



QUBOX



QUBOX PULSE



SYNERGIC MULTIPROCESS INVERTER EQUIPMENT WITH SEPARATE WIRE FEEDER

QUBOX and QUBOX PULSE series multiprocess equipment are characterized by a synergic digital control and inverter technology integrated into a sturdy and functional metallic structure, with a separate wire feeder.

Technologically advanced, robust and easy-to-use, they allow high quality welding in MMA, TIG with "Lift" mode, MIG-MAG and with the QUBOX PULSE models, also in PULSED MIG.

QUBOX and QUBOX PULSED equipment also allow less experienced operators to easily adjust all welding parameters in an intuitive way.

Once the wished program has been selected, the welding control automatically sets the best parameters based on the material type, wire diameter and gas being used, result of CEA's know-how acquired in 70 years' experience. These power sources represent the best choice in all industrial fields for all qualified applications requiring high precision and repeatability of the welding results, such as medium and large fabrication work, shipyards and steel erection. QUBOX W and QUBOX PULSE equipment are fitted with integrated water cooling unit.

FEATURES

- ▶ Multiprocess power sources: MMA - TIG LIFT - MIG/MAG Synergic & Manual and for QUBOX PULSE: PULSED MIG
- ▶ Parameter control directly from the wire feeder
- ▶ Digital control of the welding parameters with synergic curves preset according to used type of material, gas and wire diameter
- ▶ Ability to store personalized welding parameters up to 99 JOBS
- ▶ Smart PROGRAM™ key for quickly selecting any program
- ▶ Feeding mechanism with 4 rolls of large diameter for a precise and constant wire driving
- ▶ Double groove rolls replaceable without any tool
- ▶ “Energy saving” function to operate the power source cooling fan and torch water cooling only when necessary
- ▶ Excellent arc striking always precise and efficient
- ▶ Ability to partially or totally lock the equipment with access key by password
- ▶ Reduced energy consumption
- ▶ Trouble shooting auto-diagnosis feature
- ▶ Great robustness due to solid metallic main structure
- ▶ Control rack protection cover on the wire feeder
- ▶ Initial and final crater control
- ▶ VRD – Voltage Reduction Device
- ▶ Water cooling equipment integrated into the power source (W version)



QF 4 AND QF 4W WIRE FEEDER

The digital control of all parameters, duly protected by a cover, is located directly on the QF4 (air cooled) and QF4W wire feeders (water cooled).

- Professional wire feeding mechanism with 4 rolls of large diameter for a precise and constant wire driving
- Graduated knob to achieve the most correct value of the wire pressure, which remains unchanged also after any arm opening and closing
- Double groove rolls replaceable without any tool
- Lodging for wire spools up to 300 mm diameter maximum

QUBOX equipment in the air cooled version offer the possibility of utilizing up to 50 m long interconnecting cables from the power source to the feeder.



YARD 4

This compact and light wire feeder (11,5 Kg only), studied for 200 mm Ø. wire spools, with flowmeter and complete control of the parameters on its panel, represents the ideal solution for shipyards and offshore welding applications.



VISION.ARC

vision.ARC is the innovative welding arc control developed by CEA granting a short arc extremely stable and precise in spite of any change of the

external conditions. vision.ARC ensures outstanding performances, impossible to be obtained by traditional power sources.



VISION.PULSE (QUBOX PULSE)

Vision.PULSE permits a short arc pulse welding, constantly controlled, by optimizing the results of traditional pulse welding. This enables to reduce the high heat input, typical in

pulse welding, with a consequent reduction in distortions, an improvement in the puddle and considerable increase in welding speed too.



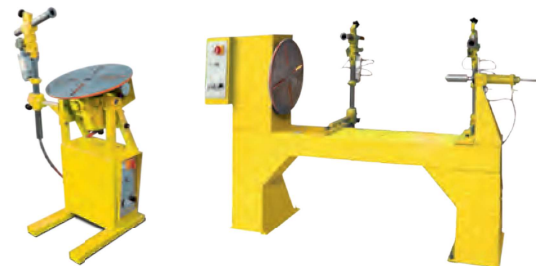
DIGITORCH

The DIGITORCH torches allow you to view the main welding parameters directly on the torch display. Furthermore, depending on the selected operating mode, it is possible to switch from one program to another or increase or decrease the parameters of the synergic curve in use.



SIMPLE AUTOMATION

Standard equipped with analogic-digital I/O, QUBOX power sources can be easily integrated into automated welding equipment without any expensive and sophisticated external interfaces usually necessarily supplied for robotics.



WSC - WIRE START CONTROL

WSC wire start control prevents any possible wire sticking to the workpiece or torch nozzle, by always ensuring a precise and "soft" arc striking.

BURN BACK CONTROL

At the end of each weld, in any condition and with any metal, the digital control ensures a perfect wire cut thus avoiding the formation of the typical "wire globule" by ensuring the subsequent best arc striking.

UP/DOWN

Possibility of working by means of up/down torches to easily adjust main welding parameters at the work place.



QUBOX and QUBOX PULSE models are available in: STANDARD configurations, designed for the most used welding applications, and PREMIUM, equipped with the innovative welding processes vision.COLD, vision.ULTRASPEED and vision.POWER. On this second version is standard the package of special ECP curves dedicated to those who want a system with higher level welding performance and who is not willing to give up the flexibility to weld different materials.

QUBOX PULSE PREMIUM



To weld thin thickness laminations with low heat transfer



For high speed welding



For a more concentrated arc and deeper penetration on medium and thick thickness



ON DEMAND



For a more accurate welding in pipe first root pass.

ACCESSORIES

- Up/Down torches
- WK1 kit of standard wheels/WK2 kit of extra large wheels
- Adjustable torch support
- Wire feeder holding support
- Dust filter
- Remote control RC 178



TECHNICAL DATA		QUBOX			QUBOX PULSE	
		400	400W	500W	405W	505W
Three phase input 50/60 Hz	V ^{+20%} _{-20%}	400	400	400	400	400
Input Power @ I ₂ Max	kVA	22	22,5	29,5	22,5	29,5
Delayed Fuse (I _{eff})	A	32	32	40	32	40
Power Factor / cos φ		0,70/0,99	0,70/0,99	0,72/0,99	0,70/0,99	0,72/0,99
Efficiency Degree		0,88	0,88	0,89	0,88	0,89
Open circuit voltage	V	62	62	62	62	62
Current range	A	10 - 400	10 - 400	10 - 500	10 - 400	10 - 500
Duty cycle at (40°C)	A 100%	350	350	420	350	420
	A 60%	400	400	500	400	500
Wires	∅ mm	0,6 - 1,6	0,6 - 1,6	0,6 - 1,6	0,6 - 1,6	0,6 - 1,6
Standards		EN 60974-1 • EN 60974-5 • EN 60974-10				
Protection Class	IP	23 S	23 S	23 S	23 S	23 S
Insulation Class		H	H	H	H	H
Dimensions	↗ mm	1030	1030	1030	1030	1030
	→ mm	950	950	950	950	950
	↑ mm	515	515	515	515	515
Weight	kg	70	80	86	80	86

Other voltages available on request