



PRESENTATION

Ref. 014657

PROGYS 220E FV CEL

*The MMA/stick welding
product dedicated
to professionals & industries !*

The PROGYS 220E FV CEL is a stick (MMA) and TIG DC welding power source. It integrates all the features for a high-end welding product in a compact and robust design.



FIELD OF APPLICATIONS



**PIPE & TUBE
CONSTRUCTION**



CRAFTS



SHIPYARDS



**OFFSHORE
YARDS**



**INDUSTRIAL
FABRICATION**



**STEEL
STRUCTURE**

Use of the welding power source :

The MMA (SMAW) welding process is ideal for onsite jobs. Thanks to this process and with its robust design, the PROGYS 220 E FV CEL is the recommended welding product for outdoor applications. It has been designed for welding in the most demanding positions for professional users.





PRESENTATION

AN UNRIVALLED WELDING QUALITY IN MMA

This welding power source has been designed to weld the most complicated coated electrodes that you can find on the market. With the factory pre-settings that has been set for each electrode, the electrical arc behavior is optimized and can be adjusted if necessary.

+ ELECTRODE TYPES *(up to Ø5mm)*

Basic (7018)

Rutile (6013)

Cellulosic (6010) : *high no-load voltage (U_0)*

[Read the video explanation](#)

Aluminium (4043)

+ DUTY CYCLE *(EN 60974-1 at 40°C)*

230 V	16 A	145 A at 60%
-------	------	--------------

230 V	32 A	175 A at 60%
-------	------	--------------

110 V	32 A	120 A at 60%
-------	------	--------------

+ MMA PULSE FEATURE [Read the video explanation](#)

Welding aids for welding in position
(vertical up, overhead, root pass...)



Welding process



PRESENTATION

WELDING AIDS FOR A SUCCESSFUL RESULT

From arc ignition to arc fade, the PROGYS 220 E FV CEL activates all welding aids to provide incomparable bead quality regardless of the electrode type, conditions or experience of the welder.



+ ANTI-STICKING

Reduces the risks of electrode sticking to the plate. If the welding product senses that the electrode is sticking, the welding current will collapse automatically to easily detach the electrode.



+ HOT START

Generates a peak of current when striking the arc to facilitate the arc ignition and reduce welding defects. This parameter can be adjusted.



+ ARC FORCE

Generates a peak of current while welding to optimise the welding pool. Increasing the Arc Force gives more penetration, ideal for root passes, and avoid the electrode sticking to the workpiece. The PROGYS 220E CEL has, as standard, optimal values according to the nature of the selected electrode (rutile, basic or cellulosic).



Welding aids

TIG DC LIFT FEATURES FOR ADAPTABILITY

+ TIG - LIFT ARC IGNITION

Lift TIG : The arc is generated by contact between the tungsten electrode and the workpiece. This type of arc ignition avoids electromagnetic pollution and is suitable for electrosensitive environments.

+ TIG WELDING AIDS

Pulsed TIG : It gives the possibility to set a cold current that will alternate with the welding current set. It is ideal for thin metal sheets and gives a better penetration.
The arc fades automatically (Auto Down Slope)

+ EXATIG OPTION : TIG DC

Turn your PROGYS 220E FV CEL into a TIG DC with HF arc ignition (HF : High Frequency - Arc ignition without contact) by connecting the EXATIG to it. It does not require to be connected to the mains and is power supplied by the PROGYS 220E FV CEL.





PRESENTATION

REINFORCED SAFETY TO WORK WITH CONFIDENCE

+ VRD (VOLTAGE REDUCTION DEVICE)

While not welding, this device reduces the unloaded open circuit voltage ($< 30V$) in order to increase the safety of the welding operator. Activating the VRD is sometimes mandatory in environments where the risks of explosion are important (mines, ship yards, chemical and petrochemical sites...).

+ PROTEC 400 (P400)

It can withstand voltage variations on the electrical network up to 400V (e.g. lightning, power generator, ballast loads...).

+ INTERNATIONAL PROTECTION MARKING (IP23)

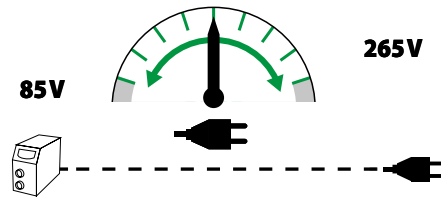
Degree of protection : resist to dust, foreign objects and water.
The PROGYS has a reinforced design for on site jobs.



SAFETY

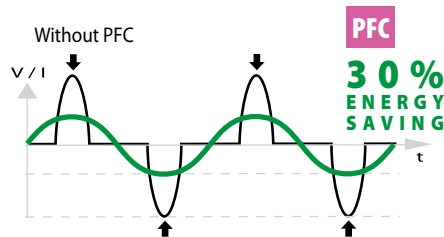
HIGH-TECH POWER SUPPLY SUITABLE TO YOUR ENVIRONMENT

+ FLEXIBLE VOLTAGE



The PROGYS 220E FV CEL works on a 1-phase network even for heavy use and on extension leads onsite (100m). It works from 85V to 265V.

+ POWER FACT CORRECTION (PFC)



PFC technology eliminates power surges and regulates the power supply current. PFC accepts power supply voltage between 185V and 265V, the use of extension leads and use on power generators. It also helps to provide better arc stability during the welding phase for consistent welding beads.



ROCK SOLID DESIGN

FOR ALL JOBS

+ ROBUST

Rubber protection

Anti-dust ventilation corridor to avoid the pollution of the welding power source

+ MOBILE & COMPACT

Easy to carry around with its strong and resistant handle.

Weight : 12 kg

Compact & design













+ MADE IN FRANCE

In our manufacturing plant in Saint-Berthevin, (Mayenne - 53 - France),

our R&D department as well as our production teams design and manufacture

on a daily basis new welding power sources that are always more competitive.

+ TECHNICAL SPECIFICATIONS : *PROGYS performances*

 50/60hz	 TIG / MMA	 I ₂	 Ø 1.6	 Ø 2	 Ø 2.5	 Ø 3.2	 Ø 4	 Ø 5	<div>EN60974-1 (40°C)</div> <div>I_A (60%)</div> <div>X% (I₂ max)</div>	<div>U₀</div>	 35/50	 cm/kg	 Protected & compatible POWER GENERATOR (+/- 15%)
230 V 1~	16 A 32 A	5 - 220 A	62	50	47	45	38	30	145 A 160 A 120 A	22 % 25 % 40 %	77.5 V 69 V	40.5x34x21.5 / 12	10 kW 12.5 kVA
110 V 1~	32 A	5 - 140 A											





www.gys.fr

