



INDUSTRIAL HEAVY DUTY MIG WELDER

**MIG 302i | 402i | 502i**



**VERSATILE  
USER-FRIENDLY  
ENERGY EFFICIENT**

MIG Welder design for extended periods of uninterrupted use in industrial applications.

### Excellent Performance:

MIG 302i/402i/502i are based on inverter IGBT technology that provides reliable equipment with outstanding welding characteristics and easy arc control. The pre-defined parameters with fine adjustment of voltage enables effortless welding making parameter setting extremely easy and user friendly.

### Continuous Work-flow:

The 100% Duty cycle design enables extended periods of welding, significantly enhancing productivity and efficiency. This feature is especially beneficial for professional welders who often face tight deadlines and demanding production targets.

### Simple to use:

The machine's simple control panel and user-friendly settings enables welders of all skill levels to effortlessly operate and deliver superior quality welds. The menu has options for selection of material, wire and gas that helps select optimized parameters for the MIG welding process.

### Program Memory:

The 16 memory sets of welding parameters allows users to store and recall job parameters for key applications.



### Wire Feeder Drive :

The 4-Roll drive wire feeder system for MIG 402i/502i ensures smooth and consistent wire feeding, minimizing wire deformation.

### Energy Efficient:

The inverter based technology with efficient design that allows high energy efficiency and minimal idle power consumption enhances energy savings significantly.

### Multi-process System:

The power source is designed to allow users the flexibility to operate in different welding processes with a few additional accessories. Its optimized design for MIG process allows heavy duty usage in MIG welding in extreme conditions. The equipment is designed to deliver good quality welds with manual metal arc welding as well as lift TIG welding.

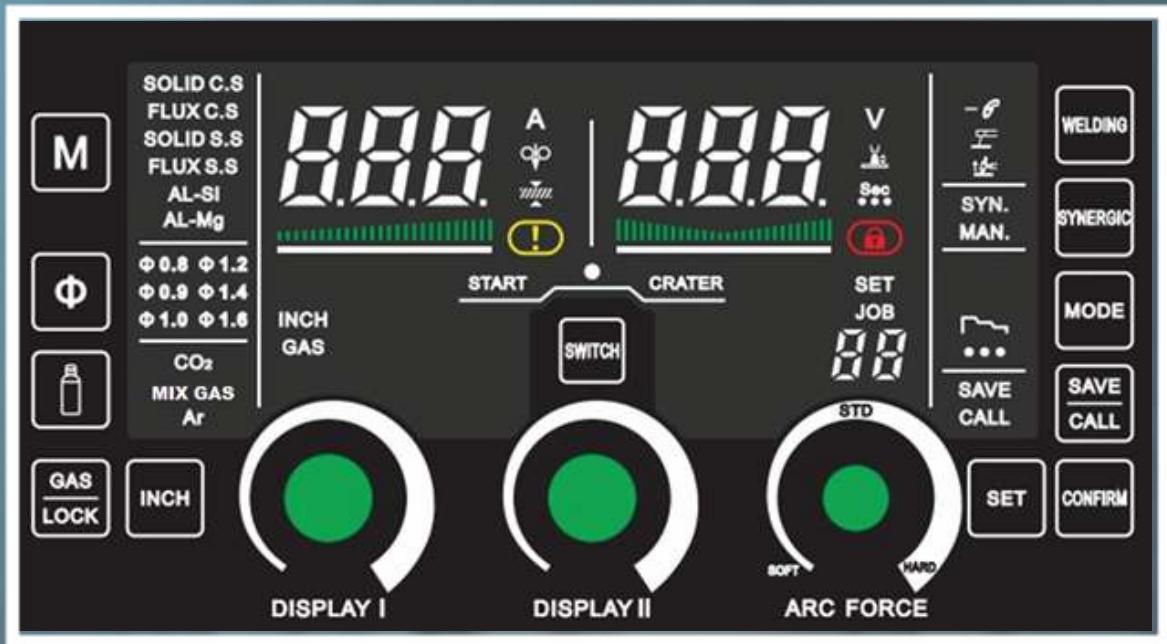
### Flexibility:

The versatility of the MIG 302i/402i/502i power source allows flexibility with welding of various materials and wire types, delivering superior performance and attractive bead appearance with minimal spatter for all joints. Its user-friendly controls make it a valuable tool for welders looking to achieve high-quality results in their welding process.



The power sources deliver exceptional performance in thick plates, particularly in the Spray Transfer Mode. Its high travel speeds and superior penetration when working with mild steel, stainless steel and aluminum help improve productivity.

Additionally, this power source is an appropriate choice for thin sheet welding up to 1.2mm in stainless steel, mild steel, and aluminum. Its precise control offers low heat input to avoid burn-through and reduce distortion. In addition, it has the capability to perform spot welding with adjustable timing, those features making it ideal for use in the furniture industry and automotive body parts.



**Digital Display LED Screen:** Display current, voltage, wire-feed speed, parameter reference number, error code and other relevant information.

**Wire Material Selection:** Different wire types are available for selection, including Solid Carbon Steel, Solid Stainless Steel, Flux-cored Carbon Steel, Flux-cored Stainless Steel, Al-Si Alloy, and Al-Mg Alloy for MIG 402i/MIG 502i. Moreover, Solid Carbon Steel and Solid Stainless Steel wire are available for selection with MIG 302i.

**Wire Diameter Selection:** A wide range of welding wire diameter could be selected from the menu  
 MIG 302i - 0.8, 0.9, 1.0 mm  
 MIG 402i - 0.8, 0.9, 1.0, 1.2 mm  
 MIG 502i - 0.8, 0.9, 1.0, 1.2, 1.4 and 1.6 mm

**Gas Selection:** Choice of CO<sub>2</sub>, Mixed (Argon-CO<sub>2</sub>) Gas and Argon are available for selection.

**Gas Detection:** Gas check option could be used to confirm the flow of shielding gas before starting the welding process.

**Process Selection:** Welding process selection choices include MIG/MAG, MMA and TIG.

**Synergic / Manual Method:** Synergic mode allows system setting of voltage automatically matched with the set current, while also allowing fine voltage adjustment upto ±9.9V.

Manual / Individual mode allows users to set current and voltage independently.

**Arc Dynamics:** The Arc Dynamics function provides the ability to modify the behavior of the arc by adjusting it within a range of -9 to +9. The softest arc is delivered when set value is “-9” and the harshest arc is delivered at set value of “+9”.

**Spot Welding:** The control panel allows setting of spot-welding time in the range of 0.1 s to 10.0 s under spot welding mode.

**Crater Control:** The end current and voltage can be adjusted to facilitate the filling of crater and avoid any welding defects.

**Welding Control:** Choice of Four welding controls option are available eg 2T, 4T, Special 4T and Spot.

# SPECIFICATION.

Power Source	Mig 302i	Mig 402i	Mig 502i
Mains Voltage, V/Ph, Hz	415 (+15%/-20%) / 3, 50/60	415 (+15%/-20%) / 3, 50/60	415 (+15%/-20%) / 3, 50/60
Rated Input Power, KVA	12.5	17.8	25
No Load Voltage, V	68	70	81
Output Current Range, MIG/MMA/TIG, A	MIG 30-300 / MMA&TIG 20-300	MIG 30-400;MMA&TIG 20-400	MIG & MMA 50-500; TIG 20-500
Output Voltage Range, MIG/MMA/TIG, V	15.5 - 29   21 - 32   10.8 - 22	15.5 - 34   21 - 36   10.8 - 26	16.5 - 39   22 - 40   10.8 - 30.0
Permissible Load At 100% Duty Cycle MIG/MMA, A	300	400	500
Maximum Input Power At Idle Mode, W	<30	<30	<30
Power Factor At Maximum Current	0.88	0.91	0.937
Efficiency At Maximum Current, %	90	90	88.5
Insulation Class	H	H	H
Enclosure Class	IP21S	IP21S	IP21S
Dimension (LxWxH), mm	535x245x425	615x290x510	615x290x510
Weight, Kg	23.5	31.5	31.5
Standards Of Conformity	IEC-60974-1	IEC 60974-1	IEC 60974-1
Wire Feeder	MIG 302i WF-2R	MIG 402i/502i WF-4R	MIG 402i/502i WF-4R
Wire Feed Drive	2 Roll	4 Roll	4 Roll
Wire Feeder Speed, m/min	1.5-24 (0.8mm) ; 1.5 -18 (1.0mm)	1.5 – 20.0	1.5 – 20.0
Torch Connection	Euro	Euro	Euro
Wire Dimensions, mm (MS/SS/AL/FCW)	0.8 -1.0(MS/SS)	0.8 -1.2 (MS/SS/AL/FCW)	0.8 -1.6 (MS/SS/AL/FCW)
Weight, Kg	8	10	10

Ordering Information	
Description	Part Number
4650800325	MIG 302i (PS+5M WF)
4650800326	MIG 302i (PS+10M WF)
4650800327	MIG 302i (PS+15M WF)
4650800446	MIG 402i (PS+5M WF)
4650800447	MIG 402i (PS+10M WF)
4650800448	MIG 402i (PS+15M WF)
4650800434	MIG 502i (PS+5M WF)
4650800435	MIG 502i (PS+10M WF)
4650800436	MIG 502i (PS+15M WF)

Power source packages are delivered with Wire-feeder and inter-connection cable(5m/10m/15m), 3m Earth cable with clamp.



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