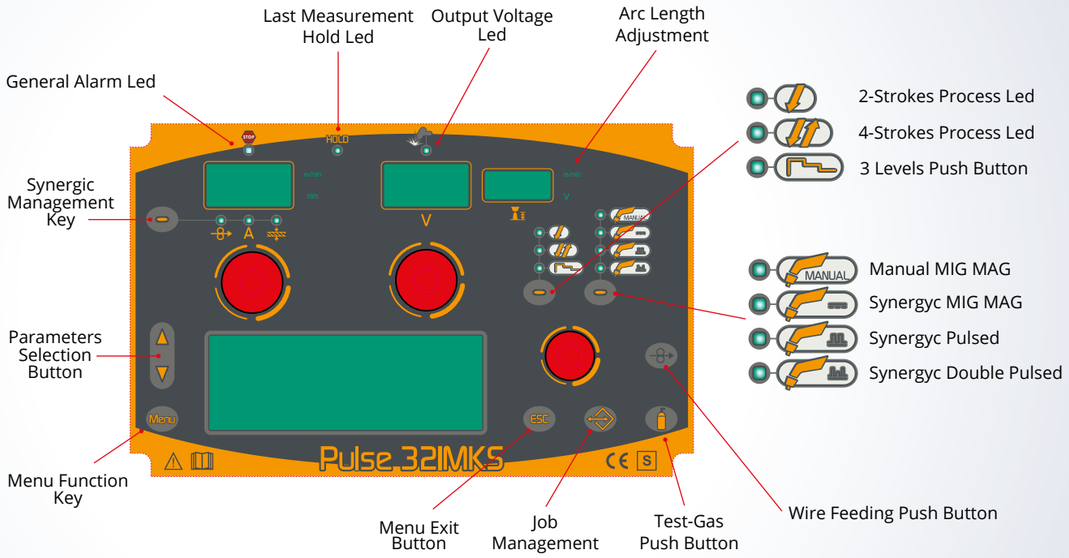
WELD THE WORLD

Pioneer Pulse 321MKS
321MSR

ENG

Pioneer Pulse 321MKS
MIG MAG Pulse/Double Pulse/Synergic

Front Panel Power Source MKS



Pioneer Pulse 321MKS
Technical Data

WELD THE WORLD

Pioneer Pulse 321MKS is an industrial 3 Phase Inverter Power Source (320A 45% at 40°C)MIG-MAG available modes are: Manual, Synergic, Pulse Synergic and Double Pulse Synergic.
Pulse Synergic and **Double Pulse Synergic** modes guarantee excellent bead appearance wthout spatter and deformations of aluminum, stainless steel and mild steel welding, Inconel, CuSi3, CuAl8 and flux cored wires.
High perfomance are guaranteed by the advanced functions MIG MAG , HSL, POWER FOCUS and POWER ROOT.

Pioneer Pulse 321MKS			
	3x400Vac ± 15% @ 50-60Hz		
	25A@		
	MIG/MAG		
% 40°C	45%	60%	100%
I_2	320A	280A	230A
I_2	20A – 320A		
U_0	11/71V		
$P_{1\,MAX}$	14,6kVA – 10,9kW		
IP	23		
	1110 x 550 x 805mm		
	121,6Kg (H_2O)		

TECHNOLOGY

POWER INVERTER INSIDE

HAC HYBRID ARC CONTROL

PROCESSES

MIG MAG

PULSE - DOUBLE PULSE

SPECIAL FUNCTIONS

P.F Power Focus

HSL HIGH SPEED LINE

POWER ROOT

MATERIALS

Aluminium

Mild steel

Stainless steel

INDUSTRY

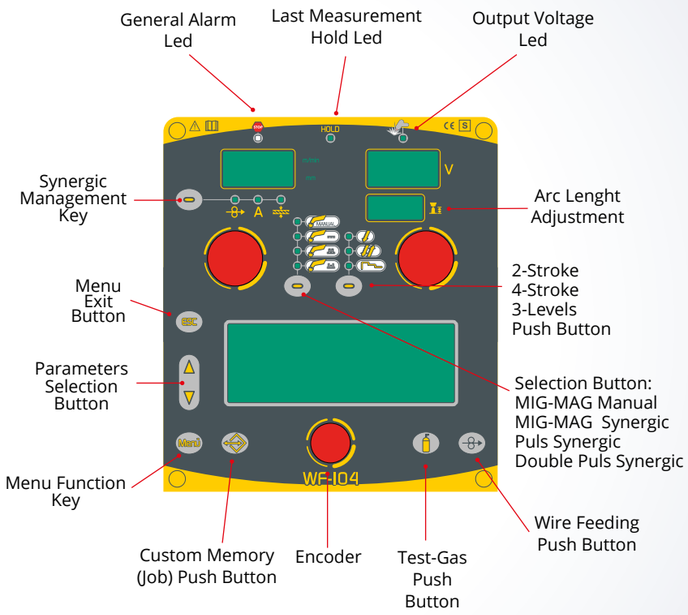
Maintenance

Pipe welding

Industry

Pioneer Pulse 321MSR
MIG MAG Pulse/Double Pulse/Synergic

Front Panel
WF 104



Pioneer Pulse 321MSR
Technical Data

WELD THE WORLD

Pioneer Pulse 321MSR is an industrial 3 Phase Inverter Power Source (320A 45% at 40°C) with separated wire feeder. MIG-MAG available modes are: Manual, Synergic, Pulse Synergic and Double Pulse Synergic.
Pulse Synergic and **Double Pulse Synergic** modes guarantee excellent bead appearance wthout spatter and deformations of aluminum, stainless steel and mild steel welding, and flux cored wires.
High perfomance are guaranteed by the advanced functions MIG MAG , HSL, POWER FOCUS and POWER ROOT.

Pioneer Pulse 321MSR			
	3x400Vac ± 15% @ 50-60Hz		
	25A@		
	MIG/MAG		
$\%_{40°C}$	45%	60%	100%
I_2	320A	280A	230A
I_2	20A – 320A		
U_0	11/71V		
$P_{1\,MAX}$	14,6kVA – 10,9kW		
IP	23 S		
	1110 x 550 x 1400mm		
	121,6Kg (H_2O)		

TECHNOLOGY

PROCESSES

MIG MAG

PULSE - DOUBLE PULSE

SPECIAL FUNCTIONS

MATERIALS


Aluminium


Mild steel


Stainless steel

INDUSTRY


Maintenance

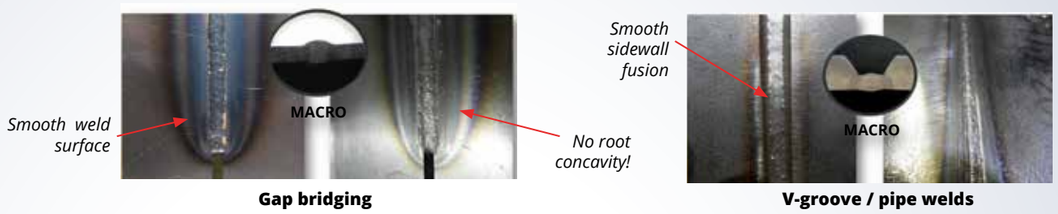

Pipe welding


Industry


Shipyard

Pioneer Pulse 321MKS - MSR
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 wich 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 a great deal of experience on these types of seams.



Gap bridging | **V-groove / pipe welds**

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.

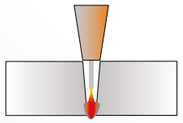
4 - Better mechanical properties
From our tests carried out we established that tensile strengths values in the Pure Deposit and Heat Affected Zone (HAZ) are much higher in Standard Pulse. This means that the higher heat input increased considerably the tensile strengths. In HS Pulse, hardness and tensile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

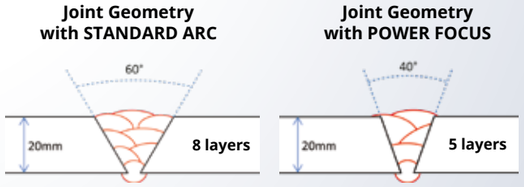
The difference between Standard Mig Mag welding and Power Focus
The difference between Standard Mig Mag welding and Power Focus is to be found on the concentration and precision of the arc.
The concentration on the Power Focus mode allows to focalize the high arc temperature precisely on the middle of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



Until 40% less volume to fill!

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

Pioneer Pulse 321MSR
Plus and Accessories

WELD THE WORLD

PLUS

STRUCTURAL STRENGTH

The structural strenght of the Pioneer Pulse 321MKS-MSR is very robust in any working environment.

ROBUST WHEELS

The robust wheels of the Pioneer Pulse 321MKS-MSR allows smooth movement of the power source.

EASY CLEANING

The cleaning of the Pioneer Pulse 321MKS-MSR could not be easier which saves time and money.

ACCESSORIES

KIT PUSH PULL

SOFTWARE UPGRADE OF THE WHOLE MACHINE

MIG DIGIMANAGER TORCH

REMOTE CONTROL

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

WECO srl
Corso Noblesville n.8,
35013, Cittadella, (Padova) Italy
+39 049 7301120
www.weco.it

Dealer

06/2016