



TELWIN®
JOIN THE INNOVATION

TECNHOMIG DUAL SYNERGIC MULTIPROCESS WELDING MACHINES

> WHAT IS WELDING

Welding is a process that allows two or more metals to melt one into the other in a permanent way. Protagonists in this process are: Steel, Stainless Steel, Aluminum, Copper, Bronze, Titanium, metal alloys and galvanized surfaces.

Welding is anywhere it is necessary to guarantee the highest performance, even in the most extreme environmental and use conditions, but it is also an ally capable of adapting to our simplest but no less important needs - as in the world of do-it-yourself - as well as to be flexible to all plant engineering and maintenance needs in all civil and professional fields.

There are various welding processes: the most common and simplest one is Arc Welding with coated electrodes (the so-called MMA - Manual Metal Arc – welding process), to follow is the Continuous Wire Arc Welding process either with gas (GMAW - Gas Metal Arc Welding) or without gas protection (FLUX or Self Shielded Wire) and the Inert Gas Arc Welding with infusible Tungsten electrode (TIG - Tungsten Inert Gas).

Wherever welding is required, Telwin is there, with a range of products which, for extent and typology fears no comparison on the market. Technological products that are functional, reliable and safe, the quality of which is acknowledged by the most important international certifying bodies in the sector.

To any request, Telwin guarantees the best response.



> WHAT DOES MULTIPROCESS MEAN

A “multiprocess” welding machine is a single station capable of satisfying different welding needs.

A multiprocess welding machine guarantees excellent results in MIG-MAG (with/without gas), electrode and TIG welding, by simply using different dedicated accessories. This kind of machine is suitable for those who need to use all the processes during their work and are looking for a reliable and compact product, or for those who are more familiar with one type of welding and want to approach the others as well.



> THE TECHNOMIG DUAL SYNERGIC RANGE

Technomig Dual Synergic: one machine, endless possibilities.

Technomig Dual Synergic is the range of MIG-MAG/FLUX/BRAZING/MMA/TIG DC-Lift inverter multiprocess welding machine 100% made in Telwin that confirms Telwin's high standards of quality and reliability.

The quick SYNERGIC regulation of the welding parameters, thanks to the ONE TOUCH technology, makes these products easy to use. Powerful and versatile, these welding machines represent the perfect solution for a wide range of applications, from maintenance to installation and interventions in body shops.

The compact size and low weight ensure high portability, allowing professional results wherever required.



- Complete with MIG-MAG welding accessories (torch, cable and earth clamp).
- Synergic adjustment of the welding parameters. Preset curves (starting with model 210). Advanced adjustments that can be customized manually.
- ATC (Advanced Thermal Control) for excellent welding on thin surfaces (starting with model 215)
- Made in Italy by Telwin.
- Lightweight and compact with 230V power supply (can be used with residential networks from 3kW, up to model 225)
- Equipped with thermostatic, overvoltage, undervoltage, overcurrent protection; compatible for use with a motor generator (+/- 15%); VRD device in MMA (starting with model 210).

OneTouch: WELDING IS EASY!**Simply adjust the thickness of the material to start welding!**

With One Touch, simply adjust the thickness of the material to start welding!

The synergic welding curves preset allow you to work on various materials and with different wires and gas. The intelligent and automatic control of the arc, instant by instant, guarantees high levels of welding in all working conditions, with different materials and/or gases. You can also manually intervene on the length of the arc to modify the shape of the seam based on your welding style.

For models with LCD screen, you can set the parameters in advanced mode: wire up slope, electronic reactance, burn back time of the wire, post gas, 2/4-time operating selection, spot operation.



Watch the video

**ATC: Advanced Thermal Control****Excellent results on thin material**

The Made in Telwin ATC technology is designed for use in specific sectors where the materials (with thin materials measuring from 0.5-0.8 mm) are extremely sensitive to deformation caused by the temperatures reached during welding operations. The ATC technology makes it easy to achieve excellent standards of welding on thin materials thanks to state-of-the-art control of the arc.

Starting with model 215.



> TECHNOMIG 180 DUAL SYNERGIC

The smallest in the series

Multiprocess inverter welding machine (MIG-MAG/FLUX/BRAZING/MMA and TIG DC-Lift) controlled by a 170A microprocessor. Complete with MIG-MAG torch, cable and earth clamp.

- Welds steel, stainless steel, aluminium, galvanised sheet metal.
- Max. spool 5 kg (Ø 100 and 200 mm).
- One Touch Synergy: easy to use.
- Light and compact, it can be used with 3kW residential meters (power supply 230V – 16A).
- Polarity change for GAS MIG-MAG/BRAZE welding.
- Equipped with thermostatic, overvoltage, undervoltage, overcurrent protection; compatible for use with a motor generator (+/- 15%); arc-force adjustment in MMA.



OPTIONAL

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|--|--|--|--|--|--|---|---|--|
| BOXES MIG READY BOX C 804149 CONSUMABLES BOX 804137 | GAS REGULATOR 722119 QUICK GAS CONNECTOR 804208 | MMA - MIG/MAG TIG MASK STREAM FLAME 804235 | STEEL KIT - GAS - Throwaway Bottle 802147 Refillable Bottle 802148 | ALUMINIUM KIT 802115 STAINLESS STEEL KIT 802037 | MIG-MAG TORCH MT15 4m 742181 NAIL SPOT WELDING KIT 802014 | ELECTRODE HOLDER 16mm ² 3m AX25 804121 TIG TORCH 4m - ST3V 722563 | TROLLEY ARCTIC 803059 | TROLLEY AMERICA 803084 |
|--|--|--|--|--|--|---|---|--|

TECHNICAL DATA

| V _{1PH} | A _{MIN} / A _{MAX} / A _{DC} | A _{MAX} 40°C / EN 60974-1 | A _{60%} 40°C / EN 60974-1 | V _{0 DC} | A _{MAX} | A _{60%} | P _{MAX} | P _{60%} | η | φ | Ø _{MIN} / Ø _{MAX} | Ø _{ST} | Ø _{SS} | Ø _{AL} | Ø _{FX} | Ø _{BZ} | IP | LxWxH | kg |
|------------------|---|------------------------------------|------------------------------------|-------------------|------------------|------------------|------------------|------------------|----|-----|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|-----------------|----|
| V (50-60Hz) | A | A | A | V | A | A | MW | MW | % | mm | mm | mm | mm | mm | mm | mm | | cm | kg |
| 230 1ph | 20 - 170 | 140 @ 20% | 80 | 44 | 22 | 11 | 3,2 | 1,6 | 86 | 0,7 | 1,6 3,2 | 0,6 0,8 | 0,8 | 0,8 1 | 0,8 1,2 | 0,8 | IP23 | 46 x 24 x 36 | 11 |

> TECHNOMIG 210 DUAL SYNERGIC

The most compact multiprocess

Multiprocess inverter welding machine (MIG-MAG/FLUX/BRAZING/MMA and TIG DC-Lift) controlled by a 200A microprocessor. Complete with MIG-MAG torch, cable and earth clamp.

- Welds steel, stainless steel, aluminium, galvanised sheet metal.
- One Touch Synergy: easy to use. 25 preset synergic curves.
- LCD display for immediate and easy reading.
- Max. spool 5 kg (Ø 100 and 200 mm).
- Adjustments: wire up slope, electronic reactance, wire burn back time, post gas; 2/4-time operating selection, spot operation.
- Equipped with thermostatic, overvoltage, undervoltage, overcurrent protection; compatible for use with a motor generator (+/- 15%); VRD device in MMA.



OPTIONAL

| | | | | | | | |
|--|--|---|--|--|---|--|--|
| BOXES MIG READY BOX C 804149 CONSUMABLES BOX 804137  | GAS REGULATOR 722119  QUICK GAS CONNECTOR 804208  | MMA - MIG/MAG TIG MASK STREAM FLAME 804235  | ALUMINIUM KIT 802115  STAINLESS STEEL KIT 802037  | MIG-MAG TORCH MT15 4m 742181  NAIL SPOT WELDING KIT 802014  | ELECTRODE HOLDER 16mm ² 3m AX25 804121  TIG TORCH 4m - ST3V 722563  | TROLLEY ARCTIC 803059  | TROLLEY AMERICA 803084  |
|--|--|---|--|--|---|--|--|

TECHNICAL DATA

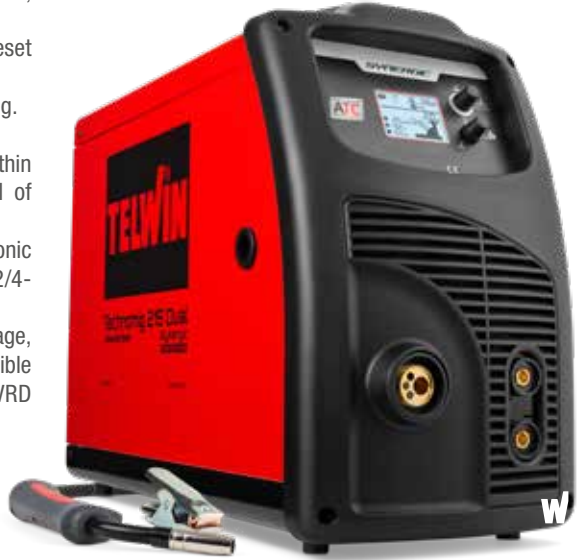
| V _{1PH} | A _{MIN} / A _{MAX} / A _{DC} | A _{MAX} 40°C / EN 60974-1 | A _{60%} 40°C / EN 60974-1 | V _{0 DC} | A _{MAX} | A _{60%} | P _{MAX} | P _{60%} | η | φ | Ø _{MIN} / Ø _{MAX} | Ø _{ST} | Ø _{SS} | Ø _{AL} | Ø _{FX} | Ø _{BZ} | IP | LxWxH | kg |
|------------------|---|------------------------------------|------------------------------------|-------------------|------------------|------------------|------------------|------------------|----|-----|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|-----------------|----|
| V (50-60Hz) | A | A | A | V | A | A | MW | MW | % | mm | mm | mm | mm | mm | mm | mm | | cm | kg |
| 230 1ph | 20 - 200 | 180 @ 20% | 100 | 52 | 32 | 15 | 5 | 2,2 | 85 | 0,7 | 1,6 3,2 | 0,6 1 | 0,8 1 | 0,8 1 | 0,8 1,2 | 0,8 1 | IP23 | 46 x 24 x 36 | 13 |

> TECHNOMIG 215 DUAL SYNERGIC

Even more power and productivity

Multiprocess inverter welding machine (MIG-MAG/FLUX/BRAZING/MMA and TIG DC-Lift) controlled by a 220A microprocessor. Complete with MIG-MAG torch, cable and earth clamp.

- Welds steel, stainless steel, aluminium, galvanised sheet metal
- One Touch Synergy (simple to use). 27 preset synergic curves
- LCD display for immediate and easy reading.
- Max. spool 15 kg (Ø 200 and 300mm)
- ATC technology for excellent welding on thin surfaces thanks to state-of-the-art control of the arc.
- Adjustments: wire up slope, electronic reactance, wire burn back time, post gas; 2/4-time operating selection, spot operation;
- Equipped with thermostatic, overvoltage, undervoltage, overcurrent protection; compatible for use with a motor generator (+/- 15%); VRD device in MMA.



OPTIONAL

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|---|--------------------------------------|---|--------------------------------------|--|---|--|------------------------------------|
| BOXES MIG READY BOX F 804168 | GAS REGULATOR 722119 | MMA - MIG/MAG TIG MASK STREAM FLAME 804235 | ALUMINIUM KIT 802817 | MIG-MAG TORCHES MT15 4m 742181 5m 742182 | TIG TORCH 4m - ST9V 722563 | TROLLEY COSMOPOLITAN 803079 | TROLLEY EUROPA 803073 |
| CONSUMABLES BOX 804137 | | | | | | | |
| | QUICK GAS CONNECTOR 804208 | | STAINLESS STEEL KIT 802037 | ELECTRODE HOLDER 16mm ² 3m AX25 804121 | GLOVES MONTANA 804336 | | |

TECHNICAL DATA

| V _{1PH} | A _{MIN} / A _{MAX} / A _{DC} | A _{MAX} / A _{DC} / A _{DC} / EN 60974-1 | A _{60%} / A _{DC} / A _{DC} / EN 60974-1 | V _{0 DC} | A _{MAX} | A _{60%} | P _{MAX} | P _{60%} | η | φ | φ _{DC} / MIN/MAX | φ _{ST} | φ _{SS} | φ _{AL} | φ _{FX} | φ _{BZ} | IP | LxWxH | kg |
|------------------|---|---|---|-------------------|------------------|------------------|------------------|------------------|----|-----|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|-----------------|----|
| (50-60Hz) | A | A | A | V | A | A | KW | KW | % | mm | mm | mm | mm | mm | mm | mm | | cm | |
| 230 1ph | 20 - 220 | 180 @ 20% | 100 | 78 | 32 | 15 | 5 | 2,2 | 84 | 0,7 | 1,6 3,2 | 0,6 1 | 0,8 1 | 0,8 1 | 0,8 1,2 | 0,8 1 | IP23 | 62 x 26 x 49 | 22 |

> TECHNOMIG 225 DUAL SYNERGIC

Maximum mobility, maximum performance

Multiprocess inverter welding machine (MIG-MAG/FLUX/BRAZING/MMA and TIG DC-Lift) controlled by a 220A microprocessor. Complete with MIG-MAG torch, cable and earth clamp. Model with wheels.

- Welds steel, stainless steel, aluminium, galvanised sheet metal
- One Touch Synergy (simple to use). 27 preset synergic curves
- LCD display for immediate and easy reading
- Max. spool 15 kg (Ø 200 and 300mm)
- ATC technology for excellent welding on thin surfaces thanks to state-of-the-art control of the arc.
- Adjustments: wire up slope, electronic reactance, wire burn back time, post gas; 2/4-time operating selection, spot operation;
- Equipped with thermostatic, overvoltage, undervoltage, overcurrent protection; compatible for use with a motor generator (+/- 15%); VRD device in MMA.



OPTIONAL

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|--|--|---|--|---|---|
| BOXES MIG READY BOX F 804168 CONSUMABLES BOX 804137  | GAS REGULATOR 722119  QUICK GAS CONNECTOR 804208  | MMA - MIG/MAG TIG MASK STREAM FLAME 804235  | ALUMINIUM KIT 802817  STAINLESS STEEL KIT 802037  | MIG-MAG TORCHES MT15 4m 742181 5m 742182  ELECTRODE HOLDER 25mm² 4m AX50 804123  | TIG TORCH 4m - ST26V 742058  GLOVES MONTANA 804336  |
|--|--|---|--|---|---|

TECHNICAL DATA

| V _{I PH} | A _{MIN} / A _{MAX} / A _{DC} | A _{MAX} / A _{DC} / A _{DC} | A _{60%} / A _{DC} / A _{DC} | V ₀ / DC | A _{MAX} | A _{60%} | P _{MAX} | P _{60%} | η | φ | Ø _{DC} / MIN / MAX | Ø _{ST} | Ø _{SS} | Ø _{AL} | Ø _{FX} | Ø _{BZ} | L / LeWeld | Kg |
|-------------------|---|--|--|---------------------|------------------|------------------|------------------|------------------|----|-----|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------------|----|
| V (50-60Hz) | A | EN 60974-1 A | EN 60974-1 A | V | A | A | KW | KW | % | mm | mm | mm | mm | mm | mm | mm | cm | kg |
| 230 1 ph | 20 - 220 | 180 @ 20% | 100 | 78 | 32 | 15 | 5 | 2,2 | 84 | 0,7 | 1,6 3,2 | 0,6 1 | 0,8 1 | 0,8 1 | 0,8 1,2 | 0,8 1 | 79,5 x 37,5 x 73 | 30 |

> TECHNOMIG 260 DUAL SYNERGIC

Even more power and productivity

Multiprocess inverter welding machine (MIG-MAG/FLUX/BRAZING/MMA and TIG DC-Lift) controlled by a 250A microprocessor. Complete with MIG-MAG torch, cable and earth clamp.

- Welds steel, stainless steel, aluminium, galvanised sheet metal
- One Touch Synergy (simple to use). 29 preset synergic curves
- LCD display for immediate and easy reading
- Max. spool 15 kg (Ø 200 and 300mm)
- ATC technology for excellent welding on thin surfaces thanks to state-of-the-art control of the arc.
- Adjustments: wire up slope, electronic reactance, wire burn back time, post gas; 2/4-time operating selection, spot operation.
- Equipped with thermostatic, overvoltage, undervoltage, overcurrent protection; compatible for use with a motor generator (+/- 15%); VRD device in MMA.



OPTIONAL

| CONSUMABLES BOX NT25 804152 | GAS REGULATOR 722119 | MMA - MIG/MAG TIG MASK STREAM FLAME 804235 | ALUMINIUM KIT 802817 | MIG-MAG TORCHES MT15 4m 742184 5m 742185 | ELECTRODE HOLDER 25mm ² 4m AX50 804123 | TROLLEY COSMOPOLITAN 803079 | TROLLEY EUROPA 803073 |
|-----------------------------------|----------------------------------|---|----------------------------------|--|--|-----------------------------------|-----------------------------|
| | | | | | | | |
| | QUICK GAS CONNECTOR 804208 | | STAINLESS STEEL KIT 802037 | | TIG TORCH 4m - ST26V 742058 | | |

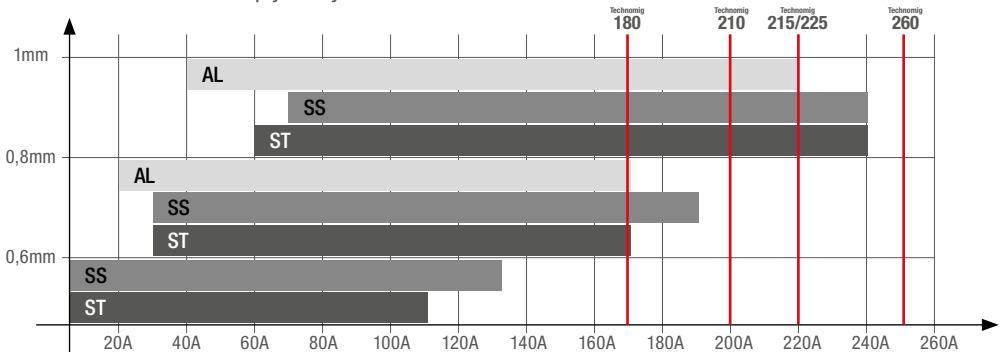
TECHNICAL DATA

| V _{1PH} | A _{MIN} A _{MAX} DC | A _{MAX} AC/DC | A _{60%} AC/DC | V ₀ DC | A _{MAX} | A _{60%} | P _{MAX} | P _{60%} | η | φ | Ø _{DC} MIN/MAX | Ø _{ST} | Ø _{SS} | Ø _{AL} | Ø _{FX} | Ø _{BZ} | IP | LxWxH | kg |
|------------------|--|---------------------------|---------------------------|-------------------|------------------|------------------|------------------|------------------|----|-----|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------|-----------------|----|
| V (50-60Hz) | A | EN 60974-1 A | EN 60974-1 A | V | A | A | kW | kW | % | | mm | mm | mm | mm | mm | mm | | cm | kg |
| 230 1ph | 20 - 250 | 220 @ 20% | 130 | 60 | 39 | 22 | 6,3 | 3,3 | 87 | 0,7 | 1,6 4 | 0,6 1,2 | 0,8 1 | 0,8 1 | 0,8 1,2 | 0,8 1 | IP23 | 62 x 26 x 49 | 22 |

> FAQ

■ WHICH IS THE TECHNOMIG MODEL THAT BEST SUITS MY WIRE WELDING NEEDS?

Here is a table that can help you in your choice:



■ CAN I USE TECHNOMIG WITH A RESIDENTIAL NETWORK?

Most Technomig Dual Synergic models have absorption under 16A and they can therefore be used on 3kW residential networks with a delayed 16A network fuse. The Technomig 260 Dual Synergic model requires a 25A network fuse and therefore it is not suitable for use with residential systems.

■ CAN I USE TECHNOMIG WITH A MOTOR GENERATOR?

Yes, provided the motor generator stabilises and always maintains the power voltage range within an interval of 230V +/-15%. To guarantee this, also during use of the machine at its maximum performance, use of motor generators is usually suggested which can supply power of approx. 50% - 60% higher than the maximum power of the product. Example: if the product consumes at most 4kW, the motor generator should supply maximum power of 6kW.

■ WHEN AND HOW SHOULD I CHANGE POLARITY?

If using a FLUX wire without gas (intended for welding soft wire only), the torch should be connected to the negative and the earth to the positive. Vice versa, for all other filters use gas and assemble the torch on the positive and the earth on the negative.

■ WHAT ADVANCED ADJUSTMENTS CAN I IMPLEMENT ON MY TECHNOMIG?

For models 210 upwards, you can also set the parameters in advanced mode, such as: wire up slope, electronic reactance, burn back time of the wire, post gas; 2/4-time operating selection, spot operation.

■ WHAT SHOULD I DO FOR TIG AND MMA WELDING?

For TIG, the following rules/instructions should be followed:

- Use a ST9V torch (ST26V for mod. 260)
- Set the machine for TIG DC (adjustment on the panel with the selector or display selection).
- Remember the machine will weld in TIG DC (therefore, it is not possible to weld aluminium in TIG, but only steel based metals).
- The torch should be placed in the NEGATIVE pole.
- The earth should be placed in the POSITIVE pole.
- For scratch start, and therefore the part should be gently touched with the electrode and immediately lift the electrode just the few millimetres necessary to trigger the welding arc
- The gas to use is Pure ARGON (no mixture).

For MMA, the following rules/instructions should be followed:

- Use an electrode holder clamp
- Set the machine for MMA (adjustment on the panel with the selector or display selection)
- Connect the electrode holder clamp in the polarity indicated by the electrodes box you intend welding (remember that most rutile electrodes E6013 should be connected to the electrode holder clamp in negative).
- Scratch the electrode to start welding.

■ WHAT IS VRD?



Available in models 210 upwards for MMA welding, VRD (Voltage Reduction Device) is a device that reduces output voltage to a safe level when the welding machine is on, but not in welding conditions. The operator's safety is guaranteed: he can come in contact with the electrode without risks until he starts welding again (e.g mines, shipyards, etc.).

Available in models 210 upwards for MMA welding, VRD (Voltage Reduction Device) is a device that reduces output voltage to a safe level when the welding machine is on, but not in welding conditions. The operator's safety is guaranteed: he can come in contact with the electrode without risks until he starts welding again (e.g mines, shipyards, etc.).

> Discover the telwin offer



With Telwin you have everything you need, from welding masks to gloves, as well as other accessories such as magnetic positioners, wires and electrodes. Visit telwin.com to discover the whole offer!

T E L W I N . C O M



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