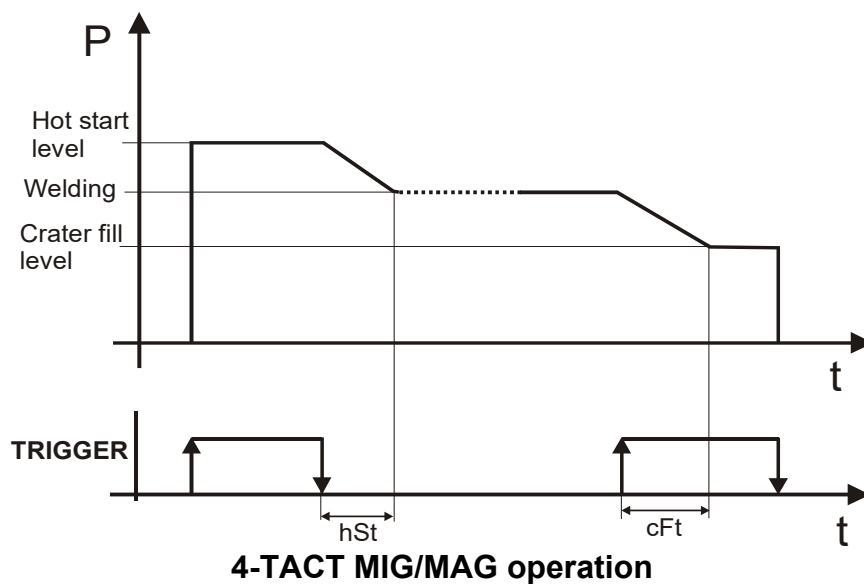
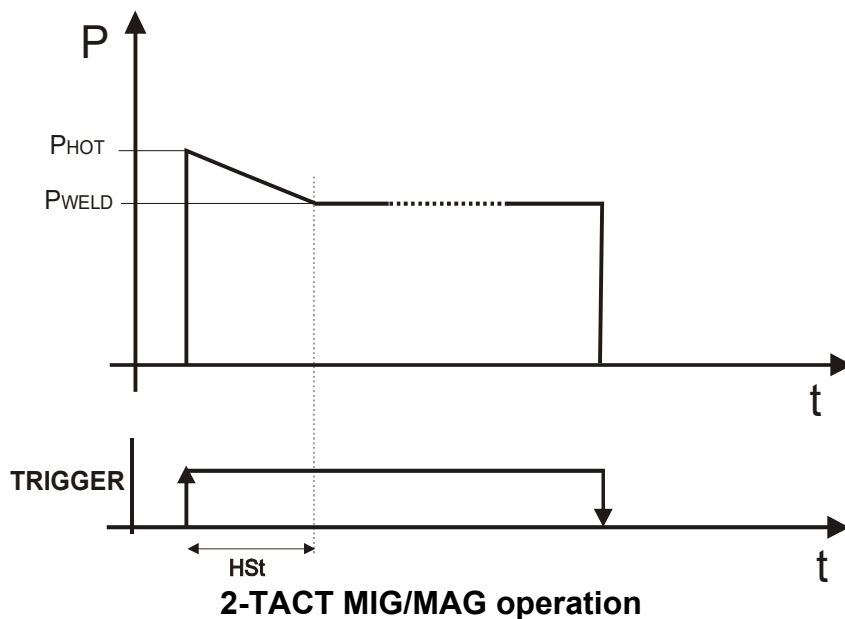
(Not available if MMA/TIG selected)



- ↕ - 2- cycle mode
- ↕↕ - 4- cycle mode
- ⊗→ - Manual wire-speed mode. In wire-speed window it is possible to adjust the speed for manual feed. Feeding is activated by pressing the trigger button.

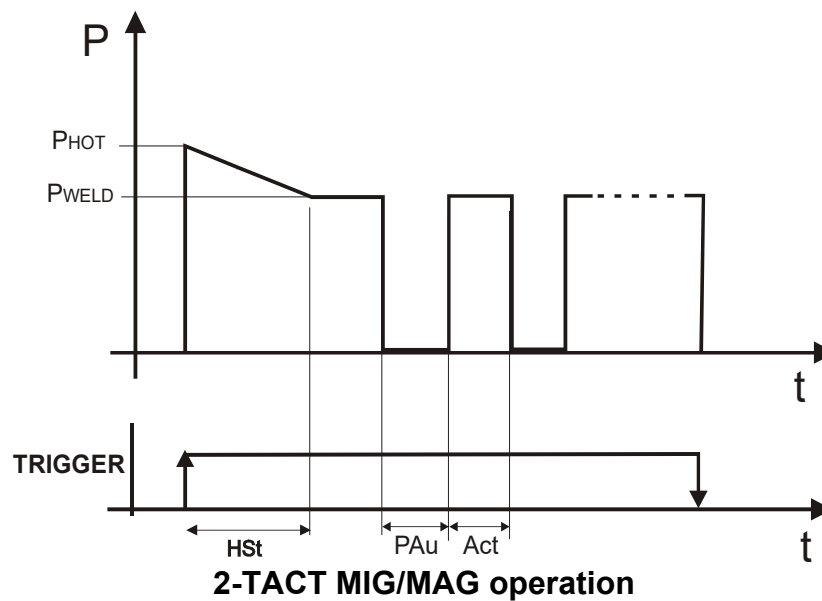
#### 2-TACT Mode / 4-TACT Mode

2-TACT/4-TACT relates to the function of starting button (trigger) on the welding torch. Differences in operation of this two modes are shown in following pictures:



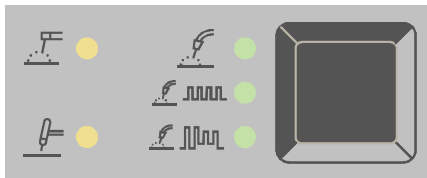
### ***Interval welding***

To activate the interval welding program, the pause time must be set greater than 0 (factory setting). To disable interval welding feature, set the pause time parameter to 0 (menu parameter number 1.9 – PAU). Interval function is available in both – 2cycle and 4cycle operation



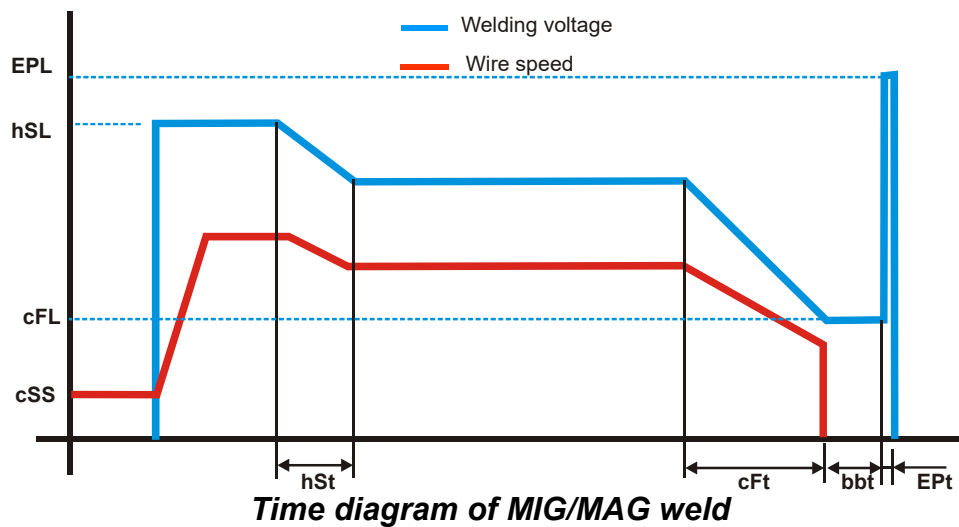
## 4.2.2

## Welding process selection

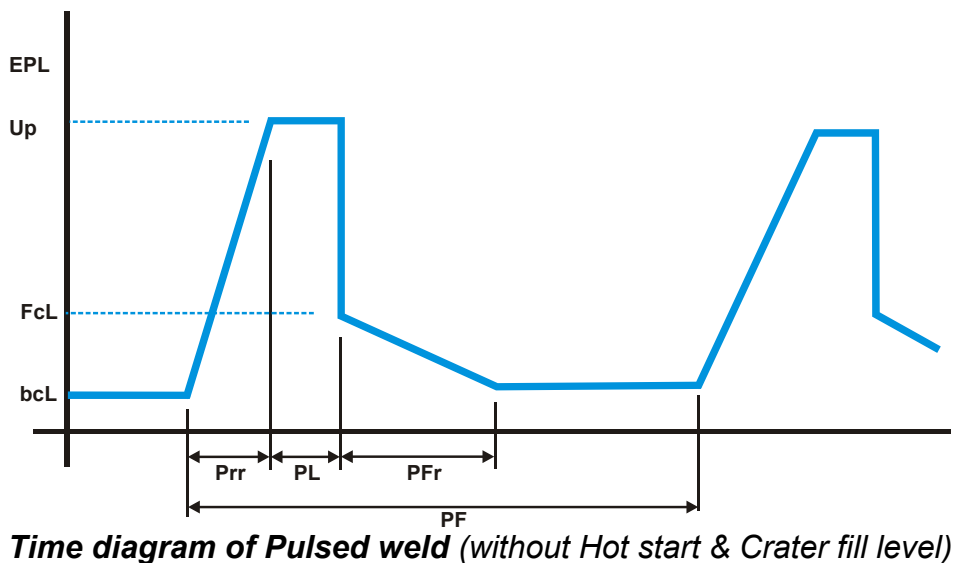


- Standard MIG/MAG welding process
- Pulsed MIG/MAG welding process (EcoPulse only)
- MIG/MAG Double Pulse welding process
- MMA welding process
- WIG welding with Lift Arc ignition

## Synergy parameters for MIG/MAG welding

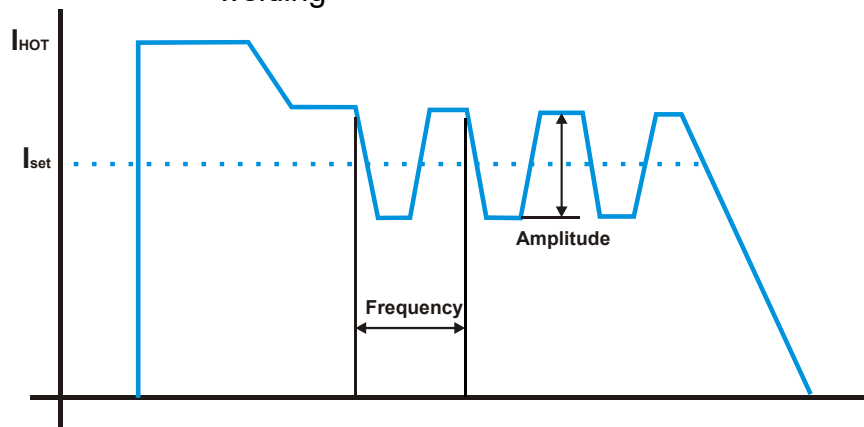
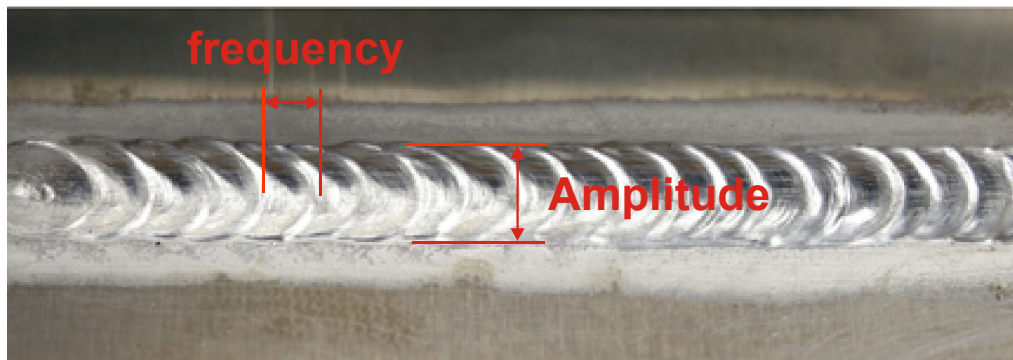


## Synergy parameters for standard Pulse



**MIG / MAG Double Pulse**

- Double pulse frequency** – define a speed of interleaving hot and cold phases in double pulse welding
- Double pulse amplitude** – power ratio between hot and cold phases in double pulse welding

**Double pulse time characteristic****Double pulse weld – AlSi5 / 1.0mm wire****4.2.3****Selection of the additional material**

(Not available if MMA/TIG selected)

**Fe (ACT)** - alloyed + non-alloyed steel, inert gas: 82%Ar + 18%CO<sub>2</sub>  
(LED shines)

**Fe (ACT)** - Steel thin sheets ACT welding, inert gas: 82%Ar + 18%CO<sub>2</sub>  
(LED flashes)

**CrNi** - Stainless steel AWS308LSi, gas: 87.5%Ar + 2.5%CO<sub>2</sub>

**AlMg** - Aluminum + magnesium, shielding gas: 100%Ar

**AlSi** - Aluminum + silicium, shielding gas: 100%Ar

**CuSi3** - Copper silicium, shielding gas: 100%Ar

**CuAl8** - Copper aluminium, shielding gas: 100%Ar



## 4.2.4

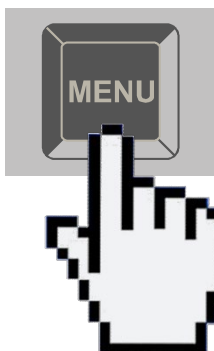
## Selection of the additional material diameter



0,6mm  
0,8mm  
1,0mm (1,2mm)

## 4.2.5

## MENU



For enhanced adjustment is available MENU function.

Press and hold for 3 seconds



**4.2.5.1 List of MENU parameters:**

Display Name	Description	Min.	Max.	Step	Unit	MIG	Pulse MIG	Double Pulse MIG	MMA	TIG
<b>GPr</b>	Gas pre-flow time	0,0	10,0	0,1	sec	X	X	X	-	-
<b>GPo</b>	Gas post-flow time	0,0	10,0	0,1	sec	X	X	X	-	-
<b>hSL</b>	Hot-start level	100	199	1	%	X	X	X	X	-
<b>cFL</b>	Crater-fill level	1	100	1	%	X	X	X	-	-
<b>hSt</b>	Hot-start slope time	0,0	10,0	0,1	sec	X	X	X	X	-
<b>cFt</b>	Crater-fill slope time	0,0	10,0	0,1	sec	X	X	X	-	-
<b>Act</b>	Active time for interval weld.	0,0	10,0	0,1	sec	X	X	-	-	-
<b>PAU</b>	Pause time for interval weld.	0,0	10,0	0,1	sec	X	X	-	-	-

Synergetic controlled parameters

These parameters are reset to factory settings when changing the material thickness selection.

**Global menu parameters**

Parameters that are independent of the selected filler material, wire diameter and base material thickness are referred to as general parameters. All these parameters can be set by the user in the menu. They remain saved and unchanged as long as the user does not change the setting. The parameter group includes:

**1. Gas pre-flow time****2. Gas post-flow time**

**3. Hot-start level** – Hot start level in percent, based on the preselected Welding current. Can only be > 100%.

**4. Crater-fill level** – Crater fill level in percent, relative to the selected one Welding current. Can only be <100%

**5. Hot-start slope time** – a time which is needed to slope from hot start level to the welding level. In seconds.

**6. Crater-fill slope time** – a time which is needed to slope from welding level to the crater fill level. In seconds.

**7. Active time** – parameter for automatic interval welding, which defines an active welding time in seconds

**8. Pause time** – parameter for automatic interval welding, which defines an inactive time, when arc is off in seconds. If it is set to 0, interval welding is disabled.



### 4.3 Set up, adjustment and display description

#### 4.3.1 Welding power set up



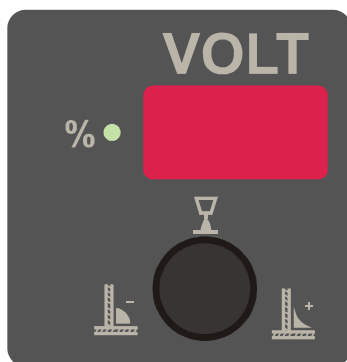
Teh welding-brazing machines are controlled with full synergic feature (except Manual modus).

The welding power is to adjust just with one main rotary encoder. By press of the encoder button, wire speed (in meters/min) or material thickness (in millimeters) can be selected.

In MMA and TIG mode is only Ampere setup possible.

#### 4.3.2 Arc length correction synergic mode

In all MIG/MAG modes is possible to adjust length of the welding arc. By turning the encoder in any direction is display switching from Voltage mode to Arc length correction mode (% LED active).



Arc length set to = 0 –



Arc length set to max. +



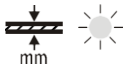

Arc length set to min. –




## 4.4 JOB Mode



The JOB mode allows you to store up to 100 individual parameter settings in addition to the preset programs.




Change from synergic mode  to JOB mode  is made by short press of the JOB button. After entering the Job mode, the number of the actual job is shown in the Material thickness / JOB window. There are 100 jobs available: J00 – J99. By Turning the main encoder the required job number can be chosen. While in JOB mode, there are no set-up and adjustments available except the JOB number and welding mode. If adjustment is required, JOB editing must be activated – see following section

To quit from JOB mode press JOB button  again.

### 4.4.1 Editing / saving the JOB

While working in synergic mode , by long pressing the JOB button  actual set up can be stored. After long pressing of JOB button, number of job starts to flash. This number can be changed by encoder rotation, after desired job number is set by pressing the encoder button actual set up is saved under this job number.

To edit actual job, set job number to change, by long pressing the JOB button  the material thickness start to flash and any change of any parameter can be made. After changes are made, by short press of the encoder button the settings will be stored.

## 4.5 Selecting the active feeder

Active feed unit selection is indicated by LED indicator above the corresponding euro torch connector. To switch the idle feed unit on, the trigger button on the corresponding torch must be pressed. By pressing the trigger button on the non-active feed unit, it will switch to active state with automatic up-loading of all appropriate settings on the front panel. After releasing the torch button and pressing it again the welding process will start.

## 4.6 Parameters setup for different feed units

There can be made specific setup for each feed unit. All settings made on the front panel are belonging to the active feed unit and will be stored in internal memory in case of switching the feed unit to idle state or switching the machine off. Always if some setup should be done, the feed unit must be set as active.



## 4.7 ARC Control

If there is no arc detected for more than 3 seconds during active welding the inverter will be automatically switched off.

This feature may prevent user from some desired actions. When feeding a new roll of wire in the torch, please use Manual feed mode described before.

## 4.8 Factory setup

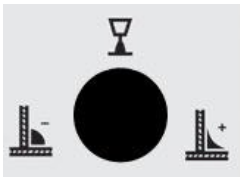
With the following procedure the machine can be reset to factory setup.

This procedure will delete all stored jobs and will reset all parameters to the state at delivery!

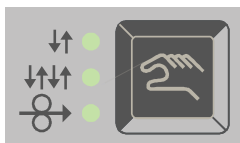


Make sure that the machine is connected to the power supply and switched off.

Hold this button depressed and switch the machine on until the initial display test sequence is over and the code menu is displayed.



Once in the code menu you will have to enter the unique code U 01, A 01, B 01, C 01. Individual numbers can be accessed by pressing voltage encoder.



When you have entered all 4 numbers and you are sure that they are correct then confirm the complete code by depression of this button. The panel will be restarted in order to apply new factory default settings.

## 5 MAINTENANCE

Disconnect the power cable from the socket before any maintenance and troubleshooting. The device is almost maintenance free.

It's necessary to check feeding wheel, pressure roller and inflow nozzle regularly. Clean nozzles and tips regularly.

Please, change the contact tip on the torch regularly

The complete set of pressure hoses should be cleaned up from time to time, because of embedded dust and parts.

The contact nozzle of the torch is wearing up subsequently. When the hole in the nozzle is too large, it is necessary to change the nozzle. The metal drops are embedding in the inner walls of the torch cover. Take them out if necessary. The separator is helpful and it is also a prevention against the firm spatter build-up.

Any damaged cables must be changed at once.

### 5.1 Disposal of the machine



Do not dispose of electrical equipment together with the normal waste!

In observance of European Directive 2002/96/EC on Waste Electrical and Electronic Equipment and its implementation in accordance with national law, electrical equipment that has reached end of its life must be collected separately and returned to an environmentally compatible recycling facility.



## 6 TECHNICAL DATA

### MIG-MAG / Alu welding-brazing 400V:

Mains connection		3~ 400V +/-15%
Mains cable		4x2.5qmm cable's length 10m
Fusing		16Amp delayed
Load capacity @ 40°C		35% ED @280Amp/28V 60% ED @240Amp/26V 100% ED @ 200Amp/24V
Peak input current	I <sub>1p</sub>	20Amp ED @270Amp/30.8V
Peak input power		13kVA
Effective maximum input current	I <sub>1eff</sub>	11Amp @270Amp/30.8V/40%
No load output voltage	U <sub>0</sub>	96V for MIG 96V for TIG 72V for MMA
Efficiency		86%
Idle power consumption in MIG mode		45W
Idle power consumption in MMA/TIG mode		120W
Power factor		0.75
Current adjustment range		10 – 280Amp / 1Amp step
Voltage adjustment range		10 – 50V / 0.1V step
Wire speed range		0,5 – 22 m/min
Wire feed roll diameter		37mm
Wire spool diameter		2 x 200mm / 2x7kg max.
Thermal class		H(180°C)
Temperature range		-10 ....+40°C - operating temp. -40 ....+80°C - storage temp.
Max. noise emission (LWA)		66 dB (A)
Dimensions LxWxH		920x650x930mm
Weight		67kg
Degree of protection		IP23
EMC Class		A

The product meet requirements for CE and S marking.



**MIG-MAG / Alu welding-brazing 200V :**

Mains connection		3~ 200V +/-10%, 50–60Hz
Mains cable		4x4qmm cable's length 10m
Fusing		25Amp delayed
Load capacity @ 40°C		35% ED @280Amp/28V 60% ED @240Amp/26V 100% ED @ 200Amp/24V
Peak input current	I <sub>1p</sub>	38Amp ED @270Amp/30.8V
Peak input power		13kVA
Effective maximum input current	I <sub>1eff</sub>	21Amp @270Amp/30.8V/40%
No load output voltage	U <sub>0</sub>	96V for MIG 96V for TIG 72V for MMA
Efficiency		85%
Idle power consumption in MIG mode		45W
Idle power consumption in MMA/TIG mode		120W
Power factor		0.73
Current adjustment range		4 – 280Amp / 1Amp step
Voltage adjustment range		10 – 50V / 0.1V step
Wire speed range		1,5 – 22 m/min
Wire feed roll diameter		37mm
Wire spool diameter		2 x 200mm / 2x7kg max.
Thermal class		H(180°C)
Temperature range		-10 ....+40°C - operating temp. -40 ....+80°C - storage temp.
Max. noise emission (LWA)		66 dB (A)
Dimensions LxWxH		920x650x930mm
Weight		67kg
Degree of protection		IP23
EMC Class		A

The product meet requirements for CE and S marking.



## 7 AVERAGE CONSUMPTION VALUES FOR WELDING

### 7.1 Average welding wire consumption for MIG / MAG welding

#### 7.1.1 Steel welding wire

Wire feed rate	0,6 mm Welding wire diameter	0,8 mm Welding wire diameter	1,0 mm Welding wire diameter
2m/min	0,4kg/h	0,6kg/h	0,7kg/h
3m/min	0,7kg/h	0,9kg/h	1,1kg/h
5m/min	1,1kg/h	1,5kg/h	1,9kg/h
7m/min	1,6kg/h	2,1kg/h	2,6kg/h
10m/min	2,2kg/h	3kg/h	3,7kg/h
12m/min	2,7kg/h	3,6kg/h	4,4kg/h

#### 7.1.2 CrNi welding wire

Wire feed rate	0,6 mm Welding wire diameter	0,8 mm Welding wire diameter	1,0 mm Welding wire diameter
2m/min	0,5kg/h	0,6kg/h	0,8kg/h
3m/min	0,7kg/h	0,9kg/h	1,1kg/h
5m/min	1,1kg/h	1,5kg/h	1,9kg/h
7m/min	1,6kg/h	2,1kg/h	2,7kg/h
10m/min	2,3kg/h	3kg/h	3,8kg/h
12m/min	2,7kg/h	3,6kg/h	4,6kg/h

#### 7.1.3 Aluminium welding wire

Wire feed rate	1,0 mm Welding wire diameter	1,2 mm Welding wire diameter	
2m/min	0,3kg/h	0,3kg/h	
3m/min	0,4kg/h	0,5kg/h	
5m/min	0,7kg/h	0,8kg/h	
7m/min	0,9kg/h	1,1kg/h	
10m/min	1,3kg/h	1,6kg/h	
12m/min	1,6kg/h	1,9kg/h	





**7.1.4 CuSi welding wire**

Wire feed rate	0,6 mm Welding wire diameter	0,8 mm Welding wire diameter	1,0 mm Welding wire diameter
2m/min	0,5kg/h	0,6kg/h	0,8kg/h
3m/min	0,7kg/h	1kg/h	1,2kg/h
5m/min	1,2kg/h	1,6kg/h	2kg/h
7m/min	1,7kg/h	2,2kg/h	2,8kg/h
10m/min	2,4kg/h	3,2kg/h	4kg/h
12m/min	2,9kg/h	3,8kg/h	4,8kg/h

**7.2 Average shielding gas consumption for MIG / MAG welding****7.2.1 MIG / MAG steel welding**

Welding wire diameter	0,6mm	0,8mm	1,0mm	1,2mm
Average gas consumption	8 l/min	9l/min	10l/min	

**7.2.2 MIG / MAG aluminium welding**

Welding wire diameter	0,6mm	0,8mm	1,0mm	1,2mm
Average gas consumption			12l/min	15l/min

**7.3 Average shielding gas consumption for WIG welding**

Gas nozzle size	4	5	6	7	8	10
Average gas consumption	6l/min	6l/min	10l/min	12l/min	12l/min	15l/min



## 8 TROUBLESHOOTING

Mechanical defects are mostly the result of irregular wire feeding or its blocking.

Electrical defects cause partial or full device failure. Only an authorized electrician can repair the electrical part of welding device.

The troubleshooting should be executed in the OFF mode first and in the following sequence:

- Check up the solidity of electrical connections on switches, current transformer, and also the solidity of plugged and soldered connections.
- Check up the conductivity and fuse contacts.
- Check up visually possible short circuits or winding overload (coloration).

### Possible malfunction

### Troubleshooting

#### Possible reason

#### ***Electric arc is irregular or unstable***

1.	wrong welding voltage setup	Adjust the voltage
2.	too much/little wire	Adjust the wire feed regulator
3.	The workpiece clamp is loose or transfer resistance is too high (rust, paint)	Make a good contact between workpiece and clamp
4.	The contact nozzle is worn up or the diameter is wrong	Change it
5.	The gas flow is not correct	Adjust the gas flow
6.	The workpiece is not clear in the welding area	Remove paint, rust, fat etc.
7.	Performance grade malfunction	Take the device to service
8.	Plug-in spiral is dirty	Clean it up or change it
9.	Feeding malfunction	See below

#### ***Too much metal drops during welding***

1.	too much wire	Adjust the wire feed regulator
2.	welding voltage is too high	Set up lower voltage
3.	workpiece is dirty	Clean it up

#### ***Feeding engine is not rotating***

1.	Power malfunction	Check up the connection to the socket
2.	Button on the torch was not pressed	Press the button
3.	Burner switch not actuated	Press the button, good contact between workpiece and make workpiece clamp
4.	Fuse	Change it (must be changed by authorized electrician)
5.	Engine malfunction	Take the device to service



**Wire feeding malfunction**

1.	Pressing roller is loosen	Increase the pressure to the leaf spring by using the grooved screw
2.	Wire has got out from feeding	Center the intake nozzle
3.	Wire feed wheel grove is worn up	Change the wire feed wheel
4.	Wire is welded to the contact nozzle	Change the contact nozzle, if the wire is deformed, lower the pressure on wire

**Device turns OFF and the “Err t” is displayed**

4.	Time of make is exceeded (TM)	Let the device cool down and follow the instructions for TM according to device type
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**The protective gas still flows**

4.	Magnetic valve is dirty and it is still open	Disconnect the torch connector and connecting hose, alternately flow a pressure air into the torch connector and connecting hose and in the same time often press the button on the torch.
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Only an authorized electrician can repair the electric part of device.



## **9 Distributors Worldwide**

Here you can find our worldwide distributors:

<https://www.wielanderschill.com/service/vertretungen-weltweit/>  
<https://www.wielanderschill.com/en/service/distributors-worldwide/>



## 10 EU-Declaration of Conformity

### EU-Declaration of Conformity

Manufacturer: WS Wieländer+Schill GmbH & Co.KG  
Professionelle Karosserie-Spezialwerkzeuge  
Neue Wiesen 8  
D-78609 Tuningen

Equipment type: Arc welding machine  
Tool type: Inert gas welding equipment

Model name: **VAS 821 003**

Developed and manufactured in  
accordance with the standards and  
guidelines listed below by

Applied  
harmonized  
standards  
EN 60974-1 / 2012  
EN 60974-5 / 2013  
EN 60974-10 / 2014  
EMV-guideline 2014/30/EU  
Low Voltage Directive 2014/35/EU

EU-Machinery directive: 2006/42/EG

We hereby declare that: The products marked accordingly  
comply with the requirements of the  
referenced guidelines and standards.

Tuningen, 07.02.2018

Manfred Bäurer  
*Managing Director*









**Wieländer+Schill**

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