



STEL

WELDING DIVISION

COMPLETE INVERTER MIG-MAG RANGE


Italian creations
the only way to forward



PRODOTTO IN ITALIA



 **STEL**
WELDING DIVISION



When **tradition** and **innovation** are welded together.

In 1979 in Castegnero, few kilometers from Vicenza, Stel was established. In a few years it was possible to transform a family company into a solid industrial reality, able to combine Italian tradition with technological innovation.

Even today the Barocco family continues to run a company technologically and logistically advanced that has been able to get relevant market share of the production of Inverter Welders and Plasma cutting machines.

A lean and dynamic reality that delivers know-how, skills and synergies for a result that combines high technology with obsessive attention to details. This way of work allows today to create solid, concrete products both for materials and solutions.

Today Stel is the change, the answer to the needs of a market in continuous evolution. Today Stel is the answer, for flexibility and adaptability.

Today means already tomorrow.



40 years of experience make you feel great

When you grow up and you reach professional maturity, increase your awareness of values on which you have built a company. These are today more than ever, the values for tomorrow's success.

And we are talking about:

CUSTOMER RESPECT

Respecting the agreements is a value beyond the common interest. It is the capacity to share a goal by increasing in an exponential manner the quality of results. Any contract or agreement is an absolute guarantee.

ENVIRONMENTAL RESPECT

Increasing the technological level means lowering the environmental impact to a minimum for the production of all the components. It is a challenge that does not reward in economic terms but rewards for the quality of ours and children future.

COMPLIANCE WITH REGULATIONS

Stel follows strict quality standards and compliance with regulations, in order to guarantee security during processes and procedures, from incoming materials quality, design, development, production, storage, handling and distribution of products. Our production is approved by CSA International and our Technical Office is ISO / IEC 17025: 2005 certified.

INTERNATIONAL MARKET

Technological development and technological knowledge are not the same in every country. There are developed countries with advanced technology and developing countries with outdated technology. The commercial involvement and the information's exchange allowed us to grow and respond to diversified needs.





ST-ARCTM

ST-ARCTM IS INTELLIGENT CONTROL OF THE SHORT ARC PROCESS, IN CHARGE OF AUTOMATICALLY MANAGE ALL VARIATIONS DURING THE WELDING PROCESS.

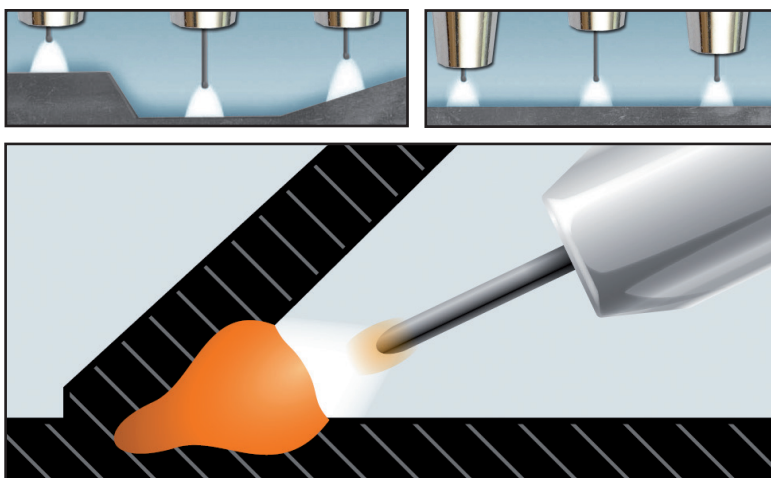
__The result is a short and concentrated arc, stable at 100%, colder with lower heat input and less deformation. Spatters free and reduction of post treatments. ST-ARCTM is a function standard of MIG / MAG STEL welders.

ST-ARC MIG/MAG RANGE

SELF-COMPENSATION:

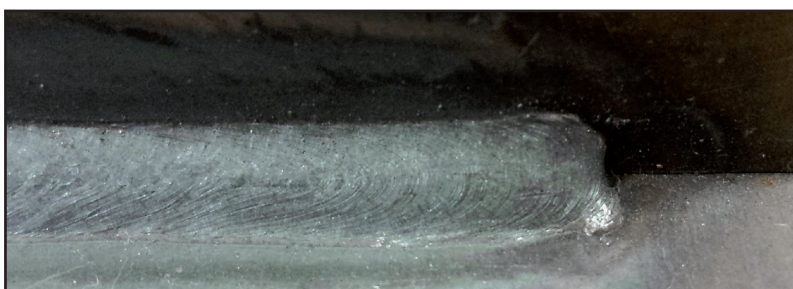
Automatically compensate for any change in conditions of welding caused by irregularities of the working piece or operator's hand movements.

Ideal in welding with deep angles.

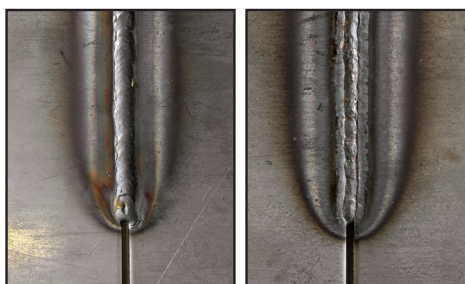


START CONTROL:

The wire approach speed and the welding dynamic are synergic ensuring very few sprays at the start with each material.



FE 3mm



↑ 5mm ↑

VERTICAL POSITION:

In a vertical UP position allows welding of thin material with separation up to 5mm gap.



INCONEL[®]

INCONEL[®] REFERS TO THE FAMILY OF SUPERLEGATIONS AUSTENITHIC STRUCTURE BASED ON NICHEL-CHROME.

OTHERS COMMERCIAL NAMES USED TO INDICATE THIS ALLOY ARE CHRONIN, ALTEMP, NICKELVAC AND Nicrofer. INCONEL[®] IS ONE ALLOY, PRINCIPALLY BASED ON NICKEL (48% -72%) AND CHROME (14% -29%).

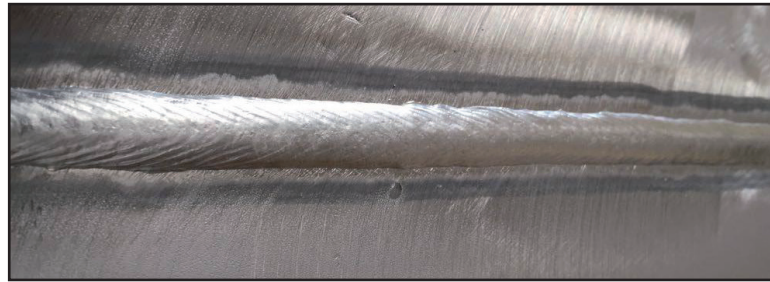
— It presents an excellent resistance to oxidation at high temperatures and corrosion; due to these characteristics, it is used in gas turbine parts, in the oil sector (for example for the internal of pipes), in Toxic-harmful industrial waste RSU/ toxins incinerators, for the protection of boiler pipes, fixed with welding or with thermal spray, for the realization of black aircraft boxes and in the chemical industry.

INCONEL MIG/MAG RANGE

Butt welding of 4mm plate. Material SMO 254.

INCONEL® filler material.

Work performed with MAX 453 + TOP 504 XXM.



High pressure collector. Material P11 10mm plate the collector and 35mm the bottom.

Work performed with MAX 603 + TOP 504 XXM.



PROGRAMS:

TOP 504 XXM:

available programs

dedicated to welding of
metal sheet INCONEL®.

Pulsed Programs with the
possibility of Double Pulse
welding customized.





PAWTM

**PAWTM IS PRECISION ALUMINUM WELDING.
A NEW INTELLIGENT CONTROL OF THE ARC
WELDING ON THIN MATERIAL THICKNESS FROM
1 TO 3MM. THE RESULT IS VERY SHORT AND
CONCENTRATED WELDING ARC WITH THE USE
OF THE 1.0MM AND 1.2MM WIRE.**

_Therefore we obtain savings of the expensive push-pull torches and avoid the use of small diameters wires, difficult to find and not economic.

PAW MIG/MAG RANGE

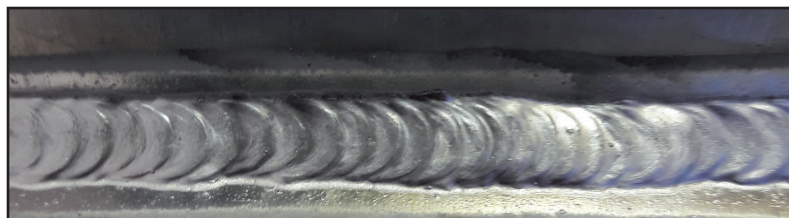
PROGRAMS:

Twelve 12 dedicated PAW™ programs are available for aluminum. The programs are synergic and pulsed (AlMg5 and AlSi5) dedicated to thin material thicknesses from 1 to 3mm.



PULSE:

The synergic preset PULSE by the program helps the operator in welding materials like aluminum.



ALUMINUM:

Thanks to the PAW™ technology it allows the welding of the AlMg5 and AlSi5 aluminum wires avoiding the use of expensive push-pull torches and the purchase of wires with reduced diameters.





i-COLD PULSE™

NORMALLY PULSE WELDING IS A “HOT” PROCESS. THIS HAS ALWAYS PROVOKED GREAT PROBLEMS ON THE DEFORMATION OF THE MATERIAL (IN PARTICULAR THIN MATERIAL) AND ON WELDING SPEED.

_Trying to increase speed has been the challenge of all manufacturers in the last years, therefore, processes with various names were born, always in the name of speed.

I-COLD PULSE MIG/MAG RANGE

But what about the heat?

This is the great challenge of Stel with its innovative i-Cold Pulse™.

Reducing the heat input STEL has managed to increase by 35% speed and eliminate all the disadvantages of the standard pulsed while maintaining the same performance at the start. Furthermore, the arc is more concentrated and intense granting a better penetration.



**Standard MIG
Pulsed**

i-Cold Pulse™
+35% of speed



ROD-PULSE™

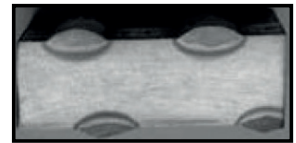
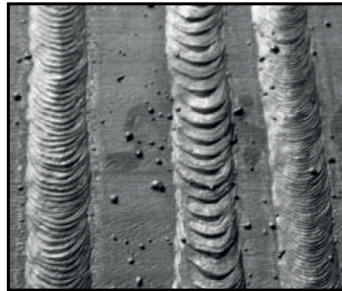
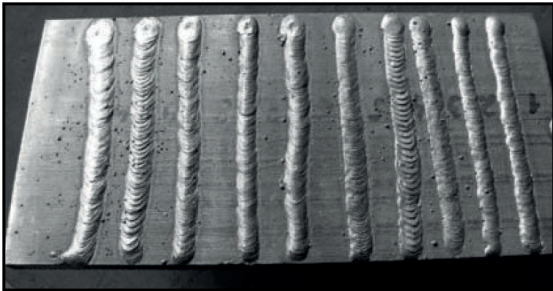
NORMALLY YOU KNOW THE PULSED WELDING IN TIG AND IN MIG, BUT NOT THE PULSE IN ELECTRODE. STEL HAS BEEN THE FIRST TO DEVELOP THIS PROCEDURE WITH THE RANGE MAX DP 171-201C PRESENTED AT ESSEN IN 2005.

_Today this process has been studied and appreciated in all the European Universities of welding. The benefits of aesthetics and arc control are unmatched in particular with the welding of cellulose electrodes. The ROD-Pulse™ function is available with the RCCS remote control in the MAX 403 and Standard in the Iron-Mig 303 and MAX 453-603 series.

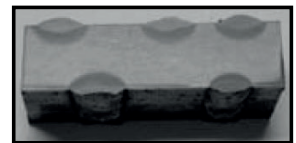
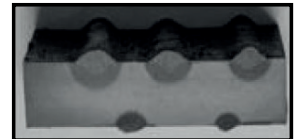
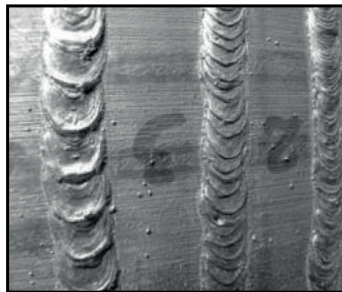
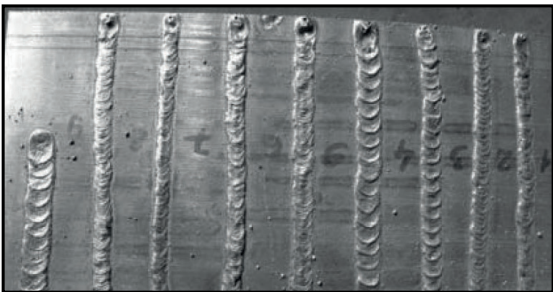
ROD-PULSE MIG/MAG RANGE

- Better stability of the welding arc (especially at low currents)
- Possibility to use electrodes with bigger diameter with thin material thicknesses
- Reduction of breakthroughs during welding with thin material thicknesses
- Better transfer control of the welding arc
- Easier control for the welder.
- Improvement of the aesthetics of welding very similar to the Tig especially with frequency 4-5 Hz. Better penetration.

› Welding Appearance with Titan Electrode



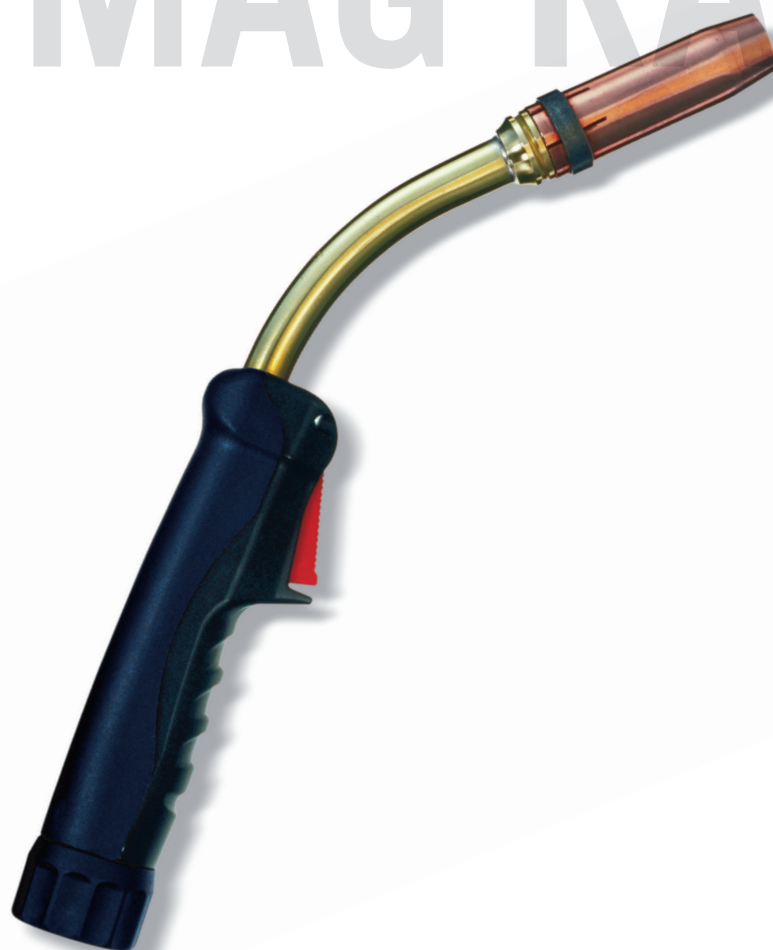
› Welding Appearance with Cellulosic Electrode



PERFECT FOR PIPEWELDING

- Ensures better and safer welding with gaps.
- Ensures better penetration from both sides of the pipe.
- Ideal for vertical up and vertical down welds.

TORCE MIG STEEL MIG/MAG RANGE



Technical Data	TMS 36
V Class	L
I2 max (CO2)	300
I2 max (Misc.)	270
V (Ac or Dc)	DC
Ø Wire	0,8-1,2 mm
Gas	10-20 l/1'
Cooling	Air

Technical Data	TMS 500
V Class	L
I2 max (CO2)	500
I2 max (Misc.)	450
V (Ac or Dc)	DC
Ø Wire	1,0-2,4 mm
Gas	10-25 l/1'
Cooling	H2O

Torches MIG TMS 36 Air

P/Number	Description
6043500000	Torches MIG TMS 36 4m Air

Torches MIG TMS 500 H2O

P/Number	Description
6015130000	Torches MIG TMS 500 3m H2O
6015140000	Torches MIG TMS 500 4m H2O
6016140000	Torches MIG TMS 500 5m H2O



MIG STEEL TORCHES

**NEW RANGE OF MIG / MAG STEEL TORCHES
GUARANTEES THE A HIGH QUALITY LEVEL WITH
A COMPETITIVE PRICE.**

_In particular the new pulsed welding and **i-Cold Pulse™** need adequate accessories to achieve the desired performance.

SUITCASE PULSE



AVAILABLE PROGRAMS LIST:

Iron 1,2	80% Argon - 20% CO2
Iron 1,2	100% CO2
Aluminium Mg5 1,2 Pulsato 40mt	100% Argon
Flux Cored Rutilic 1,2	Argon - 8-25% CO2
Flux Cored Rutilic 1,2	100% CO2
Flux Cored Metalcored 1,2	Argon - 8-25% CO2
Flux Cored Metalcored 1,2	100% CO2





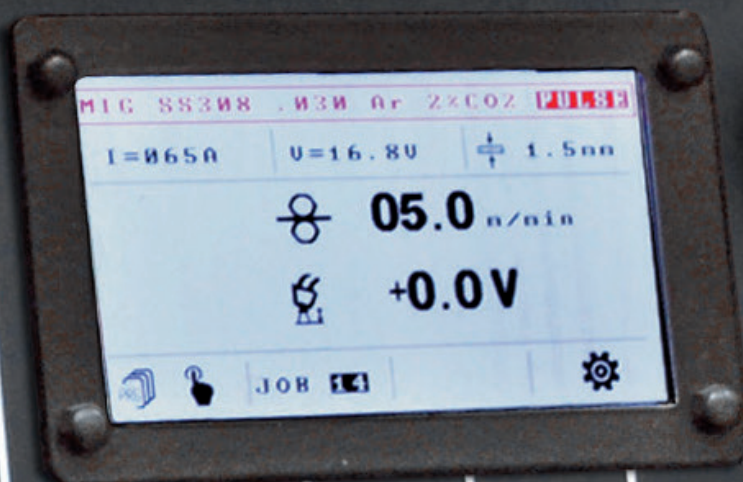
TOP 504 NAVY

**CLEAR DIGITAL DISPLAY, QUICK READING OF
AMPERE AND VOLTS. MINIFEEDER 4 ROLLERS
INCORPORATED WITH SYNERGIC FUNCTIONS.**

_The Amp reading is on the Euro connector for a more precise reading considering the long cables. Minifeeder 4 rollers incorporated to obtain always a stable arc and a highly professional welding. The synergic functions are very easy to use with a digital display for a very fast set-up. They offer a precise setting of welding parameters in easy and precise way. Possibility of Aluminium pulse up to 40mt.

Control panel with five circular buttons and a "Select Mode" button.

CE
EN 60730-1



TECH NICAL DATA MIG/MAG RANGE



IRON-MIG221

MULTIMULTIMULTI



IRON MIG 221 MULTI
IRON MIG 221P MULTI

ST-Arc™	P.A.W™	i-Cold Pulse™	Double Pulse	Rod Pulse™	Push-Pull	Spool-Gun	PFC Multi-Link™	INCONEL™
•								
•	•		•		•	•		

	CURRENT RANGE	DUTY CYCLE 60%	DUTY CYCLE 100%	PHASE	VOLTAGE
IRON MIG 221 MULTI	4-220 A	140 A	120 A	1	230 V
IRON MIG 221P MULTI	4-220 A	140 A	120 A	1	230 V

IRON MIG 22



MATERIAL	GAS	IRON-MIG 221 MULTI			IRON-MIG 221P MULTI		
Ferro 0,6	80% Argon - 20% CO2		•			•	
Ferro 0,8	80% Argon - 20% CO2		•			•	
Ferro 1,0	80% Argon - 20% CO2		•			•	
Ferro 0,8 Pulsato	92% Argon - 8% CO2		•			•	
Alluminio Mg5 0,8	100% Argon					•	
Alluminio Mg5 1,2	100% Argon					•	
Alluminio Mg5 0,8 P.A.W.	100% Argon					•	
Alluminio Mg5 1,0 P.A.W.	100% Argon					•	
Alluminio Mg5 1,0 Pulsato	100% Argon					•	
Alluminio Mg5 1,0 Double Pulse	100% Argon					•	
Alluminio Si5 1,2	100% Argon					•	
Alluminio Si5 1,0 P.A.W.	100% Argon					•	
Alluminio Si5 1,0 Pulsato	100% Argon					•	
Alluminio Si5 1,0 Double Pulse	100% Argon					•	
Inox NiCr 0,8 Pulsato	98% Argon - 2% CO2					•	
Inox NiCr 1,0 Pulsato	98% Argon - 2% CO2					•	
Cu Si3 0,8	100% Argon					•	
Cu Si3 0,8 Pulsato	100% Argon					•	
Cu Si3 1,0 Pulsato	100% Argon					•	
Flux Cored 0,9 NO GAS	NO GAS		•			•	
Flux Cored 0,9	80% Argon - 20% CO2		•			•	

IRON-MIG303



IRON-MIG 303

IRON-MIG 303S

IRON-MIG 303P

IRON-MIG 303SP

ST-Arc™	P.A.W™	i-Cold Pulse™	Double Pulse	Rod Pulse™	Push-Pull	Spool-Gun	PFC Multi-Link™	INCONEL™
•				•	•	•		
•				•	•	•	•	
•	•	•	•	•	•	•		
•	•	•	•	•	•	•	•	

IRON MIG 303

IRON MIG 303S

IRON MIG 303P

IRON MIG 303SP

CURRENT RANGE	DUTY CYCLE 60%	DUTY CYCLE 100%	PHASE	VOLTAGE
4-320 A	250 A	200 A	3	400 V
4-320 A	250 A	200 A	1-3	200-575 V
4-320 A	250 A	200 A	3	400 V
4-320 A	250 A	200 A	1-3	200-575 V



IRON-MIG 303

MATERIAL	GAS	IRON-MIG 303				IRON-MIG 303S				IRON-MIG 303P				IRON-MIG 303SP			
Ferro 0,6	80% Argon - 20% CO2	•				•				•				•			
Ferro 0,8	80% Argon - 20% CO2	•				•				•				•			
Ferro 1,0	80% Argon - 20% CO2	•				•				•				•			
Ferro 1,2	80% Argon - 20% CO2	•				•				•				•			
Ferro 0,8 Pulsato	80% Argon - 20% CO2									•				•			
Ferro 1,0 Pulsato	80% Argon - 20% CO2									•				•			
Ferro 1,2 Pulsato	80% Argon - 20% CO2									•				•			
Ferro 1,0 i-Cold Pulse	80% Argon - 20% CO2									•				•			
Ferro 1,2 i-Cold Pulse	80% Argon - 20% CO2									•				•			
Alluminio Mg5 0,8	100% Argon	•				•				•				•			
Alluminio Mg5 0,8 P.A.W.	100% Argon									•				•			
Alluminio Mg5 1,0 P.A.W.	100% Argon									•				•			
Alluminio Mg5 1,2 P.A.W.	100% Argon									•				•			
Alluminio Mg5 1,0 Pulsato	100% Argon									•				•			
Alluminio Mg5 1,2 Pulsato	100% Argon									•				•			
Alluminio Mg2 1,2 Pulsato	100% Argon									•				•			
Alluminio Si5 1,0 P.A.W.	100% Argon									•				•			
Alluminio Si5 1,2 P.A.W.	100% Argon									•				•			
Alluminio Si5 1,0 Pulsato	100% Argon									•				•			
Alluminio Si5 1,2 Pulsato	100% Argon									•				•			
Inox NiCr 308L 0,8 Pulsato	98% Argon - 2% CO2									•				•			
Inox NiCr 308L 1,0 Pulsato	98% Argon - 2% CO2									•				•			
Inox NiCr 316L 1,0 Pulsato	98% Argon - 2% CO2									•				•			
Inox NiCr 308L 1,2 Pulsato	98% Argon - 2% CO2									•				•			
Cu Si3 0,8	100% Argon	•				•				•				•			
Cu Si3i 0,8 Pulsato	100% Argon									•				•			
Cu Si3 1,0 Pulsato	100% Argon									•				•			
Flux Cored 0,9 NO GAS	NO GAS	•				•				•				•			
Flux Cored 0,9	80% Argon - 20% CO2	•				•				•				•			
Flux Cored 1,2 NO GAS	NO GAS	•				•				•				•			
Flux Cored 1,2 NO GAS	80% Argon - 20% CO2	•				•				•				•			
E30XLT1 1,2	80% Argon - 20% CO2	•				•				•				•			

MAX403

HIGHPERFORMANCEMACHINES



- MAX 403
- MAX 403S

ST-Arc™	P.A.W™	i-Cold Pulse™	Double Pulse	Rod Pulse™	Push-Pull	Spool-Gun	PFC Multi-Link™	INCONEL™
•			•	•	•	•		
•			•	•	•	•	•	

	CURRENT RANGE	DUTY CYCLE 60%	DUTY CYCLE 100%	PHASE	VOLTAGE
MAX 403	4-400 A	350 A	300 A	3	400 V
MAX 403S	4-400 A (300Am in 1P)	350 A	300 A	1-3	200 - 575 V

MAX 403



MATERIAL		GAS		MAX 403 + XM		MAX 403S + XM		MAX 403 + TOP NAVY ALU	
Ferro 0,8		80% Argon - 20% CO2		•		•			
Ferro 1,0		80% Argon - 20% CO2		•		•			
Ferro 1,2		80% Argon - 20% CO2		•		•		•	
Ferro 1,6		80% Argon - 20% CO2		•		•			
Ferro 1,2		100% CO2						•	
Ferro 0,8 Pulsato		80% Argon - 20% CO2		•		•			
Ferro 1,0 Pulsato		80% Argon - 20% CO2		•		•			
Ferro 1,2 Pulsato		80% Argon - 20% CO2		•		•			
Ferro 1,6 Pulsato		80% Argon - 20% CO2		•		•			
Alluminio Mg5 1,0 Pulsato		100% Argon		•		•			
Alluminio Mg5 1,2 Pulsato		100% Argon		•		•			
Alluminio Mg5 1,2 Pulsato 40mt		100% Argon						•	
Alluminio Mg5 1,6 Pulsato		100% Argon		•		•			
Alluminio Si5 1,0 Pulsato		100% Argon		•		•			
Alluminio Si5 1,2 Pulsato		100% Argon		•		•			
Alluminio Si5 1,6 Pulsato		100% Argon		•		•			
Inox NiCr 0,8 Pulsato		98% Argon - 2% CO2		•		•			
Inox NiCr 1,0 Pulsato		98% Argon - 2% CO2		•		•			
Inox NiCr 1,2 Pulsato		98% Argon - 2% CO2		•		•			
Cu Si3 1,0 Pulsato		100% Argon		•		•			
Cu Si3 1,2 Pulsato		100% Argon		•		•			
Flux Cored Rutilic 1,2		Argon - 8-25% CO2						•	
Flux Cored Rutilic 1,2		100% CO2						•	
Flux Cored Metalcored 1,2		Argon - 8-25% CO2						•	
Flux Cored Metalcored 1,2		100% CO2						•	

MAX603

HIGHPERFORMANCEMACHINES



MAX 453
MAX 603

ST-Arc™	P.A.W™	i-Cold Pulse™	Double Pulse	Rod Pulse™	Push-Pull	Spool-Gun	PFC Multi-Link™	INCONEL™
•	•	•	•	•	•	•		•
•	•	•	•	•	•	•		•

	CURRENT RANGE	DUTY CYCLE 60%	DUTY CYCLE 100%	PHASE	VOLTAGE
MAX 453	4-450 A	430 A	350 A	3	400 V
MAX 603	4-550 A	500 A	400 A	3	400 V

MAX600

MATERIAL	GAS		MAX 453/603 + SMX	MAX 453/603 + XXM	MAX 453/603 + NAVY ALU
Ferro 0,8	80% Argon - 20% CO2		•	•	
Ferro 1,0	80% Argon - 20% CO2		•	•	
Ferro 1,2	80% Argon - 20% CO2		•	•	•
Ferro 1,6	80% Argon - 20% CO2		•	•	
Ferro 1,2	100% CO2				•
Ferro 0,8 Pulsato	80% Argon - 20% CO2			•	
Ferro 1,0 Pulsato	80% Argon - 20% CO2		•	•	
Ferro 1,2 Pulsato	80% Argon - 20% CO2		•	•	
Ferro 1,6 Pulsato	80% Argon - 20% CO2			•	
Ferro 1,0 i-Cold Pulse	80% Argon - 20% CO2			•	
Ferro 1,2 i-Cold Pulse	80% Argon - 20% CO2			•	
Alluminio Mg5 0,8	100% Argon			•	
Alluminio Mg5 0,8 P.A.W.	100% Argon			•	
Alluminio Mg5 1,0 P.A.W.	100% Argon			•	
Alluminio Mg5 1,2 P.A.W.	100% Argon			•	
Alluminio Mg5 1,0 Pulsato	100% Argon			•	
Alluminio Mg5 1,2 Pulsato	100% Argon			•	
Alluminio Mg5 1,2 Pulsato 40mt	100% Argon			•	•
Alluminio Mg5 1,6 Pulsato	100% Argon			•	
Alluminio Si5 1,0 P.A.W.	100% Argon			•	
Alluminio Si5 1,2 P.A.W.	100% Argon			•	
Alluminio Si5 1,0 Pulsato	100% Argon			•	
Alluminio Si5 1,2 Pulsato	100% Argon			•	
Alluminio Si5 1,6 Pulsato	100% Argon			•	
Inox NiCr 0,8 Pulsato	98% Argon - 2% CO2			•	
Inox NiCr 1,0 Pulsato	98% Argon - 2% CO2			•	
Inox NiCr 1,2 Pulsato	98% Argon - 2% CO2			•	
Inox NiCr 1,6 Pulsato	98% Argon - 2% CO2			•	
INCONEL 1,2 Pulsato	98% Argon - 2% CO2			•	
Cu Si3 0,8	100% Argon			•	
Cu S3i 0,8 Pulsato	100% Argon			•	
Cu Si3 1,0 Pulsato	100% Argon			•	
Flux Cored 1,2 NO GAS	NO GAS			•	
Flux Cored 1,2 NO GAS	80% Argon - 20% CO2			•	
E30XLT1 1,2	80% Argon - 20% CO2			•	
Flux Cored Rutilic 1,2	Argon - 8-25% CO2				•
Flux Cored Rutilic 1,2	100% CO2				•
Flux Cored Metalcored 1,2	Argon - 8-25% CO2				•
Flux Cored Metalcored 1,2	100% CO2				•



Always connected with your needs.

Technical requests, commercial requirements and terms of sale are scrupulously comply until the minimum detail. Each contract stipulated with us it is an absolute guarantee, Stel offers not only the most advance technologies on the market, but above all, Stel is synonymous of total respect of the agreements.

Help-line

Our technicians and salespeople are operative from Monday to Friday, from 8.30 at 17.30 pm. Welding technicians are also available to answer all the technical questions in a professional prompt way .

Call +39 0444 639525 or +39 0444 639682

On Site Demonstration

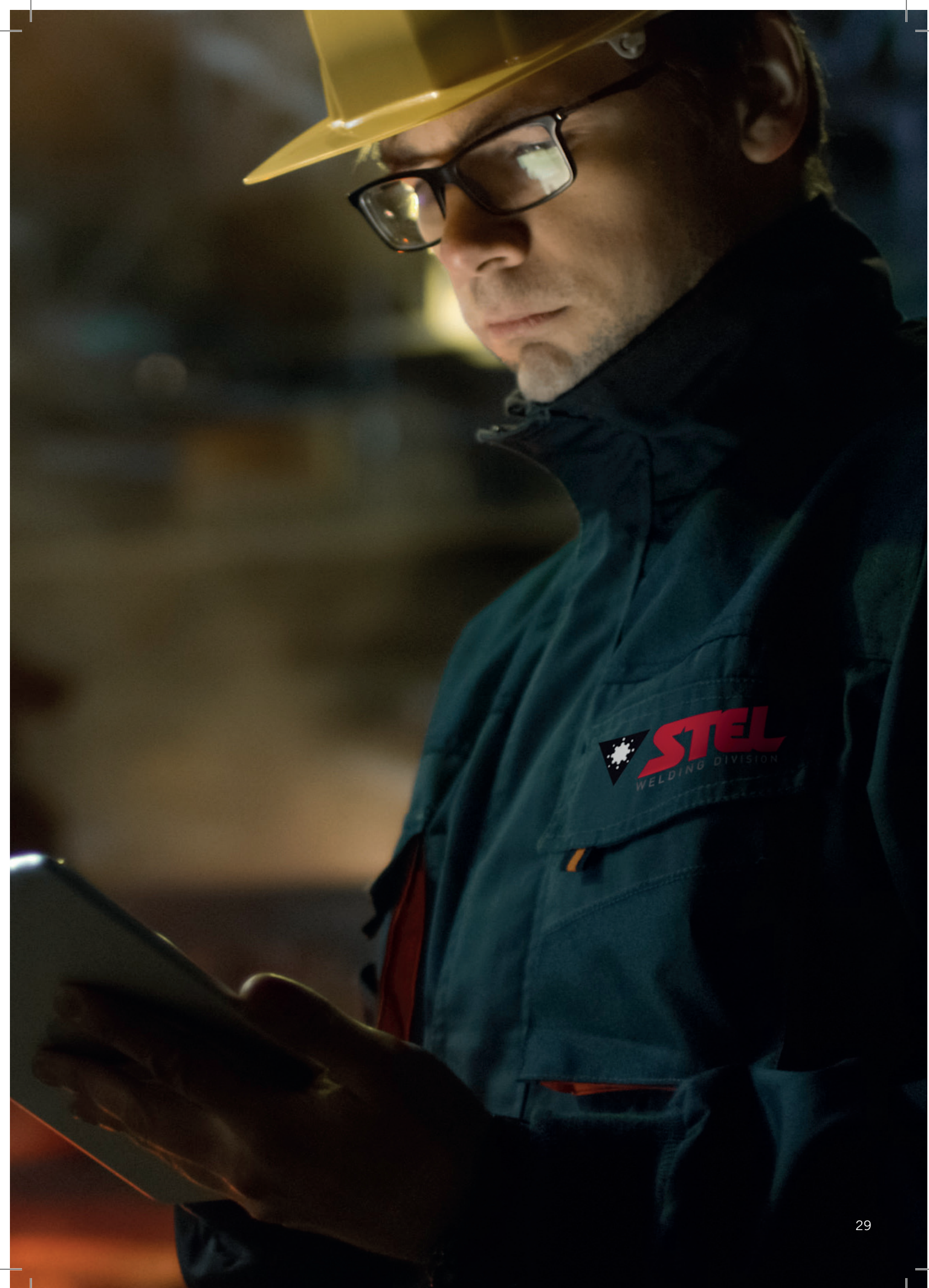
Upon request, Stel is able to organize a welding demonstration with our technicians at the end user in close cooperation with our Distributors.

Open-House and Training

Our factory is open all year. You can meet our specialized staff and view our products. We are also available to organize maintenance and practical Training on our products.

Web Assistance

Thanks to social media, email and the Technical Area of our Website we are able to make the user autonomous to download technical documents and manuals 24 hours a day. Request access to the Technical Area via email to info@stelgroup.it





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