WELD THE WORLD

Power Pulse 322T-402T-502T
Cruiser 322T-402T-502T
Synergic

ENG

The Power Source: Cruiser 322T- 402T-502T

TIG DC - Modular Multifunction

MMA

The Cruiser 322T-402T-502T allows for the setting of different coated electrodes´ types: CELLULOSIC - BASIC - RUTILE - CrNi- ALUMINIUM

TIG DC

Weco have developed new innovative TIG functions in order to find an effective solution to any application, which will make the impossible become possible!

GOUGING/ARC AIR

(only 402T - 502T)

The Arc Air process provides high quality gauging with up to 6mm (Cruiser 402T) and 8mm (Cruiser 50T) carbon electrode.

The Power Source: Cruiser 322T- 402T - 502T

Technical Data

The **Cruiser 322T - 402T - 502T** are industrial Three Phase inverter power sources for TIG AC and DC welding.
TIG AC functions are ideal for aluminum, magnesium and related alloys welding, while mild steel, stainless steel and copper can be easily welded in TIG DC.
The **Cruiser 322T - 402T - 502T** are specifically designed for high definition construction, petrol/chemical plants, food& beverage industry and shipyards.

	Cruiser 402T			Cruiser 502T					
	3x400Vac ± 15% @ 50-60Hz			3x400Vac ± 15% @ 50-60Hz					
	32A@			40A@					
	TIG - WIG	MMA		TIG - WIG			MMA		
% 40°C	100%	100%		50%	60%	100%	50%	60%	100%
I2	400A	400A		500A	460A	400A	500A	450A	400A
I2	5A - 400A	10A - 400A		5A - 500A			10A - 500A		
U0	9-81V			9-81V					
P1 MAX	18,4kVA – 16,8kW			25,5kVA - 23,4kW					
IP	23			23					
	690 x 290 x 450mm			690 x 290 x 450mm					
	55,2Kg(Power Source)			55,2Kg(Power Source)					

	Cruiser 322T					
	3x400Vac ± 15% @ 50-60Hz					
	25A@					
	TIG - WIG			MMA		
% 40°C	-	60%	100%	-	60%	100%
I2	-	320A	260A	-	300A	250A
I2	5A - 320A			10A - 300A		
U0	11/74V			11/74V		
P1 MAX	14,3kVA - 11,0kW					
IP	23					
	690 x 290 x 450mm					
	45,0Kg (Power Source)					

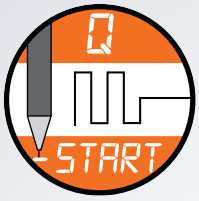
Lateral ventilation

The advanced ventilation system allows an optimal Duty Cycle:
322T: 250Ampere at 100% (40%C).
402T-502T: 400Ampere 100% at 40°C.

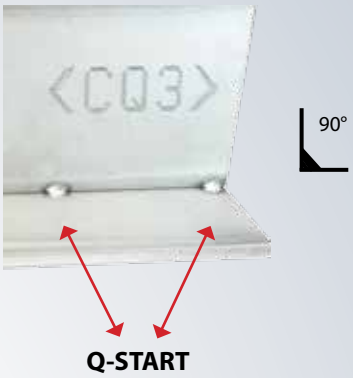
A better cooling of the inner components increase the generator's reliability. All of the electronic components are placed outside the airflow, this make the generator also suitable for working in particularly dusty conditions.

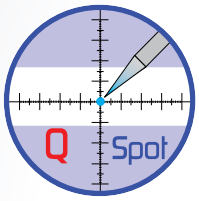
The Power Source: Cruiser 322T-402T-502T

Professional TIG/MMA Power Source



The **Q START** (Quick start) function facilitates joining of the parts in the initial stage of the welding process. On activating this function the machine automatically switches to Synergic pulsed mode for a preset time. The resulting pulses create movement of the molten metal on the two sheet metal edges thereby accelerating formation of the join.
This function is invaluable in the case of seams with slight openings or with irregular preparation. The duration of the series of pulses can be adjusted, (from 0.1 to 60 second) depending on the thickness and shape of the sheet to be welded.





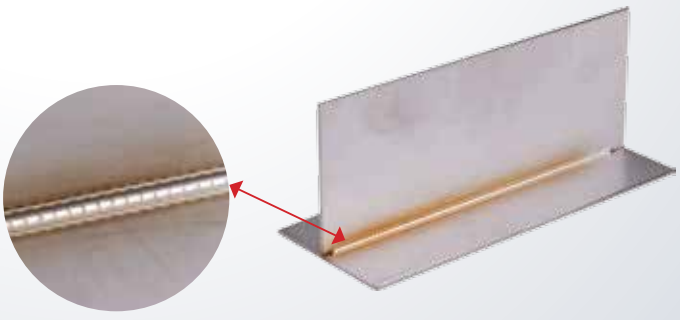
The **Q-Spot** (Quick Spot) function makes it possible to minimise tacking times for light gauge sheet metal. The operator conveniently places the tungsten electrode on the fixing point, thereby obtaining perfect control of the position of the join. Once the electrode has been lifted the machine emits a very high intensity welding current pulse with a very short preset time (from 0.01 Sec to 10 Sec). The pulse time varies depending on the type of sheet metal to be joined. In this way the welded point closes instantly with
minimum heat transfer, leaving the metal white, clean and almost cold.

Pipe butt weld
Ø 31,75 x 2 mm.

Corner spot welding
thichness 0,6 mm.

90°

The **MULTITACK** system makes it possible to reduce heat output while joining two light gauge parts. The series of arc strikes at short time intervals allows the material to cool during the pause between one strike and the next and thus minimize its deformation. The facility to adjust the frequency of the series of arc strikes in the time unit makes it possible to adapt the electric arc to the welding speed and the joint geometry.



The Power Source: Cruiser 322T-402T-502T

Professional TIG/MMA Power Source

The **DYNAMIC ARC** function makes it possible to keep the product of Voltage x Current constant. The power source increases the welding current as the arc voltage decreases and reduces the welding current if the arc voltage increases. The DynARC value can be adjusted from a minimum of 1 Ampere to a maximum of 50 Ampere at each 1 Volt variation, whether positive or negative.
Welding benefits of the DynARC function:
Faster welding - Less plastic deformation of the welded part. Increased vertex angle penetration - Heat output concentrated exclusively on the weld and not on the surrounding area - Less oxidation of the part and hence reduced post-welding reworking costs - Improved control of the first root pass (helpful for plumbers and plant engineers) - Reduced risk of the electrode sticking when it touches the weld puddle - Facility to work with the electrode very close to the weld puddle in order to concentrate the arc.

Dynamic Arc TIG welding

Standard TIG welding

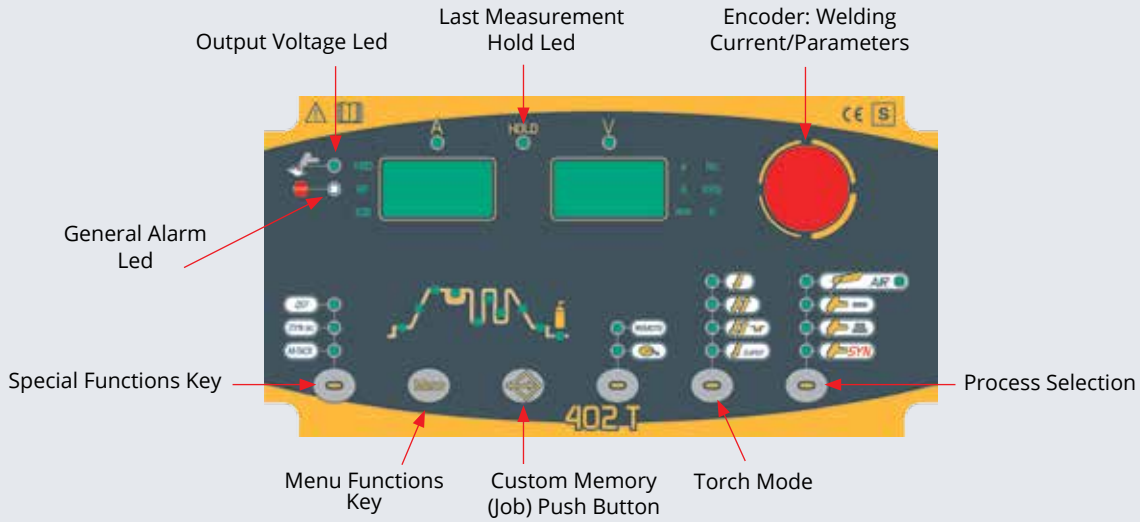
The pulse TIG with frequency until 2500Hz allows to weld very thin materials with easy arc control and very low heat input on workpiece.

Pre-set balanced parameters, stored in the Synergic Pulse TIG DC SYN curve, simplify Pulsed welding by adjusting only welding current.

Power Pulse 322T-402T-502T

MIG/MAG PULSE/DOUBLE PULSE/SYNERGIC - TIG DC HF - MMA - ARC AIR

Front Panel Power Source



Power Pulse 322T - 402T - 502T

Technical Data

The **Power Pulse 322T - 402T - 502T** are industrial 3 Phase Inverter Power Sources with extremely high duty cycle, fitted with separated wire feeders for MIG MAG SYN and MIG MAG PULSE and DOUBLE PULSE. A wide range of MIG-MAG synergic programs facilitate the selection of precise welding parameters using any welding wires.
High performances are guaranteed by MIG MAG functions, HSL, Power Focus and Power Root.
MMA, TIG DC HF and ARC AIR (only 402T - 502T) processes are also available.

	Power Pulse 322T						Power Pulse 402T						Power Pulse 502T								
	3x400Vac ± 15% @ 50-60Hz						3x400Vac ± 15% @ 50-60Hz						3x400Vac ± 15% @ 50-60Hz								
	25A@						32A@						40A@								
	MIG-MAG		TIG-WIG		MMA		MIG-MAG		TIG-WIG		MMA		MIG-MAG			TIG-WIG			MMA		
$\%_{40°C}$	60%	100%	60%	100%	60%	100%	100%						50%	60%	100%	50%	60%	100%	50%	60%	100%
I_2	320A	260A	320A	260A	300A	250A	400A						500A	450A	400A	500A	460A	400A	500A	450A	400A
I_2	20A - 320A		5A - 320A		10A - 300A		20A - 400A		5A - 400A		10A - 400A		20A - 500A			5A - 500A			10A - 500A		
U_0	10/73V						9-81V						9/81V								
$P_{1\,MAX}$	15,2kVA – 11,6kW						18,4kVA – 16,8kW						25,5kVA - 23,4kW								
IP	23						23						23								
	1160 x 670 x 1530mm (H_2O)						1160 x 670 x 1530mm (H_2O)						1160 x 670 x 1530mm (H_2O)								
	144Kg (H_2O)						153,4Kg (H_2O)						153,4Kg (H_2O)								

TECHNOLOGY

W.ECO TECHNOLOGY INSIDE

HAC HYBRID ARC CONTROL

PROCESSES


PULSE


MIG MAG


TIG DC HF


MMA


ARC AIR

SPECIAL FUNCTIONS MIG MAG

PowerFocus

HSL HIGH SPEED LINE

POWER ROOT

SPECIAL FUNCTIONS TIG DC HF

MATERIALS


Aluminium


Mild steel


Stainless steel


Copper

INDUSTRY


Industry


Shipyard

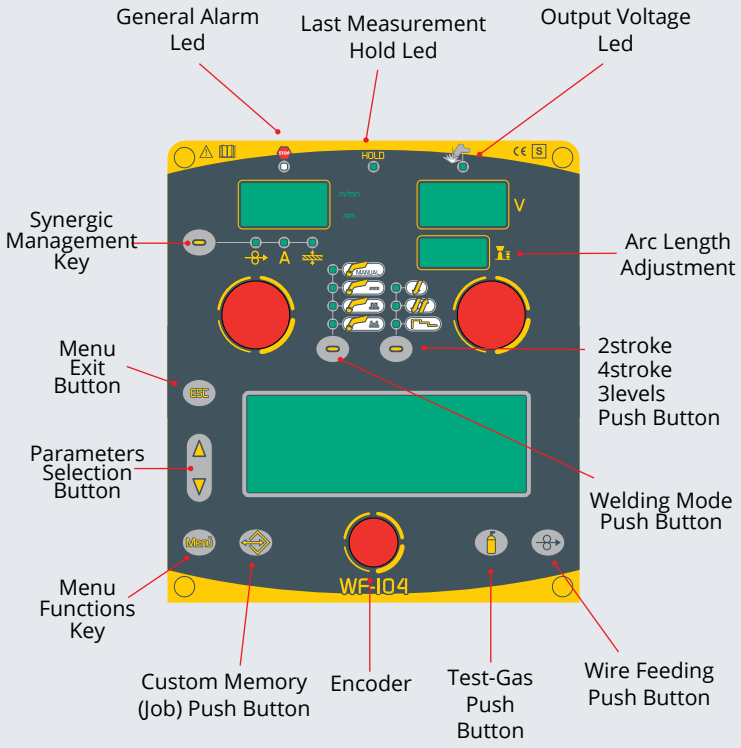

Pipe welding


Heavy Industry

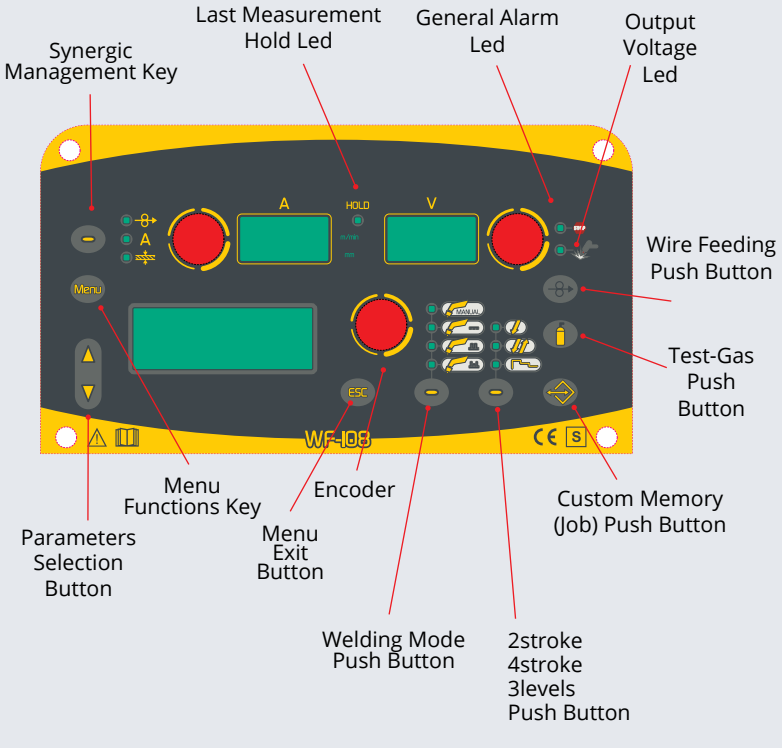
WF104 - WF108

Wire Feeder for Power Pulse 322T - 402T - 502T

Front Panel WF104



Front Panel WF108



WF104 - WF108
Technical Data

WELD THE WORLD

	WF104
	42VDC
P_{MAX}	120W
r.p.m.	270
	1,5 - 24,0m/min
	n°4 (ø37mm - ø19mm) Fe 0,6 - 1,6mm Al 0,8 - 3,2mm FCW 1,0 - 3,2mm
	200mm (5Kg) - 300mm (15 Kg)
IP	23
	670x 245 x 470mm
	23,8Kg

	WF108
	42VDC
P_{MAX}	120W
r.p.m.	270
	1,5 - 24,0m/min
	n°4 (ø37mm - ø19mm) Fe 0,6 - 1,6mm Al 0,8 - 3,2mm FCW 1,0 - 3,2mm
	200mm (5Kg) - 300mm (15 Kg)
IP	23
	680 x 280 x 380mm
	15,8Kg

Power Pulse 322T-402T-502T
Plus and Accessories

PLUS

STRUCTURAL STRENGTH

The structural strenght of the Power Pulse 322T-402T- 502T is very robust in any working environment.

ROBUST WHEELS

The robust wheels of the Power Pulse 322T-402T-502T allows smooth movement of the power source.

EASY CARRIAGE

The Power Pulse 322 - 402 - 502 can be easily moved around any workplace thanks to our robust trolley.

ACCESSORI

KIT PUSH PULL

UPGRADING SOFTWARE

DIGIMANAGER TORCH

RC 08 REMOTE CONTROL

Power Pulse 322T-402T-502T

Special Functions

W.ECO Technology Inside
Lower harmonic current emissions

W.ECO technology according to EN-60974-10, reduces harmonic current emissions.

HAC Hybrid Arc Control
Soft Arc, Low Spattering
Better welds, Money Savings

WECO unique HAC (Hybrid Arc Control) supplies a soft and very stable MIG-MAG welding arc with excellent weld bead quality and minimal spatter in any working conditions.

1 - Higher execution speed
The high dynamics applied to the pulsation of HS Pulse arc gives an extremely and focused arc that increases the fluidity and pression of transfer as well as the wettability of joints.
This allows the operator (or automatism) to proceed much faster with the torch offering up to 35% in time saving.

2 - Higher deposition rate
The high dynamics applied to the pulse of Pulse HS arc allows for an increase in wire's speed whilst keeping same current value when welding in Standard Pulse. The increase in the quantity of wire in to the pool increases consequently the weight of deposit in the unit of time (Kg/h).

3 - Lower heat input and less plastic deformation
In Pulse HS mode the heat input is much lower (35%) than with Standard Pulse.

4 - Better mechanical properties
From our tests carried out we established that tensile strengths values in the Pure Deposit and Heat Affected Zone (HAZ) are much higher in Standard Pulse. This means that the higher heat input increased considerably the tensile strengths. In HS Pulse, hardness and tensile strengths are in line with the class which the base metal belongs to, therefore the heat input has no influence in the welded material.

5 - Higher penetration, offers lower risk of lack of fusion
Penetration obtained in HS Pulse (P2) is considerably higher compared to that of Standard Pulse (P1).
Moreover the weld face is smoother thanks to the excellent joints' wettability.

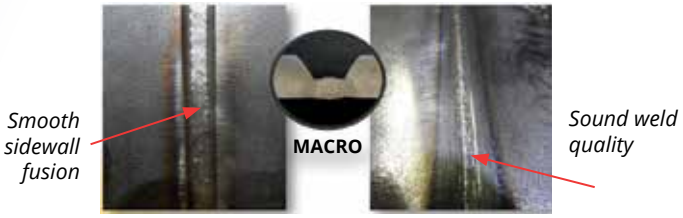
6 - Lower production costs and depreciation
The higher execution speed combined with the higher deposition rates reduces remarkably both times and working costs. Less defects on the material and almost no need of reworking allow a always better amortization.

Power Pulse 322T-402T-502T
Special Functions

The **Power Root function** has been developed for improving and simplifying the root pass welding on seams. The Power Root Arc is perfectly suited for the joining of weld seams which have significant gap and irregular preparation. The arc remains highly stable on several different applications and allows optimal control of the welding puddle, especially in the vertical down position.
Power Root results are extremely easy to adjust, therefore making it easy for welders without the a great deal of experience on these types of seams.

Gap bridging

The cold droplet transfer provides process stable welding even with wide gaps.
The modelability is significant improved. The weld puddle is smooth, combined with a high viscousity.

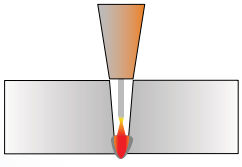


V-groove / pipe welds

The optimized short arc cycle guarantees a high arc pressure – even in constrained positions.
No matter if vertical down or overhaed welding, the root pass quality will be assured. Root pass welding with up to 4 times higher welding speed compared to vertical up.

The difference between Standard Mig Mag welding and Power Focus
The difference between Standard Mig Mag welding and Power Focus is to be found on the concentration and precision of the arc.
The concentration on the Power Focus mode allows to focalize the high arc temperature precisely on the middle of the deposition, avoiding overheating on theweld edges.

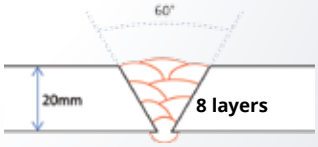
Power Focus Arc Specifications



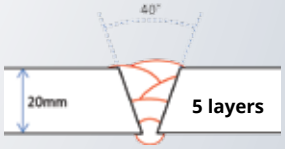
On the butt welding applications the Power Focus Arc stays concentrated in the exact middle of the weld seam, so that full penetration is achieved. In this way, it is possible to work on very narrow weld seams, which demands less mechanical preparation and of course, also less filling passes.

Difference joint geometry

Joint Geometry with STANDARD ARC



Joint Geometry with POWER FOCUS



Until 40% less volume to fill!

Power Focus provides a stable arc even with stick-out very long (50mm)

Power Pulse 322T-402T-502T

Twin feeder - Air Cooled

Air Cooled

Twin Feeder

A solid industrial activity, where the production is based on substantial investments for the supporting of research, projection and continuous testing.

Since 1997 Weco has been producing and selling welding machines
Both registered office and production plant are based on the north east of Italy. Our offices, technical/project department, production and warehouse are able to serve both our national and international sales net. A wide range of welding machines together with a huge stock, allow us to encounter and fully satisfy our customers´ requests in short time.
A dynamic management supported by solid experience on the main sales´ arguments and a deep knowledge on the application issues, allow this company to be ahead in the welding sector.
WECO means better solution for improving the production, optimizing the intervention time, minimizing the processes´ costs, with the highest perform-standards granted.

WELD THE WORLD

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Dealer

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