

PRODUCT SERVICE

we insists on the principle of customer-first service to meet customers' requirement for personalized customization. Having a high-level design team and technical R&D team, professional manufacturing team that are in line with international standards, from product design, function research and development to production process and manufacturing process, the whole process has set strict high standards, so that the appearance of the product to the user experience, all maintain a unique differentiation, with a very strong competitive advantage in the market.

APPLICATION AREAS

Taizhou wargo Electronic Technology Co., Ltd. was founded in 2019, with more than 20 years of R&D, production and sales service team of welding and cutting equipment, focusing on the welding machine market, covering professional fields such as welding & cutting equipment, welding & cutting protection and welding & cutting gun accessories etc.

With its compact structure, excellent performance, portability, ease of operation and high efficiency, our series of products are suitable for hundreds of millions of users worldwide and are widely used for various welding and cutting requirements, thereby satisfying the individual needs of customers.

FACILE welders has four series support for Customers choice:

1. The ECO series is designed for users who focus on economy & price.
 2. The PER series is designed for users who focus on high cost performance.
 3. The SuP series is designed for slap-up intelligent users.
 4. The LASER series is high-efficiency and perfect welding joint.
- You can choose the best product series according to your actual needs.

We have built a complete after-sales service system, providing pre-sale technical consultation and after-sales tracking service. according to the feedback, the customer satisfaction rate of our welding machines reaches 100% and the after-sales maintenance rate is only 0.03%. In besides, our sales team can continuously provide you with professional, prompt and efficient all-round services.





TECHNOLOGICAL INNOVATION

As an manufacturer in the welding equipment industry,FACILE takes innovation as its leader, breaks through main common technologies with its core strength, sets complete industry standards and rules system from technology, design R&D and customer service etc , to create greater value for customers.

In the area of welding and cutting innovative technologies , we have gathered a strong R&D team.Relying on advanced welding and cutting equipment and material manufacturing , we have developed and mastered the key technologies of welding power, process and cutting equipment.

The inverter welding machine series independently developed and produced by our company are delicate in shape, portability, high efficiencies, stable performance, long lifetime and SO on.

They boast unique market competitiveness and have been awarded a number of international standard certifications and several national patents.



OUR BRAND FACILE, EASY FOR USER IS THE CORE OF FACILE.

FACILE is devoting to providing users with portable and delicate welding & cutting equipment, enhancing brand lifeblood through technological innovation, quality innovation, service innovation, business model innovation and company culture innovation, and creating a product system that meets international quality, superior performance and professional customization.

CUSTOMER ORIENTATION

Our product series, with great market differentiation and market competitive advantages through unique design and core advanced technology, can provide ideal solutions that truly benefit each customer according to their different practical needs. Creating personalized and exclusive product customization for customers, providing more competitive products, and helping customers to increase their profitability while obtaining excellent returns.

Relying on our powerful after-sales service system, we provide customers with professional, high-quality and comprehensive welding and cutting solutions from pre-sales to after-sales. And quickly and flexibly solve a series of problems in welding and personalization for distributors and customers.





CUSTOMER COOPERATION

When dealing with cooperative relationships, we always take the principles of honesty, sincerity, fairness, positivity and mutual respect, treating every customer as a friend and considering from the customer's standpoint.

Through efficient teamwork and active information exchange, we help our partners achieve their goals with our valuable experience and expertise, creating a win-win collaboration.

CORPORATE VISION

Based on the present, looking to the future, we will not forget our heart, insist on technical innovation and maintain product quality. Accurately match customer production, satisfy different welding needs, provide global customers with total solutions for welding and cutting, improve the experience of using products, and let users enjoy more happy life.

In the future, we will continue to win customers' satisfaction with our sincerity and quality products, steadfastly build a one-stop welding and cutting equipment procurement platform, create a model welding machine brand of quality, and devote ourselves to becoming a super supplier to provide customers with convenient, reliable and satisfactory welding equipment and enhance customer value.

INDEX

www.facileweld.com

WELDING & CUTTING TECHNOLOGY

01-16

ECO Product display

| | |
|---------------|-------|
| ECO MMA | 03-06 |
| ECO TIG | 07-10 |
| ECO MIG | 11-12 |
| ECO CUT | 13-16 |

17-36

PER Product display

| | |
|-------------------------|-------|
| PER MMA | 19-22 |
| PER TIG | 23-27 |
| PER MIG | 28-31 |
| PER CUT | 32-34 |
| PER Multi-Process | 35-36 |

37-46

WELDING&CUTTING
TECHNOLOGY

| | |
|-----------|-------|
| MMA | 47-48 |
| TIG | 49-50 |
| MIG | 21-52 |
| PAC | 53-54 |



ECO

PRODUCT
DISPLAY

WELDING
&
CUTTING
TECHNOLOGY





OPTION EXTRA FUNCTIONS

- *Built in Hot Start.
- *Built in Arc Force.
- *Built in Anti-Sticking.
- *110/220V dual voltage.
- *Built in VRD.
- *Lift TIG.
- *Generator friendly.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *one hand easy to carry,and with a belt.
- *Higher cost performance,affordable with each person.
- *Friendly to inexperienced use,hobby,DIY,home work etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Efficiency(%) | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|-------------|------------------|---------------------|-------------------------|--------------------|----------------------|-----------------|---------------|-----------------|-----------------------|--------------------|
| ★ ECO 11120 | AC-230V | 4.6 | DC-59V | 20-120 | 20% | 60% | 80% | 1.6-2.0 | 220×105×165 | 2.5 |
| ECO 11140 | AC-230V | 5.5 | DC-59V | 20-140 | 20% | 60% | 80% | 1.6-2.5 | 220×105×165 | 2.5 |
| ECO 11160 | AC-230V | 6.5 | DC-59V | 20-160 | 20% | 60% | 80% | 1.6-3.2 | 260×105×165 | 2.9 |

OPTION EXTRA FUNCTIONS

- *Built in Hot Start.
- *Built in Arc Force.
- *Built in Anti-Sticking.
- *110/220V dual voltage.
- *35-50 Dinse Connectors.
- *Cellulosic.
- *Generator friendly.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *Easy to adjustable welding function:MMA,VRD and Lift TIG.
- *Higher cost performance,affordable with each person.
- *friendly to inexperienced use,hobby,DIY,home work etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Efficiency(%) | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|-----------|------------------|---------------------|-------------------------|--------------------|----------------------|-----------------|---------------|-----------------|-----------------------|--------------------|
| ECO 12160 | AC-230V | 6.5 | DC-59V | 20-160 | 20% | 60% | 80% | 1.6-3.2 | 286×128×196 | 3.5 |
| ECO 12180 | AC-230V | 7.5 | DC-59V | 20-180 | 20% | 60% | 80% | 1.6-3.2 | 286×128×196 | 3.7 |
| ECO 12200 | AC-230V | 8.6 | DC-59V | 20-200 | 20% | 60% | 80% | 1.6-4.0 | 286×128×196 | 4 |



OPTION EXTRA FUNCTIONS

- *Built in Anti-Sticking.
- *220/380V dual voltage.
- *35-50 Dinse Connectors.
- *Cellulosic.
- *100% heavy duty cycle.
- *generator friendly.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *Easy to adjustable welding function:MMA,VRD and Lift TIG.
- *Hot start,Arc Force Knob adjustment.
- *Higher cost performance, affordable with each person.
- *Friendly to worker use,repair shop and light industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Efficiency(%) | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|------------------|---------------------|-------------------------|--------------------|----------------------|-----------------|---------------|-----------------|-----------------------|--------------------|
| ECO 13250 | AC-380V | 11.5 | DC-65V | 20-250 | 20% | 60% | 80% | 1.6-4.0 | 376×150×230 | 6.5 |
| ECO 13300 | AC-380V | 14.8 | DC-65V | 40-300 | 20% | 60% | 80% | 1.6-5.0 | 376×150×230 | 7.2 |

OPTION EXTRA FUNCTIONS

- *Built in anti-sticking.
- *220/380v dual voltage.
- *35-50 dinse connectors.
- *Cellulosic.
- *100% heavy duty cycle.
- *Generator friendly.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *Unique design,two strong handles.
- *Easy to adjustable welding function:MMA and Lift TIG.
- *Amperes/voltage easy switch.
- *Hot start,Arc Force Knob adjustment.
- *Higher cost performance, affordable with each person.
- *Friendly to professional use, light and heavy industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Efficiency(%) | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|------------------|---------------------|-------------------------|--------------------|----------------------|-----------------|---------------|-------------------|-----------------------|--------------------|
| ECO 14400 | AC-380V | 22 | DC-65V | 40-400 | 60% | 100% | 80% | 1.6-6.0 | 416×205×295 | 12 |
| ECO 14500 | AC-380V | 31 | DC-65V | 40-500 | 60% | 100% | 80% | 1.6-8.0 | 416×205×295 | 13.5 |
| ECO 14630 | AC-380V | 43.8 | DC-65V | 40-630 | 60% | 100% | 80% | 25mm butt welding | 416×205×295 | 15 |



OPTION EXTRA FUNCTIONS

- *Built in Hot Start.
- *Built in Arc Force.
- *Built in Anti-Sticking.
- *VRD.
- *110/220V dual voltage.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *one hand easy to carry,and with a belt.
- *option function of the button,HF TIG/MMA.
- *Higher cost performance,affordable with each person.
- *Friendly to inexperienced use,hobby,DIY,home work etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Pre/post flow(s) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|-------------|------------------|---------------------|-------------------------|--------------------|------------------|----------------------|-----------------|-----------------|-----------------------|--------------------|
| ★ ECO 21120 | AC-230V | 4.6 | DC-59V | 10-120 | 0/5 | 20% | 60% | 1.6-2.0 | 220×105×165 | 3 |
| ECO 21140 | AC-230V | 5.5 | DC-59V | 10-140 | 0/5 | 20% | 60% | 1.6-2.5 | 220×105×165 | 3 |
| ECO 21160 | AC-230V | 6.5 | DC-59V | 10-160 | 0/5 | 20% | 60% | 1.6-3.2 | 220×105×165 | 3.4 |

OPTION EXTRA FUNCTIONS

- *Built in Hot Start.
- *Built in Arc Force.
- *Built in Anti-Sticking.
- *VRD.
- *110/220V dual voltage.
- *Generator friendly.

FEATURES

- *original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *option function of the button,HF TIG/MMA.
- *Pre/post gas knob adjustment.
- *Higher cost performance,affordable with each person.
- *Friendly to inexperienced use,hobby,DIY,home work etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Pre/post flow(s) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Insulation class | Machine dimension(mm) |
|-----------|------------------|---------------------|-------------------------|--------------------|------------------|----------------------|-----------------|-----------------|------------------|-----------------------|
| ECO 22160 | AC-230V | 6.5 | DC-59V | 10-160 | 0/0-10 | 20% | 60% | 1.6-3.2 | F | 286×128×196 |
| ECO 22180 | AC-230V | 7.5 | DC-59V | 10-180 | 0/0-10 | 20% | 60% | 1.6-3.2 | F | 286×128×196 |
| ECO 22200 | AC-230V | 8.6 | DC-59V | 10-200 | 0/0-10 | 20% | 60% | 1.6-4.0 | F | 286×128×196 |



OPTION EXTRA FUNCTIONS

- *Built in Hot Start.
- *built in Anti-Sticking.
- *VRD.
- *Cellulosic.
- *100% heavy duty cycle.
- *Generator friendly.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *35-50 Dinse Connectors.
- *Option function of the button,HF TIG,MMA and VRD.
- *Pre/ post gas/arc force knob adjustment.
- *Friendly to worker use,repair shop,light industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Pre/post flow(s) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|------------------|---------------------|-------------------------|--------------------|------------------|----------------------|-----------------|-----------------|-----------------------|--------------------|
| ECO 23250 | AC-380V | 11.5 | DC-65V | 10-250 | 0/0-10 | 20% | 60% | 1.6-4.0 | 376×150×230 | 7 |
| ECO 23300 | AC-380V | 14.8 | DC-65V | 10-300 | 0/0-10 | 20% | 60% | 1.6-5.0 | 376×150×230 | 7.8 |

OPTION EXTRA FUNCTIONS

- *Built in Hot Start.
- *Built in Anti-Sticking.
- *VRD.
- *Cellulosic.
- *100% heavy duty cycle.
- *Generator friendly.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *35-50 Dinse Connectors.
- *Option function of the button,HF TIG,MMA and VRD.
- *pre/ post gas/arc force knob adjustment.
- *Amperes/voltage easy switch.
- *Friendly to professional use, light and heavy industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Pre/post flow(s) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|------------------|---------------------|-------------------------|--------------------|------------------|----------------------|-----------------|-------------------|-----------------------|--------------------|
| ECO 24400 | AC-380V | 22 | DC-65V | 10-400 | 0/0-10 | 60% | 100% | 1.6-6.0 | 416×205×295 | 12.8 |
| ECO 24500 | AC-380V | 31 | DC-65V | 10-500 | 0/0-10 | 60% | 100% | 1.6-8.0 | 416×205×295 | 14.3 |
| ECO 24630 | AC-380V | 43.8 | DC-65V | 10-630 | 0/0-10 | 60% | 100% | 25mm butt welding | 416×205×295 | 15.8 |



OPTION EXTRA FUNCTIONS

- *built in Hot Start.
- *built in Arc Force.
- *built in Anti-Sticking.
- *VRD.
- *2/4T.
- *CO2 gas welding.
- *110/220V dual voltage.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *Light weight and small size easy with a belt.
- *Option function of the button,Lift TIG,MMA,0.8 and 1.0 MIG flux-cored wires.
- *Top door design easy to change the 1kgs wire sand don't Hit the head.
- *Build in fixed MIG torch.
- *Higher cost performance,affordable with each person.
- *Friendly to inexperienced use,hobby,DIY,home work etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding voltage (V) | Welding current(A) | Wire diameter (mm) | Plate thickness (mm) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|-----------|------------------|---------------------|-------------------------|---------------------|--------------------|--------------------|----------------------|----------------------|-----------------|-----------------|-----------------------|--------------------|
| ECO 30120 | AC-230V | 3.7 | DC-65V | 15.5-20 | 30-120 | 0.6 | 1-5mm | 20% | 60% | 1.6-2.0 | 300×128×225 | 4.8 |
| ECO 30140 | AC-230V | 4.5 | DC-65V | 15.5-21 | 30-140 | 0.6-0.8 | 1-5mm | 20% | 60% | 1.6-2.5 | 300×128×225 | 5.4 |
| ECO 30160 | AC-230V | 5.5 | DC-65V | 15.5-22 | 30-160 | 0.6-0.8 | 1-5mm | 20% | 60% | 1.6-2.5 | 300×128×225 | 5.7 |



OPTION EXTRA FUNCTIONS

- *Built in Hot Start.
- *Built in Arc Force.
- *Built in Anti-Sticking.*VRD.
- *Cellulosic.
- *Spool gun.
- *Euro MIG gun.
- *220/380V dual voltage.
- *Generator friendly.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *Unique design,two strong handles.
- *Dual meters A/V.
- *35-50 Dinse Connectors.
- *Option function of the button,Lift TIG,MMA,MIG/MAG; 0.8/1.0 co2 MIG,0.8/1.0 arc+co2MIG;2/4T.
- *Top door design easy to change the 1kgs /5kgs wires and don't Hit the head.
- *Build in fixed MIG torch.
- *Higher cost performance,affordable with each person.
- *Friendly to worker use,repair shop,light industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding voltage (V) | Welding current(A) | Wire diameter (mm) | Plate thickness (mm) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|-----------|------------------|---------------------|-------------------------|---------------------|--------------------|--------------------|----------------------|----------------------|-----------------|-----------------|-----------------------|--------------------|
| ECO 32160 | AC-230V | 5.5 | DC-65V | 15.5-22 | 30-160 | 0.6-0.8 | 1-5mm | 20% | 60% | 1.6-2.5 | 416×205×295 | 8.8 |
| ECO 32200 | AC-230V | 7.4 | DC-65V | 16.5-24 | 50-200 | 0.6-1.0 | 1-8mm | 20% | 60% | 1.6-3.2 | 416×205×295 | 9.2 |
| ECO 32250 | AC-230V | 10.2 | DC-65V | 16.5-26.5 | 50-250 | 0.6-1.0 | 1-10mm | 20% | 60% | 1.6-4.0 | 416×205×295 | 9.8 |



OPTION EXTRA FUNCTIONS

- *2/4T.
- *Air filter build-inside.
- *Compressor build-inside.
- *HF/LF both.
- *110/220V dual voltage.
- *Generator friendly.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *High frequency arc initiation mode.
- *Pilot Arc Controller.
- *Cut on arid.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Cutting current(A) | Air pressure (Mpa) | Extreme cutting thickness | Quality cutting thickness (mm) Carbon steel/Stainless steel/Aluminum/ Copper | Duty cycle EN60974-1 | Duty cycle 20°C | Machine dimension(mm) | Machine weight(kg) |
|----------|------------------|---------------------|-------------------------|--------------------|--------------------|---------------------------|---|----------------------|-----------------|-----------------------|--------------------|
| ECO 4030 | AC-230V | 4.3 | DC-285V | 20-30 | ≥0.35 | ≥12mm | 6mm | 40% | 80% | 286×128×196 | 4.6 |
| ECO 4040 | AC-230V | 5.9 | DC-285V | 20-40 | ≥0.35 | ≥13mm | 7mm | 40% | 80% | 286×128×196 | 4.8 |
| ECO 4050 | AC-230V | 7.7 | DC-285V | 20-50 | ≥0.35 | ≥15mm | 8mm | 40% | 80% | 286×128×196 | 5 |

OPTION EXTRA FUNCTIONS

- *2/4T.
- *Air filter build-inside.
- *Compressor build-inside.
- *HF/LF both.
- *110/220V dual voltage.
- *Generator friendly.

FEATURES

- *original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *High frequency arc initiation mode.
- * Pilot Arc Controller.
- *Cut on grid.
- * Post air.
- *Air test.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Pilot current | Cutting current(A) | Air pressure (Mpa) | Extreme cutting thickness | Quality cutting thickness (mm) Carbon steel/Stainless steel/Aluminum/ Copper | Duty cycle EN60974-1 | Duty cycle 20°C | Machine dimension(mm) | Machine weight(kg) |
|----------|------------------|---------------------|-------------------------|---------------|--------------------|--------------------|---------------------------|---|----------------------|-----------------|-----------------------|--------------------|
| ECO 4160 | AC-230V | 9.6 | DC-310V | 20A | 20-60 | ≥0.40 | ≥20mm | 12mm | 40% | 80% | 376×150×230 | 5.3 |
| ECO 4170 | AC-230V | 11.6 | DC-310V | 20A | 20-70 | ≥0.45 | ≥25mm | 15mm | 40% | 80% | 376×150×230 | 5.3 |



OPTION EXTRA FUNCTIONS

- *Air filter build-inside.
- *Compressor build-inside.
- *HF/LF both.
- *220/ 380V dual voltage.
- *Generator friendly.

FEATURES

- *Original design of exterior,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *High frequency arc initiation mode.
- *Pilot Arc Controller.
- *cut on grid.
- *Post air.*Air test.*2/4T.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Pilot current | Cutting current(A) | Air pressure (Mpa) | Extreme cutting thickness | Qualitycutting thickness (mm) Carbon steel/Stainless steel/Aluminum/ Copper | Duty cycle EN60974-1 | Duty cycle 20°C | Machine dimension(mm) | Machine weight(kg) |
|-----------|------------------|---------------------|-------------------------|---------------|--------------------|--------------------|---------------------------|--|----------------------|-----------------|-----------------------|--------------------|
| ECO 4280 | AC-380V | 13.8 | DC-310V | 20A | 20-80 | ≥0.45 | ≥30mm | 18mm | 40% | 80% | 416×205×295 | 4.6 |
| ECO 42100 | AC-380V | 18.5 | DC-310V | 20A | 20-100 | ≥0.5 | ≥35mm | 25mm | 40% | 80% | 416×205×295 | 5.2 |
| ECO 42120 | AC-380V | 23.6 | DC-310V | 20A | 20-120 | ≥0.5 | ≥40mm | 30mm | 40% | 80% | 416×205×295 | 16 |



EASY
TO
WELDING

PER

PRODUCT DISPLAY

WELDING
&
CUTTING
TECHNOLOGY





OPTION EXTRA FUNCTIONS

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *VRD.
- *110/220V dual voltage.

FEATURES

- *Original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market, patent certificated.
- *One hand easy to carry,and with a belt.
- *Large LED digital screen.
- *Adjustment display functions:Amperes,Lift TIG,MMA,hot start,arc force, anti-stick etc.
- *Friendly to inexperienced use,hobby,DIY,home work etc.

| Model | Input voltage(V) | Absorbed power (KVA) | Open circuit voltage(V) | Welding current(A) | Hot start current(A) | Arc force current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Electrode type | Machine dimension(mm) | Machine weight(kg) |
|------------|------------------|----------------------|-------------------------|--------------------|----------------------|----------------------|----------------------|-----------------|-----------------|----------------|-----------------------|--------------------|
| ★PER 10120 | AC-230V | 4.6 | DC-68V | 20-120 | 0-100 | 0-100 | 20% | 60% | 1.6-2.0 | E6013 E7018 | 250×105×180 | 2.8 |
| PER 10140 | AC-230V | 5.5 | DC-68V | 20-140 | 0-100 | 0-100 | 20% | 60% | 1.6-2.5 | E6013 E7018 | 250×105×180 | 2.8 |
| PER 10160 | AC-230V | 6.5 | DC-68V | 20-160 | 0-100 | 0-100 | 20% | 60% | 1.6-3.2 | E6013 E7018 | 250×105×180 | 3.2 |

OPTION EXTRA FUNCTIONS

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *VRD.
- *110/220V dual voltage.
- *Cellulosic.
- *Generator friendly.

FEATURES

- *Original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry,and with a belt.
- *Large LED digital screen.
- *Adjustment display functions:Amperes,Lift TIG,MMA,hot start,arc force,anti-stick etc.
- *35-50 Dinse connectors.
- *Friendly to inexperienced use,hobby,DIY,home work etc.

| Model | Input voltage(V) | Absorbed power (KVA) | Open circuit voltage(V) | Welding current(A) | Hot start current(A) | Arc force current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Electrode type | Machine dimension(mm) | Machine weight (kg) |
|-----------|------------------|----------------------|-------------------------|--------------------|----------------------|----------------------|----------------------|-----------------|-----------------|----------------|-----------------------|---------------------|
| PER 11160 | AC-230V | 6.5 | DC-68V | 20-160 | 0-100 | 0-100 | 40% | 80% | 1.6-3.2 | E6013 E7018 | 280×150×280 | 4.5 |
| PER 11180 | AC-230V | 7.5 | DC-68V | 20-180 | 0-100 | 0-100 | 40% | 80% | 1.6-3.2 | E6013 E7018 | 280×150×280 | 4.5 |
| PER 11200 | AC-230V | 8.6 | DC-68V | 20-200 | 0-100 | 0-100 | 40% | 80% | 1.6-4.0 | E6013 E7018 | 280×150×280 | 4.8 |
| PER 11250 | AC-230V | 11.5 | DC-68V | 20-250 | 0-100 | 0-100 | 40% | 80% | 1.6-5.0 | E6013 E7018 | 280×150×280 | 4.8 |



OPTION EXTRA FUNCTIONS

FEATURES

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *VRD.
- *220/380v dual voltage.
- *Cellulosic.
- *100% heavy duty cycle.
- *Generator friendly.

- *Original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry,and with a belt.
- *Large LED digital screen.
- *Adjustment display functions:Amperes,Lift TIG,MMA,hot start arc force, anti-stick etc.
- *35-50 Dinse Connectors.
- *Friendly to professional use, light and heavy industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Hot start current(A) | Arc force current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Electrode type | Machine dimension(mm) | Machine weight(kg) |
|-----------|------------------|---------------------|-------------------------|--------------------|----------------------|----------------------|----------------------|-----------------|-----------------|----------------|-----------------------|--------------------|
| PER 12300 | AC-380V | 14.8 | DC-72V | 40-300 | 0-100 | 0-100 | 60% | 100% | 1.6-5.0 | E6013 | E7018 460×200×355 | 11 |
| PER 12400 | AC-380V | 22 | DC-72V | 40-400 | 0-100 | 0-100 | 60% | 100% | 1.6-6.0 | E6013 | E7018 460×200×355 | 13 |

OPTION EXTRA FUNCTIONS

FEATURES

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *VRD.
- *220/380V dual voltage.
- *cellulosic.
- *100% heavy duty cycle.
- *Generator friendly.

- *Original design of exterior,nylon plastic with cold-rolled sheet, Bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry,and with a belt.
- *Large LED digital screen.
- *Adjustment display functions:Amperes,Lift TIG,MMA,hot start, Arc force,anti-stick etc.
- *35-50 Dinse connectors.
- *Friendly to inexperienced use,hobby,DIY,home work etc.

| Model | Input voltage(V) | Absorbed power (KVA) | Open circuit voltage(V) | Welding current(A) | Hot start current(A) | Arc force current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Electrode type | Machine dimension(mm) | Machine weight (kg) |
|-----------|------------------|----------------------|-------------------------|--------------------|----------------------|----------------------|----------------------|-----------------|-------------------|----------------|-----------------------|---------------------|
| PER 13400 | AC-380V | 22 | DC-72V | 40-400 | 0-100 | 0-100 | 60% | 100% | 1.6-6.0 | E6013 | E7018 550×240×450 | 22 |
| PER 13500 | AC-380V | 31 | DC-72V | 40-500 | 0-100 | 0-100 | 60% | 100% | 1.6-8.0 | E6013 | E7018 550×240×450 | 27 |
| PER 13630 | AC-380V | 43.8 | DC-72V | 40-630 | 0-100 | 0-100 | 60% | 100% | 25mm butt welding | E6013 | E7018 550×240×450 | 34 |



OPTION EXTRA FUNCTIONS

FEATURES

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *VRD.
- *Post gas.
- *2/4T.
- *Down slope.
- *170/220V dual voltage.

- *original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry,and with a belt.
- *Large LED digital screen.
- *Adjustment display functions:Amperes,Lift TIG,MMA,hot start,arc force, anti-stick etc.
- *Friendly to inexperienced use,hobby,DIY,home work etc

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|------------------|---------------------|-------------------------|--------------------|----------------------|-----------------|-----------------|-----------------------|--------------------|
| PER 20120 | AC-230V | 4.7 | DC-65V | 10-120 | 20% | 60% | 1.6-2.0 | 250×105×180 | 3.6 |
| PER 20140 | AC-230V | 5.6 | DC-65V | 10-140 | 20% | 60% | 1.6-2.5 | 250×105×180 | 3.6 |
| PER 20160 | AC-230V | 6.6 | DC-65V | 10-160 | 20% | 60% | 1.6-3.2 | 250×105×180 | 3.8 |

OPTION EXTRA FUNCTIONS

FEATURES

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *Hot start.
- *Arc force.
- *Anti-stick.
- *110/220V dual voltage.
- *cellulosic.
- *Generator friendly.

- *original design of exterior,nylon plastic with cold-rolled sheet, bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *Large LED digital screen.
- *Adjustment display functions:Amperes,Lift TIG/HF TIG,MMA,2/4T, pulse/no pulse,frequency adjustment,pre/post gas,up/down slope, base/peak amperes,base/peak time,duty cycle,start/end arc spot TIG etc.
- *Friendly to worker use,repair shop and light industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|------------------|---------------------|-------------------------|--------------------|----------------------|-----------------|-----------------|-----------------------|--------------------|
| PER 20161 | AC-230V | 6.6 | DC-65V | 10-160 | 40% | 80% | 1.6-3.2 | 280×150×280 | 5.3 |
| PER 20181 | AC-230V | 7.6 | DC-65V | 10-180 | 40% | 80% | 1.6-3.2 | 280×150×280 | 5.3 |
| PER 20201 | AC-230V | 8.7 | DC-65V | 10-200 | 40% | 80% | 1.6-4.0 | 280×150×280 | 5.6 |
| PER 20251 | AC-230V | 11.6 | DC-65V | 10-250 | 40% | 80% | 1.6-5.0 | 280×150×280 | 5.6 |



OPTION EXTRA FUNCTIONS

FEATURES

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *Hot start.
- *Arc force.
- *Anti-stick.
- *220/380V dual voltage.
- *Cellulosic.
- *Generator friendly.

- *Original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *Large LED digital screen.
- *Adjustment display functions:Amperes,Lift TIG/HF TIG,AC/DC,MMA,2/4T, pulse/no pulse,frequency adjustment,pre/post gas,up/down slope,base/ peak Amperes,base/peak time,duty cycle,start/end arc spot TIG etc.
- *Friendly to worker use,repair shop and light industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|------------------|---------------------|-------------------------|--------------------|----------------------|-----------------|-----------------|-----------------------|--------------------|
| PER 20202 | AC-230V | 8.7 | DC-75V | 10-200 | 40% | 80% | 1.6-4.0 | 460×200×355 | 8.6 |
| PER 20252 | AC-230V | 11.6 | DC-75V | 10-250 | 40% | 80% | 1.6-5.0 | 460×200×355 | 9.2 |

OPTION EXTRA FUNCTIONS

FEATURES

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *VRD.
- *Post gas.*2/4T.
- *Down slope.
- *110/220V dual voltage.
- *Cellulosic.
- *Generator friendly.

- *original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market, patent certificated.
- *one hand easy to carry,and with a belt.
- *Large LED digital screen.
- *Adjustment display functions:Amperes,HF TIG,MMA,hot start,arc force,anti-stick etc.
- *Friendly to worker use,repair shop and light industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|------------------|---------------------|-------------------------|--------------------|----------------------|-----------------|-----------------|-----------------------|--------------------|
| PER 21160 | AC-230V | 6.6 | DC-65V | 10-160 | 40% | 80% | 1.6-3.2 | 280×150×280 | 5.3 |
| PER 21180 | AC-230V | 7.6 | DC-65V | 10-180 | 40% | 80% | 1.6-3.2 | 280×150×280 | 5.3 |
| PER 21200 | AC-230V | 8.7 | DC-65V | 10-200 | 40% | 80% | 1.6-4.0 | 280×150×280 | 5.6 |
| PER 21250 | AC-230V | 11.6 | DC-65V | 10-250 | 40% | 80% | 1.6-5.0 | 280×150×280 | 5.6 |



OPTION EXTRA FUNCTIONS

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *Hot start.
- *Arc force.
- *Anti-stick.
- *220/380v dual voltage.
- *Circulation tank.
- *Cellulosic.
- *generator friendly.

FEATURES

- *original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *Large LED digital screen.
- *Adjustment display functions:Amperes,Lift TIG/HF TIG,AC/DC,MMA,2/4T, pulse/no pulse,frequency adjustment,pre/post gas,up/down slope, base/peak Amperes,base/peak time,duty cycle,start/end arc spot TIG etc.
- *Friendly to worker use,repair shop and light industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding current(A) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|------------------|---------------------|-------------------------|--------------------|----------------------|-----------------|-----------------|-----------------------|--------------------|
| PER 21402 | AC-380V | 22.5 | DC-72V | 10-400 | 60% | 100% | 1.6-6.0 | 550×240×450 | 22 |
| PER 21502 | AC-380V | 31.5 | DC-72V | 10-500 | 60% | 100% | 1.6-8.0 | 550×240×450 | 27 |
| PER 21632 | AC-380V | 44.3 | DC-72V | 10-630 | 60% | 100% | 1.6-8.0 | 550×240×450 | 34 |



OPTION EXTRA FUNCTIONS

- *Spool gun.
- *110/220V dual voltage.
- *Generator friendly.

FEATURES

- *original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market, patent certificated.
- *One hand easy to carry with a unique handle.
- *Large LED digital screen.
- *Adjustment display functions: Dual meters A/V; MIG/MAG;0.8/1.0 co2 MIG;0.8/1.0 arc+co2MIG;2/4T etc.
- *Inching fast wire button.
- *1kgs flux-cored wire/co2 wire.
- *Friendly to inexperienced use,hobby,DIY,home work etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding voltage (V) MIG | Welding current(A) | ARC force range (A,MMA) | Wire diameter (mm) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|------------------|---------------------|-------------------------|-------------------------|--------------------|-------------------------|--------------------|----------------------|-----------------|-----------------|-----------------------|--------------------|
| PER 30160 | AC-230V | 5.5 | DC-58V | 15.5-22 | 30-160 | 0-50A | 0.6-0.8 | 20% | 60% | 1.6-3.2 | 280×150×280 | 5.3 |
| PER 30200 | AC-230V | 7.4 | DC-58V | 15.5-24 | 30-200 | 0-50A | 0.6-1.0 | 20% | 60% | 1.6-4.0 | 280×150×280 | 5.9 |
| PER 30250 | AC-230V | 10.2 | DC-58V | 15.5-26.5 | 30-250 | 0-50A | 0.6-1.0 | 20% | 60% | 1.6-5.0 | 280×150×280 | 6.2 |



OPTION EXTRA FUNCTIONS

- *Spool gun.
- *110/220V dual voltage.
- *Generator friendly.

FEATURES

- *Original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market, patent certificated.
- *One hand easy to carry with a unique handle.
- *Large LED digital screen.
- *Lift TIG,MMA,MIG/MAG pulse;Dual meters A/V;flux-cored wire/co2/arc+co2 wires,pulse frequency,voltage and inductance adjustment,synergistic,2/4T, inching fast wire feeder,wire diameter,material selection,feeding speed , etc.
- *1/5kgs wires.
- *Friendly to worker use,repair shop and light industry etc.

| Model | Input voltage (V) | Absorbed power (KVA) | Open circuit voltage(V) | Welding voltage (V) MIG | Welding current (A) | Output current (/MMA/TIG) | ARC force range (A,MMA) | Wire feeding speed | Wire diameter (mm) | Duty cycle EN60974-1 20°C | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight(kg) |
|------------------|-------------------|----------------------|-------------------------|-------------------------|---------------------|---------------------------|-------------------------|--------------------|--------------------|---------------------------|-----------------|-----------------|-----------------------|--------------------|
| PER 31201 | AC-230V | 7.4 | DC-58V | 16.5-24 | 50-200 | 20-180A | 0-50A | 2-16m/min | 0.6-1.0 | 40% | 80% | 1.6-3.2 | 460×200×355 | 9.6 |
| PER 31251 | AC-230V | 10.2 | DC-58V | 16.5-26.5 | 50-250 | 20-220A | 0-50A | 2-16m/min | 0.6-1.0 | 40% | 80% | 1.6-4.0 | 460×200×355 | 10.2 |

OPTION EXTRA FUNCTIONS

- *Spool gun.
- *220/380v dual voltage.
- *Circulation tank.
- *Generator friendly.

FEATURES

- *Original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market, patent certificated.
- *One hand easy to carry with a unique handle.
- *Large LED digital screen.
- *Lift TIG,MMA,MIG/MAG double pulse;Dual meters A/V;flux-cored wire/co2/arc+co2 wires,pulse frequency,voltage and inductance adjustment,synergistic,2/4T,inchng fast wire feeder,wire diameter, material selection, feeding speed,etc.
- *5/15kgs wires.
- *35-50 Dinse Connectors.
- *Strong tray with wheels.
- *Friendly to professional use,light and heavy industry etc.

| Model | Input voltage(V) | Absorbed power (KVA) | Open circuit voltage(V) | Welding voltage (V) MIG | Welding current(A) | Output current (/MMA/TIG) | ARC force range (A,MMA) | Wire diameter (mm) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension (mm) | Machine weight (kg) |
|------------------|------------------|----------------------|-------------------------|-------------------------|--------------------|---------------------------|-------------------------|--------------------|----------------------|-----------------|-----------------|------------------------|---------------------|
| PER 32400 | AC-380V | 21 | DC-62V | 16.5-34 | 50-400 | 40-350A | 0-100A | 0.6-1.2 | 60% | 100% | 1.6-5.0 | 550×240×450 | 22 |
| PER 32500 | AC-380V | 30 | DC-62V | 16.5-39 | 50-500 | 40-450A | 0-100A | 0.6-1.6 | 60% | 100% | 1.6-6.0 | 550×240×450 | 27 |
| PER 32630 | AC-380V | 44 | DC-62V | 16.5-45.5 | 50-630 | 40-580A | 0-100A | 0.6-1.6 | 60% | 100% | 1.6-8.0 | 550×240×450 | 34 |



OPTION EXTRA FUNCTIONS

- *Spool gun.
- *220/380V dual voltage.
- *Circulation tank.
- *trolley.
- *Generator friendly.

FEATURES

- *original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market,patent certificated.
- *one hand easy to carry with a unique handle.
- *Large LED digital screen.
- *Lift TIG,MMA,MIG/MAG double pulse;Dual meters A/V; flux-cored wire/co2/arc+co2 wires,pulse frequency, voltage and inductance adjustment,synergistic,2/4T,inchng fast wire feeder, wire diameter,material selection,feeding speed,etc.
- *5/15kgs wires.
- *35-50 Dinse Connectors.
- *Friendly to professional use, light and heavy industry etc.

| Model | Input voltage(V) | Absorbed power(KVA) | Open circuit voltage(V) | Welding voltage (V) MIG | Welding current(A) | Output current (/MMA/TIG) | ARC force range (A,MMA) | Wire diameter (mm) | Duty cycle EN60974-1 | Duty cycle 20°C | Electrodes (mm) | Machine dimension(mm) | Machine weight (kg) |
|------------------|------------------|---------------------|-------------------------|-------------------------|--------------------|---------------------------|-------------------------|--------------------|----------------------|-----------------|-----------------|-----------------------|---------------------|
| PER 33300 | AC-380V | 13.5 | DC-62V | 16.5-29 | 50-300 | 40-240A | 0-100A | 0.6-1.0 | 60% | 100% | 1.6-4.0 | 900×400×700 | 47 |
| PER 33400 | AC-380V | 21 | DC-62V | 16.5-34 | 50-400 | 40-350A | 0-100A | 0.6-1.2 | 60% | 100% | 1.6-5.0 | 900×400×700 | 52 |
| PER 33500 | AC-380V | 30 | DC-62V | 16.5-39 | 50-500 | 40-450A | 0-100A | 0.6-1.6 | 60% | 100% | 1.6-6.0 | 900×400×700 | 57 |
| PER 33630 | AC-380V | 44 | DC-62V | 16.5-45.5 | 50-630 | 40-580A | 0-100A | 0.6-1.6 | 60% | 100% | 1.6-8.0 | 900×400×700 | 64 |



OPTION EXTRA FUNCTIONS

- *2/4T.
- *Air filter build-inside.
- *110/220v dual voltage.
- *Generator friendly.

FEATURES

- *Original design of exterior,nylon plastic with cold-rolled sheet, bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *Large LED digital screen.
- *Low frequency arc initiation mode.

| Model | Input voltage(V) | Absorbed power (KVA) | Open circuit voltage(V) | Pilot current (A) | Cutting current (A) | Air pressure (Mpa) | Extreme cutting thickness | Quality cutting thickness (mm) Carbon steel/Stainless steel /Aluminum/ Copper | Duty cycle EN60974-1 | Duty cycle 20°C | Machine dimension(mm) | Machine weight (kg) |
|-----------------|------------------|----------------------|-------------------------|-------------------|---------------------|--------------------|---------------------------|---|----------------------|-----------------|-----------------------|---------------------|
| PER 4050 | AC-230V | 7.7 | DC-285V | 20A | 20-50 | ≥0.35 | ≥15mm | 8mm | 40% | 80% | 280×150×280 | 5.3 |
| PER 4060 | AC-230V | 9.6 | DC-285V | 20A | 20-60 | ≥0.40 | ≥20mm | 12mm | 40% | 80% | 280×150×280 | 5.6 |
| PER 4070 | AC-230V | 11.6 | DC-285V | 20A | 20-70 | ≥0.45 | ≥25mm | 15mm | 40% | 80% | 280×150×280 | 5.6 |



OPTION EXTRA FUNCTIONS

FEATURES

- *2/4T.
- *Air filter build-inside.
- *220/380V dual voltage.
- *Generator friendly.

- *Original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *Large LED digital screen.
- *Low frequency arc initiation mode.

| Model | Input voltage(V) | Absorbed power (KVA) | Open circuit voltage(V) | Pilot current | Cutting current (A) | Air pressure (Mpa) | Extreme cutting thickness | Quality cutting thickness (mm) Carbon steel/Stainless steel /Aluminum/ Copper | Duty cycle EN60974-1 | Duty cycle 20°C | Machine dimension(mm) | Machine weight (kg) |
|------------------|------------------|----------------------|-------------------------|---------------|---------------------|--------------------|---------------------------|---|----------------------|-----------------|-----------------------|---------------------|
| PER 4180 | AC-380V | 13.8 | DC-310V | 20A | 20-80 | ≥0.45 | ≥30mm | 18mm | 40% | 80% | 460×200×355 | 14.6 |
| PER 41100 | AC-380V | 18.5 | DC-310V | 20A | 20-100 | ≥0.5 | ≥35mm | 25mm | 40% | 80% | 460×200×355 | 15.2 |
| PER 41120 | AC-380V | 23.6 | DC-310V | 20A | 20-120 | ≥0.5 | ≥40mm | 30mm | 40% | 80% | 460×200×355 | 16 |

OPTION EXTRA FUNCTIONS

FEATURES

- *2/4T.
- *Air filter build-inside.
- *220/380v dual voltage.
- *Generator friendly.

- *Original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market, patent certificated.
- *One hand easy to carry with a unique handle.
- *Large LED digital screen.
- *Low frequency arc initiation mode.
- *MMA function.
- *Compressor build-in.

| Model | Input voltage(V) | Absorbed power (KVA) | Open circuit voltage(V) | Pilot current | Cutting current (A) | Air pressure (Mpa) | Extreme cutting thickness | Quality cutting thickness (mm) Carbon steel/Stainless steel /Aluminum/ Copper | Duty cycle EN60974-1 | Duty cycle 20°C | Machine dimension(mm) | Machine weight (kg) |
|------------------|------------------|----------------------|-------------------------|---------------|---------------------|--------------------|---------------------------|---|----------------------|-----------------|-----------------------|---------------------|
| PER 42120 | AC-380V | 23.6 | DC-310V | 20A | 30-120 | ≥0.5 | ≥40mm | 30mm | 60% | 100% | 550×240×450 | 22 |
| PER 42140 | AC-380V | 29.3 | DC-310V | 20A | 30-140 | ≥0.6 | ≥50mm | 35mm | 60% | 100% | 550×240×450 | 27 |
| PER 42160 | AC-380V | 35.5 | DC-310V | 20A | 30-160 | ≥0.6 | ≥60mm | 40mm | 60% | 100% | 550×240×450 | 34 |



OPTION EXTRA FUNCTIONS

FEATURES

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *VRD.
- *Post gas.*2/4T.
- *Air filter build-inside.
- *110/220v dual voltage.
- *cellulosic.
- *Generator friendly.

- *Original design of exterior,nylon with cold-rolled sheet,bring more inimitable symbol in the market,patent certificated.
- *One hand easy to carry with a unique handle.
- *MMA,TIG,CUT,three welding functions combine one machine.
- *Large LED digital screen.
- *Adjustment display functions:MMA,hot start,arc force,anti-stick,HF TIG, CUT FH arc initiation mode etc.
- *Friendly to worker use,repair shop and light industry etc.

| Model | Input voltage (V) | Absorbed power (KVA) | Open circuit voltage (V) | Peak current | Plate thickness (mm) | Duty cycle EN60974-1 | Duty cycle 20°C | Pre / post flow (s) | Air pressure (Mpa) | Extreme cutting thickness | Quality cutting thickness (mm) Carbon steel/Stainless steel /Aluminum/ Copper | Efficiency (%) | Electrodes (mm) | Machine dimension (mm) | Machine weight (kg) |
|-----------|-------------------|----------------------|--------------------------|----------------|----------------------|----------------------|-----------------|---------------------|--------------------|---------------------------|---|----------------|-----------------|------------------------|---------------------|
| PER 50416 | AC-230V | 6.5 | DC-59 285V | 20-40A 10-160A | 1-5mm | 40% | 80% | 0-10 | ≥0.35 | ≥15mm | 8mm | 80% | 1.6-3.2 | 280×150×280 | 8 |
| PER 50520 | AC-230V | 8.6 | DC-59 285V | 20-50A 10-200A | 1-8mm | 40% | 80% | 0-10 | ≥0.40 | ≥18mm | 10mm | 80% | 1.6-4.0 | 280×150×280 | 9.2 |

OPTION EXTRA FUNCTIONS

FEATURES

- *Put your brand in the screen.
- *New large LED digital screen for you.
- *VRD.
- *Post gas.
- *2/4T.
- *Air filter build-inside.
- *110/220V dual voltage.
- *Cellulosic.
- *Generator friendly.

- *original design of exterior,nylon plastic with cold-rolled sheet,bring more inimitable symbol in the market, patent certificated.
- *One hand easy to carry with a unique handle.
- *MMA,TIG,MIG,CUT,four welding functions combine one machine.
- *Large LED digital screen.
- *Adjustment display functions:MMA,hot start,arc force,anti-stick, HF TIG,CUT FH arc initiation mode,dual meters A/V; MIG/MAG;0.8/1.0 co2 MIG,0.8/1.0 arc+co2 MIG;2/4Tetc.
- *lkg flux-cored wire/co2 wire etc.
- *Friendly to worker use,repair shop and light industry etc

| Model | Input voltage (V) | Absorbed power (KVA) | Open circuit voltage (V) | Peak current | Plate thickness (mm) | Duty cycle EN60974-1 | Duty cycle 20°C | Pre / post flow (s) | Air pressure (Mpa) | Extreme cutting thickness | Quality cutting thickness (mm) Carbon steel/Stainless steel /Aluminum/ Copper | Efficiency (%) | Electrodes (mm) | Machine dimension (mm) | Machine weight (kg) |
|-----------|-------------------|----------------------|--------------------------|----------------|----------------------|----------------------|-----------------|---------------------|--------------------|---------------------------|---|----------------|-----------------|------------------------|---------------------|
| PER 60416 | AC-230V | 6.5 | DC-59 285V | 20-40A 10-160A | 1-5mm | 40% | 80% | 0-10 | ≥0.35 | ≥15mm | 8mm | 80% | 1.6-3.2 | 460×200×355 | 11.6 |
| PER 60520 | AC-230V | 8.6 | DC-59 285V | 20-50A 10-200A | 1-8mm | 40% | 80% | 0-10 | ≥0.40 | ≥18mm | 10mm | 80% | 1.6-4.0 | 460×200×355 | 13.6 |



FACILE
EASY TO WELD

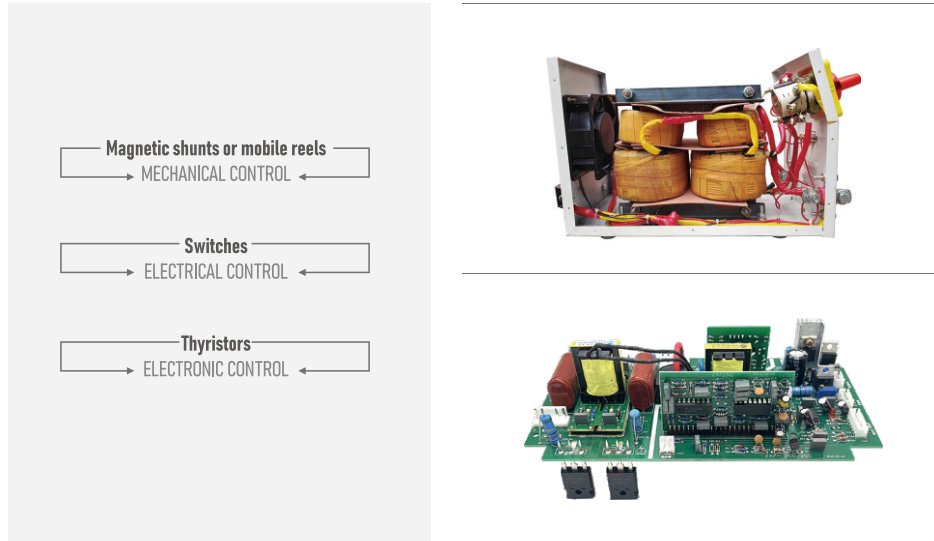
WELDING & CUTTING TECHNOLOGY



ELECTRIC ARC WELDING AND PLASMA CUTTING MACHINES

The machines for metal arc welding or plasma cutting transform the electrical parameters of the distribution network in order to obtain suitable voltage and current values to generate a welding arc or cut.

In **TRADITIONAL** solutions, magnetic sheet metal transformers are used at the mains frequency and the working power is regulated by:



In the last decade of the last century a new technology emerged for the production of generators, which we generally refer to with the term INVERTER.

The inverter technology implies increasing the frequency of the alternating current taken from the network (from 50Hz up to tens of KHz) before transforming it and obtaining a suitable value for welding or plasma cutting.

The transformation of a high frequency current does not require the use of a traditional magnetic sheet steel transformer, which is very big and heavy, but a ferrite core transformer, which is small and lightweight.

Through the application of this technology to welding machines and generators for plasma cutting, it is possible to produce easy-to-handle and compact devices, which can still supply high value currents.

The inverter power is controlled electronically and allows for the implementation of highly precise and stable systems, which are simple to use for operators in the sector.

MANUAL METAL ARC WELDING



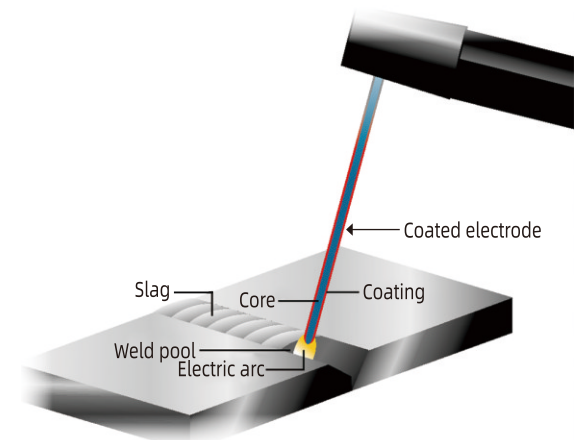
Manual metal arc welding(MMA) exploits the heat generated by an arc which shoots out between the electrode and the piece to be welded. It is probably the most widespread technology in the world for manual electric arc welding.

This process is used to weld all ferrous metals, namely iron, various types of steel, including stainless steel, and cast iron. With other metals poor results are obtained. For some of them, manual metal arc welding is impossible.

The productivity of this process is limited: it is necessary to interrupt welding when the electrode is worn and this must be replaced. Moreover, the slag must be removed after every single weld.

Advantages

- *Welding in any position.
- *Welding indoors and outdoors.
- *Handy electrode holder.
(no gas, no cooling liquids)
- *Simple equipment.



ANTISTICKING

Drastic welding current reduction when the electrode sticks to the piece, i.e. the arc voltage is zero for a time that exceeds the limit set during design. It facilitates the removal of the electrode from the piece to be welded and prevents overheating of the secondary welding circuit.

ARC FORCE

Dynamic increase of welding current when the arc becomes too short. It prevents the electrode from sticking to the piece to be welded. It can be adjusted by the operator, or arranged during design so that it is engaged automatically.

HOT START

welding current increase at the time of striking. It facilitates arc starting. It can be automatic or adjusted by the operator.

TIG WELDING



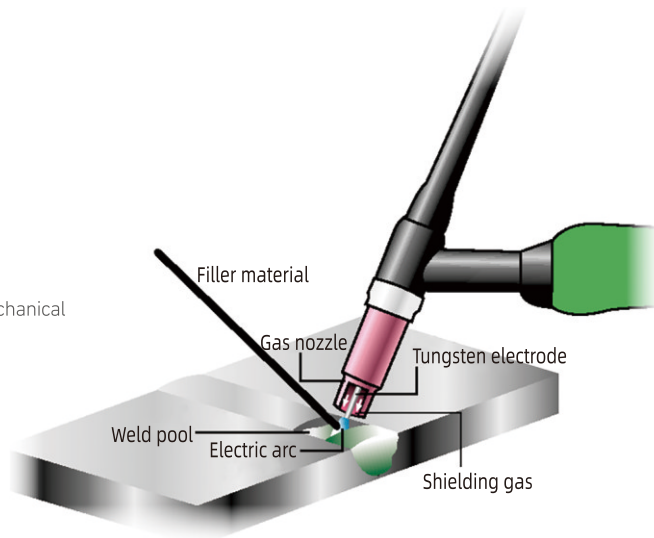
Tig welding (tungsten inert gas welding) exploits the heat generated by an arc which shoots out between the piece to be welded and an infusible tungstenelectrode, under the protection of an inert gas, which is commonly argon or anargon-helium mixture.

Welding can be without filler material or with the addition of material through atig rod that is homogeneous with the metal to be welded.

The tig process can be used for welding all metals, and in particular:

**Stainless steel Copper
Brass Bronze
Titanium Nickel
Aluminum and its alloys
Magnesium alloys**

This process ensures excellent mechanical
And aesthetic results,
With highly precise performance.
Productivity is not particularly high.



Advantages

- *High mechanical quality of the welded joint.
- *Aesthetic look of the seam (visible welding).
- *Precision welding.
- *Small thicknesses.

Disadvantages

- *Requires dexterity.
- *Low productivity.
- *Complex equipment.

TIG AC

The polarity of the welding current is alternating(AC = Alternating Current).
The generator alternates the output poles with a suitable frequency.

**It is used for aluminum and magnesium alloys.
A pure tungsten electrode is preferred.**

TIG DC

The polarity of the welding current is direct (DC = Direct Current).
The electrode always has a negative polarity, and the melting phase is continuous.

**It is used for all metals except aluminum and magnesium alloys.
A tungsten electrode with 2% cerium is preferred.**

HF STRIKING

Arc striking occurs without contact between the electrode and the piece. Avoiding such contact is important because any tungsten residues in the welding bath can cause mechanical defects in the welded joint.

SCRATCH STRIKING

The electrode must be rubbed on the piece for starting. Lower precision is obtained and the risk of tungsten contamination is high.

SLOPE DOWN (CRATER FILLER)

Time in which the current goes from the value set for welding to the end-weld value.It prevents the formation of the "crater"at the end of the seam.

AC FREQUENCY

Number of times per unit of time when the polarity often electrode changes from positive to negative and vice versa in TIG AC. Higher frequency corresponds to narrower seams and greater forward speed.

PULSE TIG

The welding current goes continuously from the set value (= peak current) to a reduced value (=base current) and vice versa. It is used to dose the heat input to the piece to be welded avoiding crater sand breakages. Used in case of even seams with small thickness.

PRE-GAS

Time during which the protection gas comes out of the torch nozzle before starting. It creates a protective atmosphere in the area where melting is about to begin.

2T/4T

Torch button operation mode: in the 2T mode the button is kept pressed during welding; in the 4T mode the button is pressed to start welding, which is then performed after the button is released, and it is pressed again to stop welding.

LIFT STRIKING

The electrode is placed on the piece and lifted slowly to strike the welding arc; the risk of tungsten contamination is modest.

SLOPE UP

Time in which the current goes from the initial value following striking to the value set for welding. It prevents an abrupt melting start.

BALANCING

Time distribution between cleaning phase and melting phase during TIG AC welding. Higher melt corresponds to greater penetration of the weld, but lower cleaning of the seam.

BI-LEVEL

The welding current changes from the set value to a reduced value and vice versa each time the torch button impressed.It is used to dose the heat input to the piece to be welded avoiding craters and breakages. Widely used in case of welding objects with uneven thickness.

PULSATION FREQUENCY

Number of times per unit of time in which the current goes from the peak value to the base value and vice versa in pulse TIG.Higher frequency corresponds to narrower seams and greater forward speed.

POST-GAS

Time during which the protection gas comes out of the torch nozzle after the arc switches off at the end of welding. It protects the molten bath until complete solidification.

CONTINUOUS WIRE WELDING

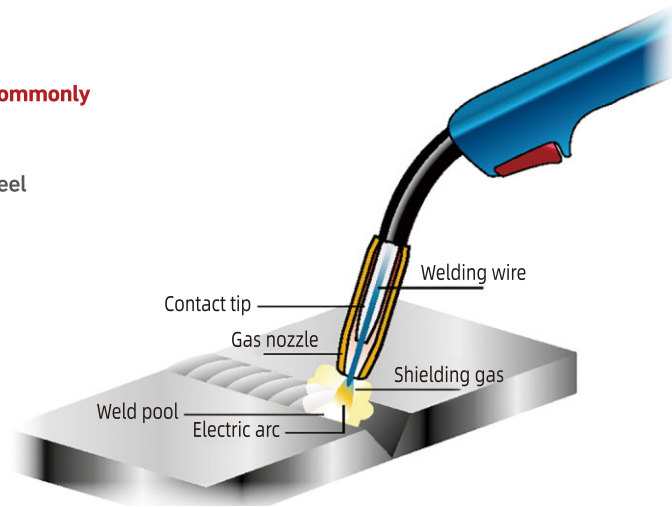


MIG/MAG welding (Metal Inert/Active Gas Welding) exploits the heat generated by an arc which shoots out between the piece to be welded and a fusible wire electrode that constitutes the filler material. The wire is wound in coils of various sizes and must be continuously fed into the welding bath by means of a suitable system.

Melting is protected from atmospheric contamination by an inert (Argon) or active (mixtures of Argon and oxygen, carbon dioxide) gas flow, conveyed to the welding area by the same torch that guides the wire. The wire is made of solid metal or consists of a thin tube filled with a fusible granular flow which improves the mechanical characteristics of the welded joint. Some types of tubular wire can be used without gas protection and are therefore identified with the initials NO-GAS. At the end of cored wire welding it is necessary to remove the slag on the surface; instead, the solid wire does not generate any slag.

The MIG/MAG process is commonly used for welding:

iron and other non-alloy steel
Alloy and stainless steel
Aluminum and its alloys



Advantages

- *High productivity.
- *No electrode change.
- *No slag removal (solid wire).
- *Good visibility of the melting bath (compared to MMA).
- *High thicknesses with single weld or more welds, thanks to the high deposit.
- *Thin thicknesses, minimum wire diameter on the market 0.6 mm.

Disadvantages

- *Complex equipment.
- *Current generator - Reel.
- *Motorized rollers for wire guiding - Torch - Gas cylinder.
- *Possible water cooling system of the torch.
- *The simultaneous adjustment of the arc voltage, the welding current and the feeding speed of the wire to the molten bath is complicated and requires experience.

SOFT START

Time in which the wire guide motor passes from idle to the set welding speed. It prevents abrupt starts. It can be regulated by the operator, or arranged during design, so that it is engaged automatically.

HOT START

Increase in current during striking. It facilitates striking, especially when welding aluminum alloys. It is usually present in inverter technology machines.

POST-GAS

Time during which the protection gas comes out of the torch nozzle after the arc switches off at the end of welding. It protects the molten bath until complete solidification.

SPOOL GUN

Particular torch that allows housing the wire coil directly in the handle. It prevents wire sliding. Aluminum wire is used, problems, especially in case A and allows for greater lengths of the torch cable. Often used in body shops.

SPOT WELDING

Welding mode for making short and regular welded sections. This is generally achieved by setting the spot time and the pause time.

BURN BACK

Delay time between motor stop and output power cutoff. It allows adjusting the length of the wire that comes out of the nozzle at the end of welding. It can be regulated by the operator, or arranged during design, so that it is engaged automatically.

PRE-GAS

Time during which the protection gas comes out of the torch nozzle before striking. It creates a protective atmosphere in the area where melting is about to begin.

2T/4T

Torch button operation mode: in the 2T mode the button is kept pressed during welding; in the 4T mode the button is pressed to start welding, which is then performed after the button is released, and it is pressed again to stop welding.

MIG-BRAZING

Welding technique involving the use of system sand consumables that allow welding at not too high temperatures, so that any galvanizing treatment of the sheet to be welded is preserved as much as possible. Commonly used in body shops.

SYNERGY

Operating mode of the generator used to adjust the speed of the wire, the arc voltage and the possible pulsation frequency at the same time through a single knob. The relationship between the various parameters is set appropriately during design.

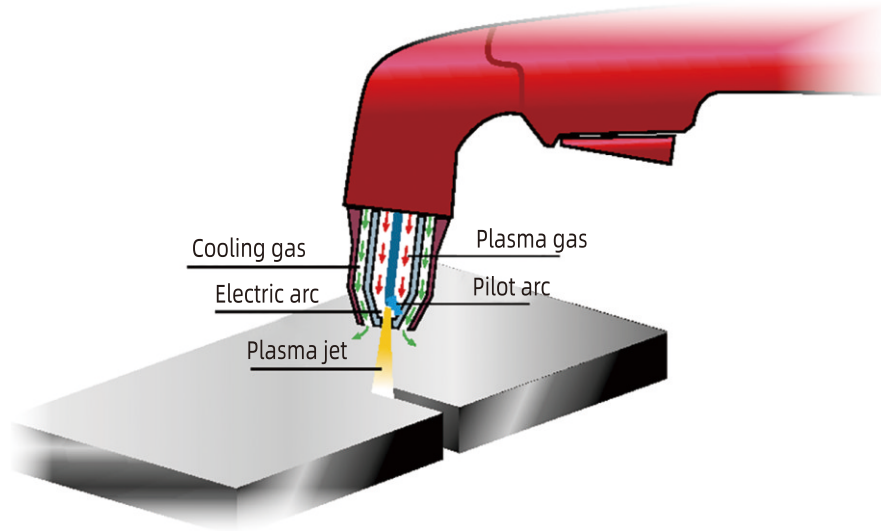
PLASMA CUTTING



Plasma is a strongly ionized gas, namely composed of charged particles, and therefore it is an electric current conductor. It can be obtained by making the gas to be ionized, usually compressed air or inert gas, pass through an electric arc generated inside a mechanical bottleneck. This way, the concentration of charged particles is increased considerably, and consequently the thermal effect and the temperature rise.

The high temperature gas tends to expand and, through the bottleneck, acquires a very high speed: **a dart of concentrated energy charges is obtained, which can be used to cut metals.**

A plasma cutting plant can be made using a current generator with suitable characteristics, a gas source and a torch which conveys the gas into a nozzle inside which the electric arc is generated.



It is preferable to start cutting the metal object starting from the free edge of the material. If it is necessary to start "from inside", a hole should be made first with an alternative technique to plasma cutting. The cutting speed depends on the thickness and the type of metal. If the speed is very low, it is difficult to get a quality cut.

The cutting speed depends on many variables and can only be estimated roughly in case of manual applications.

Below are two tables of correspondences between cutting speed expressed in centimeters per minute, metal and thickness to be cut, current and diameter of the nozzle, provided purely for guidance.

STRIKING WITHOUT HIGH FREQUENCY

The electrode is movable, the gas flow detaches it from the nozzle and the potential difference between the electrode and the nozzle causes the priming spark of the pilot arc. The pilot arc is then transferred to the piece and starts the cutting process.

HIGH FREQUENCY STRIKING

The pilot arc between the electrode and the nozzles is primed thanks to the spark caused by a device that generates a series of high voltage electric pulses; the arc is then transferred to the piece and starts the cutting process.

QUALITY CUTTING

It allows a sharp separation, with regular edges almost perpendicular to the surface of the cut object. Generally, it is obtained if the cutting speeds are constant and not less than 30-40 centimeters per minute. **To obtain a quality cut it is necessary to choose a PLASMA system that can separate a maximum thickness that is significantly bigger than the working one.**

MAXIMUM SEPARATION

It is the maximum thickness that can be separated. The value specified in the commercial documentation is generally referred to iron and does not correspond to a quality cut.

CONTACT CUTTING

Cutting technique in which the nozzle touches with the piece to be cut. It is generally used for thicknesses not bigger than 5/6 mm.

CUTTING WITH SPACER

Cutting technique in which the nozzle is kept away from the piece to be cut by means of suitable spacers that are mounted at the end of the torch. It allows the maximum cutting thicknesses that can be reached by the system used.