

# Stealth

## DIGI-CUT45PFC

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DC INVERTER • AIR PLASMA • CUTTING MACHINE

Part No. 9031



Suitable for  
220~240V

# OPERATING INSTRUCTIONS

SWP

## SAFETY PRECAUTIONS

**Follow these precautions carefully. Improper use of any welder can result in injury or death.**

1. ONLY CONNECT MACHINE TO A POWER SOURCE FOR WHICH IT WAS DESIGNED. THE SPECIFICATION PLATE ON THE MACHINE LISTS THIS INFORMATION. WHEN WELDING OUTDOORS ONLY USE AN EXTENSION CORD INTENDED FOR SUCH USE.
2. ONLY OPERATE MACHINE IN DRY LOCATIONS AND ON CEMENT OR MASONRY FLOOR. KEEP AREA CLEAN AND UNCLUTTERED.
3. KEEP ALL COMBUSTIBLES AWAY FROM WORK SITE.
4. DO NOT WEAR CLOTHING THAT HAS BEEN CONTAMINATED WITH GREASE OR OIL.
5. KEEP CABLES DRY AND FREE FROM OIL AND GREASE AND NEVER COIL AROUND SHOULDERS.
6. SECURE WORK WITH CLAMPS OR OTHER MEANS – DON'T OVER-REACH WHEN WORKING.
7. NEVER STRIKE AN ARC OVER A COMPRESSED GAS CYLINDER.
8. DON'T ALLOW THE INSULATED PORTION OF THE ELECTRODE HOLDER TO TOUCH THE GROUND WHILE CURRENT IS FLOWING.
9. SHUT OFF POWER AND UNPLUG MACHINE WHEN REPAIRING OR ADJUSTING. INSPECT BEFORE EVERY USE. ONLY USE IDENTICAL REPLACEMENT PARTS.
10. FOLLOW ALL MANUFACTURER'S RULES ON OPERATING SWITCHES AND MAKING ADJUSTMENTS.
11. ALWAYS WEAR PROTECTIVE CLOTHING WHEN WELDING. THIS INCLUDES: LONG SLEEVED SHIRT (LEATHER SLEEVES), PROTECTIVE APRON WITHOUT POCKETS, LONG PROTECTIVE TROUSERS, BOOTS AND GLOVES WHEN HANDLING HOT MATERIALS.
12. ALWAYS WEAR A WELDER'S HELMET WITH PROTECTIVE EYE PIECE WHEN WELDING. WEAR A PROTECTIVE CAP UNDERNEATH THE HELMET.
13. WHEN WELDING OVERHEAD, BEWARE OF HOT METAL DROPPINGS. ALWAYS PROTECT THE HEAD, HAND, FEET AND BODY.
14. KEEP A FIRE EXTINGUISHER CLOSE BY AT ALL TIMES.
15. DO NOT EXCEED THE DUTY CYCLE OF THE MACHINE. THE RATED CYCLE OF A WELDING MACHINE IS THE PERCENTAGE OF A TEN MINUTE PERIOD THAT THE MACHINE CAN OPERATE SAFELY AT A GIVEN OUTPUT SETTING.
16. KEEP ALL CHILDREN AWAY FROM WORK AREA. WHEN STORING EQUIPMENT, MAKE SURE IT IS OUT OF REACH OF CHILDREN.
17. GUARD AGAINST ELECTRIC SHOCK. DO NOT WORK WHEN TIRED. DO NOT LET BODY COME IN CONTACT WITH GROUNDED SURFACES.

## 1 MAIN USE AND RANGE

The STEALTH DIGI-CUT45M PFC Inverter is an inverter based air plasma cutter. This allows the machine to cut all metals cleanly, safely and economically.

## 2 OPERATING CONDITION AND WORK SURROUNDING

### 2.1 OPERATING CONDITIONS

Voltage of power source: 1 x 110V or 240 V  $\pm$  10%

### 2.2 WORK SURROUNDINGS

2.2.1 Relative humidity:  $\leq$ 90% (average monthly temperature  $\leq$ 20°C)

2.2.2 Ambient temperature: -10°C - 40°C

2.2.3 The cutting site should have no harmful gas, chemicals, moulds and inflammable matter, explosive and corrosive medium.

2.2.4 Operating in rain is not allowed.

## 3 TECHNICAL SPECIFICATIONS

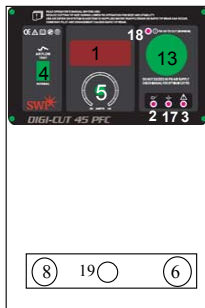
MODEL: DIGI-CUT45PFC		
Power Supply Voltage	1 x 110V $\pm$ 10%: 50/60Hz	1 x 240V $\pm$ 10%: 50/60Hz
Input Current	28A	20A
Rated Output Current	25A	40A
Current Adjusting Range	20-25A	20-40A
No Load Voltage	200V	
Rated Duty Cycle	60%	
Working Mode	Contact	
Air Pressure	0.2-0.4MPa	
After Flow Time	10S	

## 4 PRODUCT DESCRIPTION

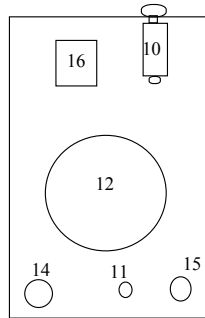
- 4.1 The voltage of the output ends is very high. Don't touch with the output ends, cutting torch and other conductive parts while setting up an electric circuit.
- 4.2 For the safety of the equipment and the persons, the customer must correctly make grounding or protection according to the power supply system:using 4 mm<sup>2</sup> lead to connect the protection grounding of the cutting machine.
- 4.3 Cutting operating should be carried out in dry and good ventilating area. The surrounding objects should be not less than 0.5m away from the cutting machine.
- 4.4 Before cutting , the operator should read the operation instructions carefully and use the machine correctly.

## 5 PANEL FUNCTION DIAGRAMS

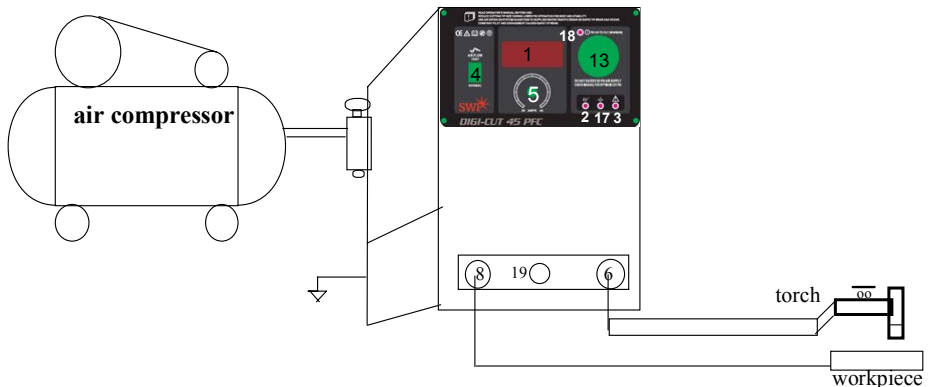
FRONT PANEL



BACK PANEL



1. Cutting current indicator
2. Power ON/OFF
3. Warning light
4. Cutting/testing gas switch
5. Cutting current indicator
6. Cutting torch cable
8. Workpiece cable
9. Nameplate
10. Air pressure-reducing valve
11. Air IN pressure
12. Fan
13. Air pressure-reducing valve indicator
14. Grounding column
15. Input cable
16. Power switch
17. Low air pressure indicator
18. PSI OK TO CUT (minimum) indicator
19. Fuse



## 6 MACHINE OPERATION

- 6.1 Connect the machine correctly according the diagram. Switch on the air compressor until it reaches its rated pressure. It will turn off automatically. Adjust the air pressure reducing valve to the required value (0.2-0.4MPa)
- 6.2 Connect the power to the machine and the power indicator light will illuminate and the cooling fan will start. Select the **AIR TESTING** setting on the function switch and air will flow through the torch. Select **CUTTING** on the function switch and air will flow through the torch again.
- 6.3 Select a suitable current with the current control knob for the thickness of the material and one that is suitable for the consumables fitted to the torch.
- 6.4 **CUTTING**: Hold the cutting torch on the workpiece at approximately a 15 degree angle and press the torch switch. The air will flow first and then the arc will ignite. Start to move the torch after the material has been pierced maintaining a uniform pace of travel and distance across the material.

## 7 PRODUCT DESCRIPTION

**This product is sold subject to the understanding that if any defect in manufacture or material shall appear within 24 months from date of consumer sale, the supplier will arrange for such defect to be rectified without charge (except for any damage due to misuse).**

**TROUBLESHOOTING**

<b>Problems</b>	<b>Causes</b>	<b>Solutions</b>
Power lamp not lit	<ol style="list-style-type: none"> <li>1. No electricity input</li> <li>2. Machine switch fails</li> </ol>	<ol style="list-style-type: none"> <li>1. Check incoming line</li> <li>2. Replace switch</li> </ol>
Fan not rotating	<ol style="list-style-type: none"> <li>1. Fan power line is off</li> <li>2. Fan enclosure is blocked</li> <li>3. Fan fails</li> <li>4. Machine fails</li> </ol>	<ol style="list-style-type: none"> <li>1. Reconnect the line</li> <li>2. Unblock the enclosure</li> <li>3. Replace the fan</li> <li>4. Return to manufacturer or service centre</li> </ol>
Warning lamp lights	<ol style="list-style-type: none"> <li>1. Over heat (yellow lamp lights)</li> <li>2. Over current (Green lamp lights)</li> </ol>	<ol style="list-style-type: none"> <li>1. Welding after cooling</li> <li>2. Input voltage too low or the machine fails</li> </ol>
No output of welder	<ol style="list-style-type: none"> <li>1. Over current protection</li> <li>2. Welder fails</li> </ol>	<ol style="list-style-type: none"> <li>1. Over load using</li> <li>2. Maintenance in manufacturer or service centre</li> </ol>
Output current decreased	<ol style="list-style-type: none"> <li>1. Input voltage is low</li> <li>2. Input line is too thin</li> </ol>	<ol style="list-style-type: none"> <li>1. Stabilise over 5KVA</li> <li>2. Thicken power line</li> </ol>
Current cannot be regulated	<ol style="list-style-type: none"> <li>1. Connecting line of the potentiometer is off</li> <li>2. Potentiometer for current regulation fails</li> </ol>	<ol style="list-style-type: none"> <li>1. Reconnect the line</li> <li>2. Replace potentiometer</li> </ol>
High frequency arc cannot be generated	<ol style="list-style-type: none"> <li>1. The switch fails</li> <li>2. Incorrect air flow selection – electrode fails</li> <li>3. High frequency arc generator fails</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace the switch</li> <li>2. Replace the electrode</li> <li>3. Replace the high frequency arc generator</li> </ol>

			
<p><b>WARNING</b></p>	<ul style="list-style-type: none"> <li>● Do not touch electrically live parts or electrode with skin or wet clothing.</li> <li>● Insulate yourself from work and ground.</li> </ul>	<ul style="list-style-type: none"> <li>● Keep flammable materials away.</li> </ul>	<ul style="list-style-type: none"> <li>● Wear eye, ear and body protection.</li> </ul>
<p>Spanish <b>AVISO DE PRECAUCION</b></p>	<ul style="list-style-type: none"> <li>● No toque las partes o los electrodos bajo carga con la piel o ropa mojada.</li> <li>● Aíslese del trabajo y de la tierra.</li> </ul>	<ul style="list-style-type: none"> <li>● Mantenga el material combustible fuera del área de trabajo.</li> </ul>	<ul style="list-style-type: none"> <li>● Protéjase los ojos, los oídos y el cuerpo.</li> </ul>
<p>French <b>ATTENTION</b></p>	<ul style="list-style-type: none"> <li>● Ne laissez ni la peau ni des vêtements mouillés entrer en contact avec des pièces sous tension.</li> <li>● Isolez-vous du travail et de la terre.</li> </ul>	<ul style="list-style-type: none"> <li>● Gardez à l'écart de tout matériel inflammable.</li> </ul>	<ul style="list-style-type: none"> <li>● Protégez vos yeux, vos oreilles et votre corps.</li> </ul>
<p>German <b>WARNUNG</b></p>	<ul style="list-style-type: none"> <li>● Berühren Sie keine stromführenden Teile oder Elektroden mit Ihrem Körper oder feuchter Kleidung!</li> <li>● Isolieren Sie sich von den Elektroden und dem Erdboden!</li> </ul>	<ul style="list-style-type: none"> <li>● Entfernen Sie brennbares Material!</li> </ul>	<ul style="list-style-type: none"> <li>● Tragen Sie Augen-, Ohren- und Körperschutz!</li> </ul>
<p>Portuguese <b>ATENÇÃO</b></p>	<ul style="list-style-type: none"> <li>● Não toque partes elétricas e electrodos com a pele ou roupa molhada.</li> <li>● Isole-se da peça e terra.</li> </ul>	<ul style="list-style-type: none"> <li>● Mantenha inflamáveis bem guardados.</li> </ul>	<ul style="list-style-type: none"> <li>● Use proteção para a vista, ouvido e corpo.</li> </ul>
<p>Japanese <b>注意事項</b></p>	<ul style="list-style-type: none"> <li>● 通電中の電気部品、又は溶材にヒブやぬれた布で触れないこと。</li> <li>● 施工物やアースから身体が絶縁されている様にして下さい。</li> </ul>	<ul style="list-style-type: none"> <li>● 燃えやすいものの側での溶接作業は絶対にしてはなりません。</li> </ul>	<ul style="list-style-type: none"> <li>● 目、耳及び身体に保護具をして下さい。</li> </ul>
<p>Chinese <b>警告</b></p>	<ul style="list-style-type: none"> <li>● 皮肤或湿衣物切勿接触带电部件及焊缝。</li> <li>● 使你自已与地面和工件绝缘。</li> </ul>	<ul style="list-style-type: none"> <li>● 把一切易燃物品移离工作场所。</li> </ul>	<ul style="list-style-type: none"> <li>● 佩戴眼、耳及身体劳动保护用具。</li> </ul>
<p>Korean <b>위험</b></p>	<ul style="list-style-type: none"> <li>● 전도체나 용접봉을 젖은 헝겊 또는 피부로 절대 접촉치 마십시오.</li> <li>● 모재와 접지를 접촉치 마십시오.</li> </ul>	<ul style="list-style-type: none"> <li>● 인화성 물질을 접근 시키지 마십시오.</li> </ul>	<ul style="list-style-type: none"> <li>● 눈, 귀와 몸에 보호장구를 착용하십시오.</li> </ul>
<p>Arabic <b>تحذير</b></p>	<ul style="list-style-type: none"> <li>● لا تلمس الأجزاء التي يمرى فيها التيار الكهربائي أو الإلكترود بجلد الجسم أو الملابس المبللة بالماء.</li> <li>● ضع عازل على جسمك خلال العمل.</li> </ul>	<ul style="list-style-type: none"> <li>● ضع المواد القابلة للاشتعال في مكان بعيد.</li> </ul>	<ul style="list-style-type: none"> <li>● ضع أدوات وملابس واقية على عينيك وأذنيك وجسمك.</li> </ul>

READ AND UNDERSTAND THE MANUFACTURER'S INSTRUCTION FOR THIS EQUIPMENT AND THE CONSUMABLES TO BE USED AND FOLLOW YOUR EMPLOYER'S SAFETY PRACTICES.

SE RECOMIENDA LEER Y ENTENDER LAS INSTRUCCIONES DEL FABRICANTE PARA EL USO DE ESTE EQUIPO Y LOS CONSUMIBLES QUE VA A UTILIZAR, SIGA LAS MEDIDAS DE SEGURIDAD DE SU SUPERVISOR.

LISEZ ET COMPRENEZ LES INSTRUCTIONS DU FABRICANT EN CE QUI REGARDE CET EQUIPMENT ET LES PRODUITS A ETRE EMPLOYES ET SUIVEZ LES PROCEDURES DE SECURITE DE VOTRE EMPLOYEUR.

LESEN SIE UND BEFOLGEN SIE DIE BETRIEBSANLEITUNG DER ANLAGE UND DEN ELEKTRODENEINSATZ DES HERSTELLERS. DIE UNFALLVERHÜTUNGSVORSCHRIFTEN DES ARBEITGEBERS SIND EBENFALLS ZU BEACHTEN.

			
<ul style="list-style-type: none"> <li>● Keep your head out of fumes.</li> <li>● Use ventilation or exhaust to remove fumes from breathing zone.</li> </ul>	<ul style="list-style-type: none"> <li>● Turn power off before servicing.</li> </ul>	<ul style="list-style-type: none"> <li>● Do not operate with panel open or guards off.</li> </ul>	<p><b>WARNING</b></p>
<ul style="list-style-type: none"> <li>● Los humos fuera de la zona de respiración.</li> <li>● Mantenga la cabeza fuera de los humos. Utilice ventilación o aspiración para gases.</li> </ul>	<ul style="list-style-type: none"> <li>● Desconectar el cable de alimentación de poder de la máquina antes de iniciar cualquier servicio.</li> </ul>	<ul style="list-style-type: none"> <li>● No operar con panel abierto o guardas quitadas.</li> </ul>	<p>Spanish <b>AVISO DE PRECAUCION</b></p>
<ul style="list-style-type: none"> <li>● Gardez la tête à l'écart des fumées.</li> <li>● Utilisez un ventilateur ou un aspirateur pour ôter les fumées des zones de travail.</li> </ul>	<ul style="list-style-type: none"> <li>● Débranchez le courant avant l'entretien.</li> </ul>	<ul style="list-style-type: none"> <li>● N'opérez pas avec les panneaux ouverts ou avec les dispositifs de protection enlevés.</li> </ul>	<p>French <b>ATTENTION</b></p>
<ul style="list-style-type: none"> <li>● Vermeiden Sie das Einatmen von Schweißrauch!</li> <li>● Sorgen Sie für gute Be- und Entlüftung des Arbeitsplatzes!</li> </ul>	<ul style="list-style-type: none"> <li>● Strom vor Wartungsarbeiten abschalten! (Netzstrom völlig öffnen; Maschine anhalten!)</li> </ul>	<ul style="list-style-type: none"> <li>● Anlage nie ohne Schutzgehäuse oder Innenschutzverkleidung in Betrieb setzen!</li> </ul>	<p>German <b>WARNUNG</b></p>
<ul style="list-style-type: none"> <li>● Mantenha seu rosto da fumaça.</li> <li>● Use ventilação e exaustão para remover fumo da zona respiratória.</li> </ul>	<ul style="list-style-type: none"> <li>● Não opere com as tampas removidas.</li> <li>● Desligue a corrente antes de fazer serviço.</li> <li>● Não toque as partes elétricas nuas.</li> </ul>	<ul style="list-style-type: none"> <li>● Mantenha-se afastado das partes moventes.</li> <li>● Não opere com os painéis abertos ou guardas removidas.</li> </ul>	<p>Portuguese <b>ATENÇÃO</b></p>
<ul style="list-style-type: none"> <li>● ヒュームから頭を離すようにして下さい。</li> <li>● 換気や排煙に十分留意して下さい。</li> </ul>	<ul style="list-style-type: none"> <li>● メンテナンス・サービスに取りかかる際には、まず電源スイッチを必ず切して下さい。</li> </ul>	<ul style="list-style-type: none"> <li>● パネルやカバーを取り外したままで機械操作をしないで下さい。</li> </ul>	<p>Japanese <b>注意事項</b></p>
<ul style="list-style-type: none"> <li>● 頭部遠離煙霧。</li> <li>● 在呼吸區使用通風或排風器除煙。</li> </ul>	<ul style="list-style-type: none"> <li>● 維修前切斷電源。</li> </ul>	<ul style="list-style-type: none"> <li>● 儀表板打開或沒有安全罩時不準作業。</li> </ul>	<p>Chinese <b>警告</b></p>
<ul style="list-style-type: none"> <li>● 얼굴로부터 용접가스를 멀리하십시오.</li> <li>● 호흡지역으로부터 용접가스를 제거하기 위해 가스제거기나 통풍기를 사용하십시오.</li> </ul>	<ul style="list-style-type: none"> <li>● 보수전에 전원을 차단하십시오.</li> </ul>	<ul style="list-style-type: none"> <li>● 패널이 열린 상태로 작동하지 마십시오.</li> </ul>	<p>Korean <b>위험</b></p>
<ul style="list-style-type: none"> <li>● ابعء رأسك بعيداً عن الدخان.</li> <li>● استعمل التهوية أو جهاز ضغط الدخان للنجار لكي تبعد الدخان عن المنطقة التي تنفّس فيها.</li> </ul>	<ul style="list-style-type: none"> <li>● اقطع التيار الكهربائي قبل القيام بأية صيانة.</li> </ul>	<ul style="list-style-type: none"> <li>● لا تشغل هذا الجهاز إذا كانت الاغطية الحديدية الواقية ليست عليه.</li> </ul>	<p>Arabic <b>تحذير</b></p>

**LEIA E COMPREENDA AS INSTRUÇÕES DO FABRICANTE PARA ESTE EQUIPAMENTO E AS PARTES DE USO, E SIGA AS PRÁTICAS DE SEGURANÇA DO EMPREGADOR.**

使う機械や溶材のメーカーの指示書をよく読み、まず理解して下さい。そして貴社の安全規定に従って下さい。

請詳細閱讀並理解製造廠提供的說明以及應該使用的銀焊材料，並請遵守貴方的有關勞動保護規定。

이 제품에 동봉된 작업지침서를 숙지하시고 귀사의 작업자 안전수칙을 준수하시기 바랍니다.

اقرأ بتعمق وافهم تعليمات المصنع المنتج لهذه المعدات والمواد قبل استعمالها واتبع تعليمات الوقاية لصاحب العمل.



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