DIGITECH VISION PULSE

MIG/MAG PULSED MMA TIG (WIG)

3~ CC CV Inverter SYN DC + - DIGITAL 888 LIFT

SYNERGIC PULSED MULTIPROCESS INVERTER POWER SOURCES.

Latest generation inverter technology with synergic digital control to automatically determine best welding parameters, based on the used type of material, wire diameter and gas, are the main characteristics of these synergic multiprocess pulsed equipment of the DIGITECH VISION PULSE series.

Thanks to their innovative digital control with colour display and the extraordinary VISION.ARC with its special welding processes, DIGITECH VISION PULSE equipment fully meet the needs of combining synergy with the total control of all the welding parameters.

Technologically ahead, robust and easy-to-use, they offer premium welding quality at high speed, in PULSED MIG, DUAL PULSED, MIG/MAG, MMA and TIG with "Lift" arc striking and represent the best solution in any industrial field requiring high precision and repeatability of the achieved results.

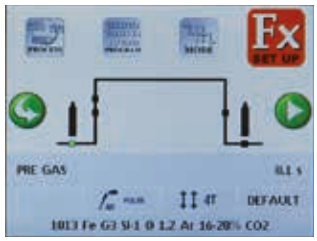
DIGITECH VISION PULSE VISION 3300, 4000 and 5000 are supplied with a separate wire feeder, whilst DIGITECH 3200 VISION PULSE is designed with a built-in feeder.

WHY TO CHOOSE DIGITECH VISION PULSE?

- Multiprocess equipment with exceptional performance in Pulsed MIG, Dual Pulsed, MIG/MAG, MMA e TIG.
- Digital control of the welding parameters with preset synergic curves according to the type of material, gas and wire diameter being used
- VISION.ARC with its excellent welding performances, more wire deposit, higher welding speed and reduced thermal dilatations
- Interface with LCD colour display to keep under control the whole welding process
- Special welding processes on request: vision.COLD, vision.PIPE, vision.POWER and vision.ULTRASPEED
- Welding process always under control by means of digital adjustments of all parameters
- User friendly and easy-to-use selection and recalling of the parameters and welding programs
- Ability to store personalized welding parameters up to 99 JOBS
- Ability of presetting welding parameters
- Excellent arc striking always precise and efficient
- Initial and final crater control
- Ability to partially or totally lock the equipment with access key by password
- Monitoring and repeatability of the welding parameters
- Low energy consumption
- "Energy Saving" function to operate the power source cooling fan and torch water cooling when necessary
- Welding parameter adjustments directly from up/down MIG torch
- Mains voltage fluctuation automatic compensation within +20% -20%
- Data storing and data printing ability (Optional)

DIGITECH VISION PULSE SYNERGIC CONTROL

DIGITECH VISION PULSE synergic digital control, fitted with the innovative colour display with icons and easily-read graphics, allows even less expert welders to very easily adjust all the welding parameters in an intuitive way with extreme simplicity.
After choosing the program type according to used material, wire diameter and gas, the control automatically selects the best welding parameters fruit of CEA's know-how acquired in over 60 years' experience.
At the same type DIGITECH VISION PULSE equipment offer also most expert welders the possibility of fine tuning and customizing the welding process control, thanks to the ability to access clear, simple and complete under menus for the best possible configuration and optimization of the equipment.



VISION.ARC

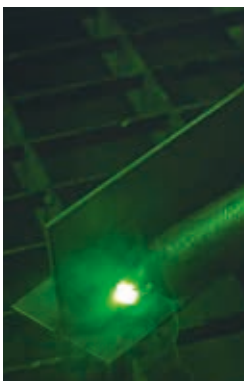
VISION.ARC is the innovative welding arc performed by DIGITECH VISION PULSE's: a powerful microprocessor manages in real time the welding process, by elaborated and adjusting, in a very few microseconds, over 100 welding parameters.

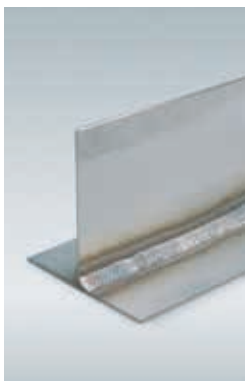
The entire welding process is under total control by keeping the arc extremely stable and precise in spite of any change in external conditions, while also compensating for the torch movement and workpiece irregularity.

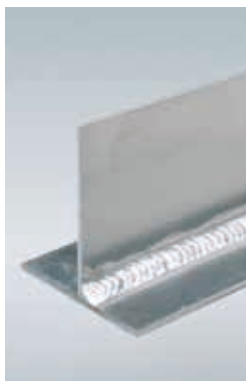
VISION.ARC grants premium performances with an exceptionally high quality impossible to be obtained by traditional power sources, thus resulting into much faster welding speed, higher welding wire deposition and remarkable reduction in spatters and workpiece thermal dilatations.

VISION.PULSE

The new VISION.PULSE optimizes the results of traditional pulsed welding, allowing to obtain the classical "one pulse one droplet" deposition by using an even shorter arc.
Thanks to the very fast dynamic response of the control, VISION.PULSE modifies in real time the parameters, while maintaining a constantly monitored short arc.
This allows to reduce the high heat input, typical in pulse welding, with a consequent reduction in distortion, an improvement in the puddle and considerable increase in welding speed too.







DUAL-PULSED

This Pulsed Mig innovative system couples existing pulse peaks with a second level of variable frequency pulses.
Dual pulse favours a reduction in the heat transfer to the workpiece by minimizing its deformation and produces premium quality aesthetic beads similar to TIG finishing.
Dual Pulsed welding is extremely useful when welding aluminium and stainless steel.

SPECIAL PROCESSES (OPTIONAL)

VISION.ARC available on DIGITECH VISION PULSE equipment is the support basis for MIG/MAG welding software of special processes, i.e. :

vision.PIPE for a more accurate welding in pipe first root pass

vision.ULTRASPEED for high speed welding

vision.COLD to weld thin thickness laminations with low heat transfer

vision.POWER for a more concentrated arc and deeper penetration on medium and thick thickness

- Metallic main structure with shock-proof fibre compound front frames
- Control rack protection cover
- Easy to read and adjust sloping front control panel, highly visible from any direction
- IP 23 S protection class and dust-proof electronic components, thanks to the innovative "Tunnel" fan cooling system, allow operation in the toughest work environments

DIGITECH VISION PULSE 3300, 4000 and 5000 equipment offer the possibility of using interconnecting cables up to 50 m in order to control the parameters directly from the feeder

HT 5 WIRE FEEDER

Also HT 5 duplicates main selection and control keys as given in the main power source. The available 4 independent displays, feeder plus power source, provide the possibility of contemporarily visualizing and monitoring 4 different parameters at the same time.

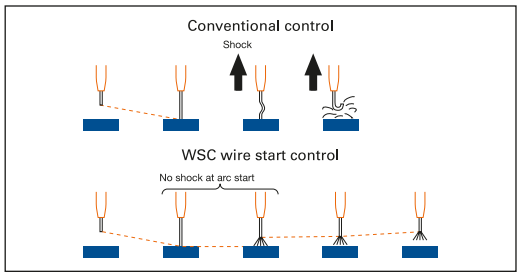
- Professional wire feeding mechanism with 4 rolls of large diameter for a precise and constant wire driving
- Graduated knob to achieve the most correct value of the wire pressure, which remains unchanged also after any arm opening and closing
- Double groove rolls replaceable without any tool
- Lodging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

DOUBLE FEEDER

DIGITECH VISION PULSE's in the version with double feeder represent the ideal solution whenever a greater flexibility is needed in all applications using two diff erent types of material. Thanks to the double feeder it is possible to greatly reduce process change time with a consequent large increase in productivity.

WSC - WIRE START CONTROL

This new arc striking control device prevents any possible wire sticking to the workpiece or torch nozzle, by always ensuring a prompt and precise arc striking.



BURN BACK CONTROL

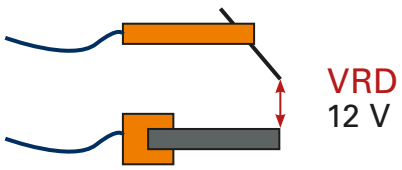
At the end of each weld, in any condition and with any material, the digital control ensures a perfect wire cut, thus avoiding the formation of the typical "wire globule", so ensuring the subsequent best arc restriking.

DIGITORCH

DIGITORCH's allow the operator readily see on the wide torch display and adjust main welding parameters, i.e. welding current, material thickness, wire speed, arc length, electronic inductance and memorized program number. Besides, depending on the selected welding mode, it is possible to switch from one program to the other or increase/decrease the parameters of the synergic curve in use.

VRD - VOLTAGE REDUCTION DEVICE

VRD device reduces open circuit voltage below 12 V and grants additional safety protection for the operator in all highly hazardous environments.

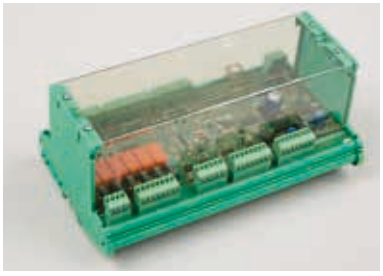


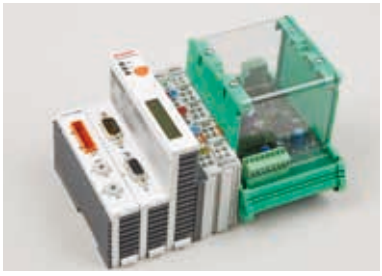
SIMPLE AUTOMATION

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

ROBOT INTERFACE

DIGITECH VISION PULSE power sources can be easily connected to any Robot by means of a CEA Robot interface which can handle several analogic/digital and DeviceNet protocols depending on the features of the Robot to be used.





OPEN TO THE FUTURE

DIGITECH VISION PULSE equipment are systems open to evolving technology: both control firmware and software are designed to be always updatable.

ACCESSORIES

- Up/Down torches
- Water cooling and gas cylinder trolley
- Wire feeder castors kit
- Adjustable torch support
- RC 178 remote control
- Autotransformer
- Water cooling trolley suitable for two gas cylinders and/or autotransformer
- HR 30 water cooling equipment

TECHNICAL DATA		DIGITECH VISION PULSE			
		3200	3300	4000	5000
Three phase input 50/60 Hz	V +20% -20%	400	400	400	400
Input Power @ I_2 Max	kVA	18,8	18,8	25,5	32
Delayed Fuse (I_2 @ 60%)	A	25	25	30	40
Power Factor / cos φ		0,64/0,99	0,64/0,99	0,66/0,99	0,66/0,99
Efficiency Degree		0,83	0,83	0,86	0,89
Open circuit voltage	V	63	63	70	70
Current range	A	10 - 320	10 - 330	10 - 400	10 - 500
Duty cycle at (40°C)	A 100%	240	280	330	380
	A 60%	270	300	370	460
	A X%	320 (40%)	330 (40%)	400 (50%)	500 (50%)
Wires	Ø mm	0,6 - 1,2	0,6 - 1,2	0,6 - 1,6	0,6 - 1,6
Standards		EN 60974-1 • EN 60974-10			
		S			
Protection Class	IP	23 S	23 S	23 S	23 S
Insulation Class		H	H	H	H
Dimensions	↗ mm	660	660	660	660
	→ mm	290	290	290	290
	↑ mm	515	515	515	515
Weight	kg	41	35	40	44

Other voltages available on request

These power sources are built for industrial environment use. EMC (CISPR 11): class A

ISO 9001: 2008

Technical features might change without notice