



# FALCON 505

MULTIPROCESS WELDING EQUIPMENT



**SUMIG**



<b>1920.4037</b>	MIG/MAG and MMA Welding Equipment - 380V/440V
<b>1920.4044</b>	MIG/MAG and MMA Welding Equipment - 380V/440V Refrigerated
<b>1920.4052</b>	MIG/MAG and MMA Welding Equipment - 220V
<b>1920.4053</b>	MIG/MAG and MMA Welding Equipment - 220V Refrigerated







E10/21

## TECHINCAL DATA

- MIG/MAG and MMA Multiprocess Equipment (Coated Electrode);
- Advanced inverter technology (IGBT);
- Digital control system;
- Operating modes: synergistic and non-synergistic;
- Trigger activation modes: 2T/4T;
- Weld bead timing (Spot Welding);
- Adjustment of the inductance to control the spatter rate;
- Arc Force feature in MMA mode;
- Protection system against overheating, overcurrent and overvoltage;
- Compensation against supply voltage fluctuation;
- Error code indicated on the equipment panel;
- Pre and Post Gas Flow.



## MAIN BENEFITS

INVERTER	BURN BACK	4 TRACTION DRIVE ROLLS	SPOT WELDING	CRATER CURRENT	SYNERGISTIC MODE	OPTIMIZED WIND TUNNEL	MODE	DUTY
ENERGY SAVING							2T/4T TRIGGER	MEDIUM HEAVY

## MAIN APPLICATIONS

 TRUCKS	 CHASSIS	 AGRICULTURAL IMPLEMENTS	 CRANES	 BOILERS AND PIPING
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**Power Source** 220V, 380V and 440V (50/60 Hz) - Three phase

	MIG/MAG	MMA
<b>Duty Cycle (40° C)</b>	500 A - 40% (220V) 500 A - 60% (380V/440V) 387 A - 80% (220V) 387 A - 100% (380V/440V)	450 A - 40% (220V) 450 A - 60% (380V/440V) 349 A - 80% (220V) 349 A - 100% (380V/440V)
<b>Max. Power</b>	24.7 kW	21.6 kW
<b>Current Range</b>	20~500 A	20~450 A
<b>Voltage Range</b>	15 a 39 V	15 a 38 V
<b>No-load voltage</b>	70 V	
<b>No-load absorbed power</b>	60 W	
<b>Efficiency</b>	85%	
<b>Power factor</b>	0,93	
<b>Insulation class</b>	F	
<b>IP Rating</b>	IP21S	
<b>MIG/MAG wire gauge</b>	ø 1,00 ~ 1,60mm	
<b>Wire Speed</b>	Up to 20m/min	

**Coated Electrode type (MMA)** E6010, E6013 e E7018

**Electrode Diameter** Até 6,0mm

**Power source weight** 35 kg  
**Feeder weight** 10 kg  
**Cooling Unit weight** 15 kg

**Power source dimensions (L x A x C)** 280 x 480 x 622mm  
**Feeder dimensions (L x A x C)** 200 x 400 x 600mm  
**Cooling unit dimensions (L x A x C)** 280 x 305 x 622mm

**Manufacturing Normative** IEC 60974-1

## INCLUDED ACCESSORIES

Wire Feeder



12.8 Quick Coupling 70mm<sup>2</sup> x 3.00m earth cable (0801.6316)



5m air cooled torch power source extension



0.80 / 1.00mm carbon steel roller (1916.0503)  
1.20 / 1.60mm carbon steel roller (1916.0504)



## NON INCLUDED ACCESSORIES

Argon Regulator (1400.8130)

CO2 Regulator (1400.8132)



MIG/MAG torch SU535 (0500.5085)

MIG/MAG torch SU735 refrigerated (0500.6155)

MIG/MAG torch SU736 Semi refrigerated (0500.6220)



Sumig Cooler unit (1916.0505)



12.80mm 50.0mm<sup>2</sup> Quick Coupling 3.0m Electrode Holder (0801.6266)



Falcon 405 / 505 cart (1916.0500)



1.20 / 1.60mm Knurled roller (1916.0651)



## + FALCON 505 RESOURCES

- Digital voltmeter/ammeter available at the equipment panel;
- Low energy consumption, high power factor and electrical efficiency;
- Robust and versatile equipment, with excellent arc stability and low spatter rate, allowing production and inspection welds;
- Recommended especially for welding thin plates with a thickness of  $\geq 2\text{mm}$  of carbon and stainless steel;
- External wire feeder with 4 rollers traction system;
- Easy-to-understand and easy-to-operate panel, which can be used in synergistic and conventional mode with just a simple touch;
- Possible to weld electrodes up to 6mm in diameter in the MMA process (Coated Electrode);
- It can operate at 220V, 380V and 440V, by manually selecting the power supply voltage;
- Special menu for adjusting the following features: Pre gas flow, Post gas flow, Burnback and manual feed rate;
- Function to control the current and voltage at the end of the weld bead (crater).





[www.sumig.com](http://www.sumig.com)

**SUMIG MATRIZ**

AV. ÂNGELO CORSETTI, 1281  
B. PIONEIRO | CEP 95042-000  
CAXIAS DO SUL - RS  
FONE/FAX: (54) 3220.3900  
VENDAS@SUMIG.COM

**SUMIG SÃO PAULO**

ALAMEDA VÊNUS, 360  
B. AMERICAN PARK EMPRESARIAL NR  
CEP 13347-659 - INDAIATUBA - SP  
FONE: (19) 4062.8900  
FILIALSP@SUMIG.COM

**SUMIG USA**

1504 EAGLE CT. STE 8  
LEWISVILLE, TX, 75057  
PHONE: +1(800) 503 9717  
WWW.SUMIGUSA.COM  
SUMIGUSA@SUMIG.COM

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**SUMIG II**