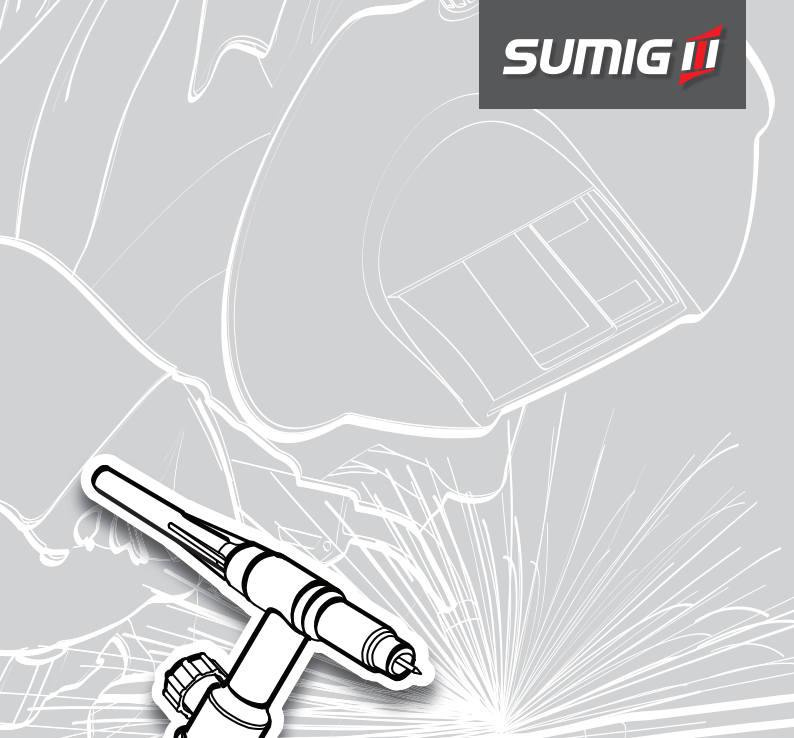




SUMIG III



**Manual de Instruções
Tochas TIG**

Português

**Instructions Manual
TIG Torches**

English

**Manual de Instrucciones
Antorchas TIG**

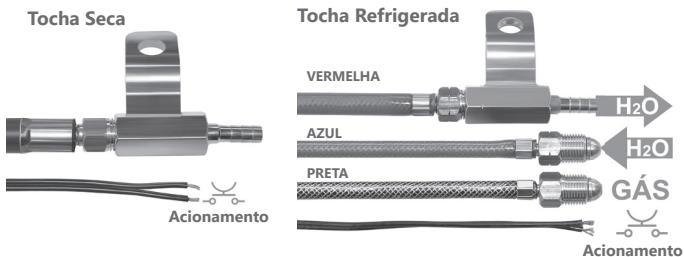
Español

Rev.03/2021-V1

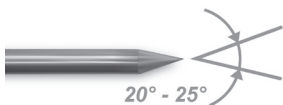


Antes de Utilizar as Tochas TIG

- **ATENÇÃO:** O acionamento da tocha não deve ser alimentado acima de 25 VCA ou 60 VCC.
- Conecte a tocha na máquina e assegure-se que todas as conexões estejam bem fixadas.
- A Conexão de força convencional deve ser isolada com termo retrátil, utilizando soprador térmico.



- Escolha o tipo de eletrodo mais adequado para a soldagem que será executada:



- Eletrodo de tungstênio puro (ponta verde).
- Eletrodo de tungstênio com 2% de tório (ponta vermelha).

A tabela ao lado mostra as indicações típicas de corrente elétrica para os principais tipos e diâmetros de eletrodos.

FAIXAS DE CORRENTE TÍPICAS PARA ELETRODOS DE TUNGSTÊNIO

Diâmetro do Eletrodo	CCPD amps	CCPR amps	Corrente Alternada com Alta Frequência	
	1% To/2% To	1% To/2% To	Puro	1% To/2% To Zirconado
0,25mm (0.010")	até 15	*	até 15	até 15
0,50mm (0.020")	5-20	*	10-20	5-20
1mm (0.040")	15-80	*	20-30	20-60
1,59mm (1/16")	70-150	10-20	30-80	60-120
2,38mm (3/32")	150-250	15-30	60-130	100-180
3,17mm (1/8")	250-400	25-40	100-180	160-250
3,97mm (5/32")	400-500	40-55	160-240	200-320
4,76mm (3/16")	500-750	55-80	190-300	290-390
6,35mm (1/4")	750-1000	80-125	250-400	340-525

Obs.: valores para utilização de argônio puro como gás de proteção

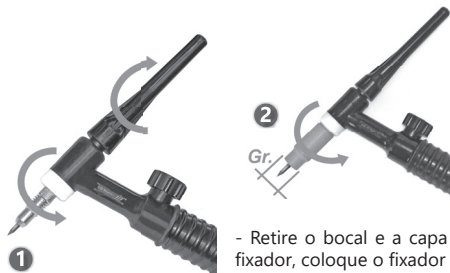
* Combinação não utilizada normalmente

CCPD - Corrente Contínua Direta Polaridade Negativa

CCPR - Corrente Contínua Reversa Polaridade Positiva



- Certifique-se que o fixador e o corpo fixador estão de acordo com o diâmetro do eletrodo escolhido.



- Retire o bocal e a capa longa, aperte o corpo fixador, coloque o fixador e o eletrodo na tocha.

- Coloque a capa longa e aperte até que o eletrodo esteja firme.

- Ajuste a vazão de gás utilizando fluxômetro.



- Certifique-se que haja vazão de água antes de utilizar tochas refrigeradas.

- Limpe e desengraxe as peças a serem soldadas.

- Proteja o ponto a ser soldado das correntes de ar.

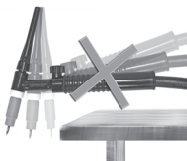


- Fixe a garra negativa na peça a ser soldada ou gabarito, desde que sejam mantidas boas condições de contato elétrico.

- Ajuste os parâmetros de soldagem, sempre observando os ciclos de trabalho recomendados para cada modelo de tocha Sumig, mencionados no catálogo do produto.



Conservação



- Não bater a tocha para retirar os respingos, sob risco de danificar seus componentes.

- Evite dobras em excesso das mangueiras de entrada e saída de água, nunca utilizando a tocha com o refrigerador desligado. Verifique periodicamente o nível de líquido no refrigerador.



- Evite puxões, quedas de peças pesadas, dobra em excesso e cortes sobre o cabo para não comprometer o isolamento elétrico, a passagem de gás, de arame e evitar vazamentos de água.

- Ao utilizar tochas com cabos longos, complete o nível da água no momento da instalação.

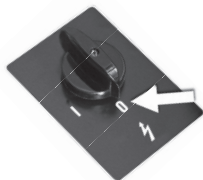
Pt

En

Es



Manutenção



- Certifique-se que o equipamento de solda está desligado e que a tocha esteja fria antes de realizar inspeção ou manutenção.



- Não prender a tocha na morsa, nem entortar o corpo da tocha sob risco de danificar seus componentes.



- Verifique o estado do isolamento elétrico do cabo, do corpo e outras peças isoladas. As peças danificadas devem ser substituídas. Não faça reparos provisórios. Consulte o catálogo de peças de reposição SUMIG.

- Verifique o estado dos anéis de vedação.

- Limpe o conector da tocha e também da máquina para que haja um bom contato elétrico.

- Complete a limpeza utilizando ar comprimido seco.



- Proteja o meio ambiente. Destine sempre as peças consumíveis para reciclagem.

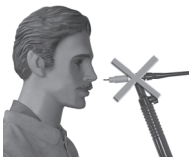
Pt

En

Es



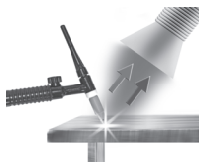
Segurança



- Não dirija a tocha para si ou para outras pessoas. Fagulhas, partículas metálicas e pontas de arame podem ferir os olhos.

- Use máscara de proteção. Arcos elétricos prejudicam a visão.

- Use luvas e roupa de proteção adequadas. Arcos elétricos queimam a pele.



- Não inalar os fumos provenientes da solda. Utilize EPI para Solda, máscara PFF2. Condição de instalação: A tocha deve ser utilizada em conjunto com o sistema de aspiração de fumos Sumig.



ATENÇÃO:

- Não soldar perto de líquidos inflamáveis. O arco elétrico da solda, em contato com líquidos inflamáveis causa incêndios.



- Não soldar sobre peças pintadas.

- Não soldar em ambientes muito úmidos ou sobre peças molhadas. Choques elétricos podem matar.

Pt

En

Es



Termo de Garantia

A Sumig Soluções para Solda e Corte Ltda, através do presente termo de garantia, garante, assegura, determina e estabelece o que segue:

- Garante que os produtos Sumig são fabricados sob rigoroso controle de qualidade ISO 9001:2008 e em conformidade com ABNT NR 10 e NR 12.
- Assegura o perfeito funcionamento e todas as características dos mesmos, quando instalados, operados e mantidos conforme orientações contidas no Manual de Instrução do respectivo produto.
- Garante a substituição ou reparo de qualquer parte ou componente do produto Sumig, desde que em condições normais de uso, que apresente falha devido a defeito de material ou de fabricação e se encontre durante o período da garantia designado para cada modelo.
- Estabelece que a obrigação do presente termo está limitada, somente, ao reparo ou substituição de qualquer parte ou componente do produto quando o defeito for devidamente comprovado pela Sumig.
- Determina que as peças sujeitas a desgaste ou deterioração causados pelo uso normal do produto ou qualquer outro dano causado pela inexistência de manutenção preventiva, não são cobertos pelo presente Termo de Garantia.
- Declara que a garantia não cobre qualquer produto Sumig que tenha sido alterado, indevidamente operacionalizado no seu processo, sofrido acidente ou dano causado por meio de transporte ou condições atmosféricas, instalação ou manutenção impróprias, uso de partes ou peças não originais, intervenção técnica de qualquer espécie realizada por pessoa não habilitada ou não autorizada pela Sumig, ou aplicação diferente a que o produto foi projetado.
- Estabelece que caso seja necessário serviço técnico Sumig para produtos considerados em garantia, a ser realizado nas instalações da Sumig, a embalagem e despesas com transporte (frete) correrão por conta e risco do consumidor.
- O período de garantia é de 1(um) ano, a contar da data de Emissão da Nota Fiscal da Venda, emitida pela Sumig ou seu revendedor autorizado.

Pt

En

Es



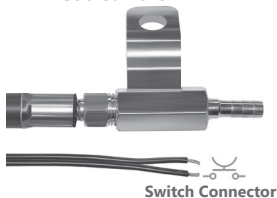
Before Using the TIG Torches

- **WARNING:** The torch switch should not have supplied voltage above 25 VAC or 60 VDC.

- Connect the torch to the machine and make sure that all connections are secure. All water connections are left handed threads to tighten turn counterclockwise.

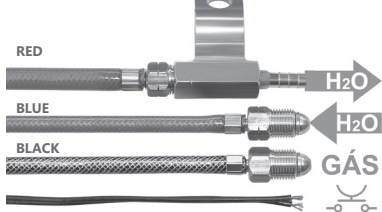
- The power block connection must be completely insulated with proper insulating material to isolate current.

Air Cooled Torch



Switch Connector

Water Cooled Torch



Switch Connector

- Choose the type of electrode most appropriate for the welding application that will be performed:

Pt



- Pure tungsten electrode (green tip).

- Tungsten electrode with 2% thorium (red tip).

En

- Use the correct tungsten alloy for the the appropriate weld application.

Es

The table shows the typical electrical current indications for the main types and diameters of electrodes.

TYPICAL CURRENT RANGE FOR TUNGSTEN ELECTRODES

Electrode Diameter	DCEN amps	DCEP amps	High Frequency Alternating Current	
	1% To/2% To	1% To/2% To	Pure	1% To/2% To Zirconado
0,25mm (0.010")	up to 15	*	up to 15	up to 15
0,50mm (0.020")	5-20	*	10-20	5-20
1mm (0.040")	15-80	*	20-30	20-60
1,59mm (1/16")	70-150	10-20	30-80	60-120
2,38mm (3/32")	150-250	15-30	60-130	100-180
3,17mm (1/8")	250-400	25-40	100-180	160-250
3,97mm (5/32")	400-500	40-55	160-240	200-320
4,76mm (3/16")	500-750	55-80	190-300	290-390
6,35mm (1/4")	750-1000	80-125	250-400	340-525

Note: values when using pure argon as shielding gas

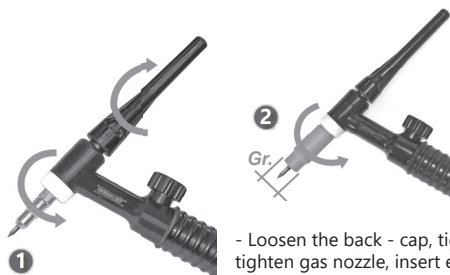
* Combination not normally used

DCEP - Direct Current Reverse Polarity

DCEN - Reverse Current Reverse Polarity



- Be sure the collet and the collet body match the diameter of the electrode.



- Loosen the back - cap, tighten the collet body, tighten gas nozzle, insert electrode to proper stickout and tighten back-cap.

- Tighten back cap until the electrode is firmly held.

Pt

En

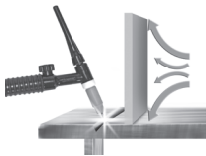
Es

Adjust the gas flow using a flow meter.



- Be sure there is adequate water flow before using the water-cooled torches.

- Clean and degrease the pieces that are to be welded; protect the tungsten point from contamination, avoid touching weld puddle or material.



- Tungsten will become contaminated if it comes in contact with air while hot.

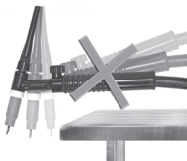
- Place the earth clamp on the part to be welded or the gauge, while ensuring there are good conditions for electrical contact.

- Adjust the welding parameters, do not exceed the recommended duty cycles for each of Sumig's torch models mentioned in the replacement parts brochure attached.



Maintenance

- Do not tap the torch to remove spatter. You may risk damaging the tungsten or the torch.



- Avoid excessive bending to the input and output water hoses. Never use a water-cooled torch with the water cooler off. Check the level of liquid in the water cooler and fill with proper mixture periodically.

Pt

- Avoid pulling, bending, cutting, and dropping heavy items on the electrical cable. This will avoid damaging the electrical insulation causing arc-outs and the flow of shielding gas as well as water leaking in water-cooled torches.

En

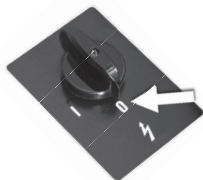


Es

- When using water-cooled torches with long cables, fill up the water level in the water cooler at the time of the installation. Run recirculator and then check water level again.



Maintenance



- Make sure that all welding equipment is turned OFF and the torch has cooled down completely before performing any inspection or maintenance.



- Do not use a bench vice, there is risk of damaging its components.



- Verify the condition of the electrical insulation on the cable, on the body, and other isolated parts. The damaged parts must be replaced. Do not make any temporary repairs. Consult Sumig's catalog of replacement parts.



- Check the condition of the O-rings.

- Clean the torch and machine connector, so that there is good electrical contact.

- Finish cleaning by using dry, compressed air.

- Protect the environment. Always properly dispose consumable parts for recycling.

Pt

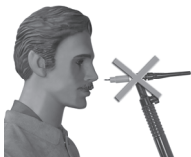
En

Es





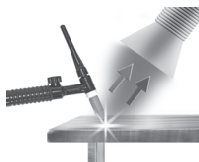
Safety



- Do not point the torch towards you or towards other people. Sparks, metallic particles, and the electrode point end may cause harm to the eyes.

- Wear approved eye protection. Electrical arcs may harm vision.

- Wear appropriate protective gloves and clothing. Electric arcs and radiant heat can burn the skin.



- Avoid inhaling fumes from welding. Use personal protective equipment for welding and PFF2 mask. The torch can be used in conjunction with a Sumig Fume Extraction system.



WARNING:

- Do not weld near flammable materials. Welding electrical arc can come in contact and start fires.

- Do not weld on painted parts.



- Do not weld in very humid places or over anything wet. Electrical shocks may cause serious injury or death.

Pt

En

Es



Warranty Conditions

Through the present warranty terms and conditions, Sumig guarantees, ensures, determines, and establishes the following:

- Guarantees that Sumig's products are manufactured under rigorous quality control and production standards.
- Ensures the proper functioning of all products and their features, when installed, operated and maintained according to instructions found in the Instruction Manual of the respective product.
- Guarantees the replacement or repair of any part or component of Sumig's products, operated within normal conditions, which is determined to be a defect of the material or manufacturing and is within the warranty period stated for each model.
- Sumig representative will decide to repair or replace any part or component of the product when the defect has been proven by Sumig to be defective and falls under terms of warranty.
- Excluded are parts subject to wear and tear caused by the normal use of any product, or any damage caused deliberately or accidental and or is caused by the absence of preventive maintenance not covered by the present terms of warranty.
- Declares that the warranty is nullified for any of Sumig's products if they have been altered in any way; damaged during transportation or undergone any sort of accident; installed improperly or maintained improperly; operated inadequately; used with any sub-standard non-original parts or pieces; worked on by any kind of non-regulated person not authorized by Sumig; or used in an application different than what they were designed for.
- Establishes that in the case of necessary technical servicing by Sumig for products not considered under warranty and performed at Sumig's facilities, the consumer shall be responsible for packaging and transportation costs (freight) to our facility.
- The period of warranty is 1 (one) year from the date of the Sales Invoice, issued by Sumig or its authorized sales representatives.

Pt

En

Es



Safety Precautions

Warning: Probability of death or serious injury. Read this manual carefully before installation and usage. The manufacturer has no responsibility for the inadequate use of the product. The equipment must be properly installed, used, and maintained.

Be aware of the possible risks of the welding process: Electric shock, gas cylinder explosion, fume and gas exposure, arc rays burns (eye and skin exposure).



1.1 ELECTRICAL SHOCK CAN KILL

- Training is important for a safe work environment.
- When installing or providing maintenance to any electrical equipment, the operator must follow the National Electrical Code (NFPA 70).
- Never repair the equipment with the power ON. Always disconnect the welding gun/torch from the power source when servicing it.
- Service must be done by trained personnel only.
- Turn OFF the equipment when it is not in use, which will help avoid electrical shock its consequences.
- Do not touch electrically live parts.
- Wear dry gloves; protective clothes; proper (nonconductive) shoes; and recommended safety equipment.
- Be sure the working area is clean and dry. Keep welding guns and torches away from water and chemicals not recommended for welding purposes.
- When welding in different positions, make sure you wear approved protective clothing.
- Never put electrodes, welding guns, torches, or cables in water. It can result in a dangerous electric shock.
- Be careful never to trigger the welding gun accidentally. Always turn OFF the welding equipment when not in use.
- Check the ground connections to ensure they are adequate for current requirements and are in good working condition.

Pt

En

Es

- Guns, holders, clamps, cables, and guns must be properly set up in accordance to the duty cycle for the work that will done. Always inspect the condition of the equipment and parts, keeping in mind your safety and the safety of others.
- Never allow two or more electrical parts to come together.
- Insulation is very important; observe the local and National Electrical Code (NFPA 70) when installing equipment.
- Always place warning signs around your welding area.



1.2 WELDING FUME AND GASES CAN BE DANGEROUS

- Dangerous fumes and toxic gases such as ozone, nitrogen dioxide, carbon monoxide, are associated with the welding process.
- Exposure to welding fumes and gases with little or no protection may cause illness or death.
- Use extraction equipment to remove fumes and gases from the working area.
- The welder must be protected by air-supplied respirator or other similar equipment when the ventilation is not adequate or when welding is done in a confined space. Be sure that breathing air is safe and air-supplied respirator is working correctly before entering a confined space.
- Solvents, degreasers, other clearing operations with chlorinated hydrocarbons, petroleum based liquids are potential sources of vapors which can form highly toxic gases and must be removed from the working area.
- Never ventilate with pure oxygen such as from a oxygen welding torch as it supports and accelerates fires; there is a serious risk of explosion.



1.3 ARC RAYS AND SPARKS CAN CAUSE SERIOUS BURN AND INJURY

- Welding processes produce heat, ultraviolet and infrared rays that can cause serious injury to the eyes and burn skin.
- Always wear a welding helmet in full compliance with federal rules; always use proper shade filters and protective lenses to protect the eyes from rays

Pt

En

Es

produced during the welding process.

- Make sure the helmet is placed over the face with no possibilities of the arc rays or their reflection entering the helmet.
- Place warning signs, shielding curtains, and have safety face shields with shade filter lenses available. The protection of others in the welding area is important.
- Never look directly into the welding arc without having appropriate eye protection.
- Wear protective, insulated gloves and shoes, and clothes resistant to heat and fire. Skin must be protected from heat, arc rays, and molten metals.
- Serious burns can occur from contact with hot metals; they should never be handled.
- Never have flammable solutions in the working area; there may be serious consequences.
- Protect your ears from noise and spatters.
- Protect others by clearly informing them that arc rays, sparks, and hot metals can cause serious injury to the eyes and skin.



1.4 NOISE CAN DAMAGE HEARING

- Protect the ears from noise; wear protecting hearing devices that are in accordance with U.S. standards and others.



1.5 RISK OF SERIOUS INJURY

- Keep your body, clothing, and tools away from the moving parts of the welding machine.

Pt

En

Es

WARNING: This product contains chemicals, including lead, known to the State of California - USA (California Health and Safety Code) to cause birth defects, other reproductive harm and in some cases, cancer. Wash hands after handling.

SAFETY / OPERATING REFERENCES

Code of Federal Regulations (OSHA) Section 29, Part 1910.95, 132, 133, 134, 139, 251, 252, 253, 254 and 1000. U.S. Government Printing Office, Washington, DC 20402.

AWS Z49.1 (ANSI) "Safety in Welding and Cutting"

AWS C5.6 "Recommended Safe Practices for Gas-Metal Arc Welding"

AWS F4.1. "Recommended Safe Practices for Welding and Cutting Containers".

AWS C5.1 "Recommended Practices for Plasma Arc Welding"

AWS C5.3. "Recommended Practices for Air Carbon-Arc Gouging and Cutting".

The American Welding Society, 550 NW Lejeune Rd., P.O. Box 351040, Miami, FL 33135.

ANSI Z41 "Standard for Personal Protection - Protective Footwear"

ANSI Z49.1 "Safety in Welding and Cutting"

ANSI Z87.1 "Practice for Occupational and Educational Eye and Face Protection"

ANSI Z88 .2 "Standard Practice for Respiratory Protection" Available from the American National Standards Institute, 11 W. 42nd St., New York, NY 10036

Code of Federal Regulations (OSHA) Section 29, Parts 1900-1910.999 and 1910.1000- Available from the U.S. Government Printing Office, Washington, DC 20402

CSA W117.2 "Safety in Welding, Cutting, and Allied Processes" Available from the Canadian Standards Association, 178 Rexdale Blvd., Rexdale, Ontario, Canada M9W 1R3

CGA Pub. P-1 "Safe Handling of Compressed Gas in Containers" Available from the Compressed Gas Association, 1725 Jefferson Davis Highway, Arlington. VA 22202-4100

NFPA51B "Fire Prevention in Cutting and Welding Processes"

NFPA-7. "National Electrical Code". National Fire Protection Association, Battery Park, Quincy, MA 02269.

Pt

En

Es



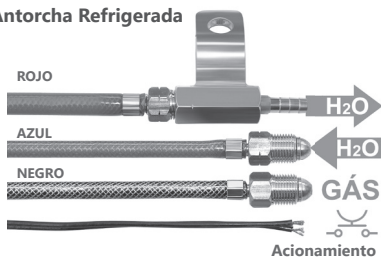
Antes de Utilizar la Antorcha TIG

- **PRECAUCIÓN:** El gatillo de la antorcha no debe de ser alimentado por encima de 25 VCA o 60 VCC.
- Conecte la antorcha a la máquina y asegúrese de que todas las conexiones estén bien apretadas.
- La conexión de fuerza convencional debe ser aislada con tubo termocontráctil, utilizando una pistola de calor.

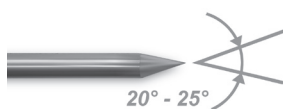
Antorcha Seca



Antorcha Refrigerada



- Escoja el tipo de electrodo más adecuado para la soldadura a ser ejecutada:



- Electrodo de tungsteno puro (punta verde)

- Electrodo de tungsteno con 2% de torio (punta roja)

La tabla a seguir da las indicaciones típicas de corriente eléctrica para los diferentes tipos y diámetros de electrodos.

FAJAS DE CORRIENTE TÍPICAS PARA ELECTRODOS DE TUNGSTENO

Diámetro del Electrodo	CCPD amps	CCPR amps	Corriente Alterna con Alta Frecuencia	
	1% To/2% To	1% To/2% To	Puro	1% To/2% To Con Zircón
0,25mm (0.010")	hasta 15	*	hasta 15	hasta 15
0,50mm (0.020")	5-20	*	10-20	5-20
1mm (0.040")	15-80	*	20-30	20-60
1,59mm (1/16")	70-150	10-20	30-80	60-120
2,38mm (3/32")	150-250	15-30	60-130	100-180
3,17mm (1/8")	250-400	25-40	100-180	160-250
3,97mm (5/32")	400-500	40-55	160-240	200-320
4,76mm (3/16")	500-750	55-80	190-300	290-390
6,35mm (1/4")	750-1000	80-125	250-400	340-525

Obs.: Valores para la utilización de argón puro como gas de protección

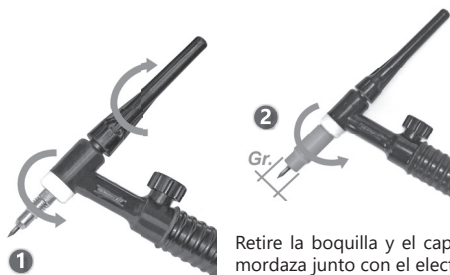
* Combinación no utilizada normalmente

CCPD - Corriente Continua Directa Polaridad Negativa

CCPR - Corriente Continua Directa Polaridad Positiva



Asegúrese de que la mordaza y la porta mordaza estén de acuerdo con el diámetro del electrodo elegido.



Retire la boquilla y el capuchón largo, instale la mordaza junto con el electrodo y apriete la porta mordaza en la antorcha.

- Coloque nuevamente el capuchón largo y apriete hasta que el electrodo esté firme.

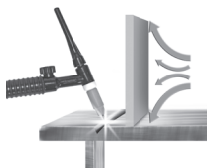
- Ajuster el caudal de gas utilizando fluxómetro.



- Asegúrese de que haya caudal de agua antes de utilizar antorchas refrigeradas.

- Limpie y desengrase las piezas a ser soldadas.

- Proteja el punto a ser soldado de las corrientes de aire.

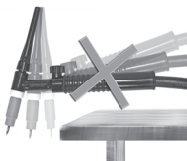


Fije la pinza negativa a la pieza a ser soldada o a la mesa, para que siempre se mantengan buenas condiciones de contacto eléctrico.

Ajuste los parámetros de soldadura, siempre observando los ciclos de trabajo recomendados para cada modelo de antorcha Sumig mencionadas en el folleto de repuestos del producto.



Conservación



- No golpee la antorcha para retirar las salpicaduras de soldadura, se corre el riesgo de dañar los componentes.

Pt

- Evite estirones, caídas de piezas pesadas, dobleces en exceso y cortes sobre el mango para no comprometer el aislamiento eléctrico, el paso de gas, de alambre y evitar fugas de agua.

En

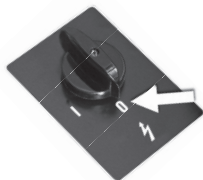


- Evite doblar en exceso las mangueras de entrada y salida de agua, y nunca utilice la antorcha con el recirculador de agua apagado. Verifique periódicamente el nivel de líquido refrigerante en el recirculador.

Es



Mantenimiento



Asegúrese de que el equipo de soldar está apagado y que la antorcha está fría antes de realizar alguna inspección o mantenimiento.



No encienda la antorcha cuando este en el tornillo de banco, bajo el riesgo de dañar sus componentes.



- Verifique el estado del aislamiento eléctrico del mango, del cable y de otras piezas aisladas. En ese caso se debe sustituir las piezas deterioradas. No haga reparaciones provisionarias. Consulte el catálogo de repuestos SUMIG.

- Verifique el estado de los anillos de sellado.

- Limpie el conector de la antorcha y también el de la máquina para que tenga un buen contacto eléctrico.

- Complete la limpieza usando aire comprimido seco.

- Proteja el medio ambiente. Destine siempre las piezas consumidas para reciclar.



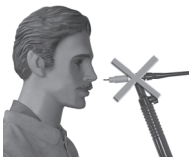
Pt

En

Es



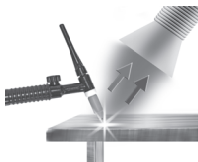
Instrucciones de Seguridad



- No dirija la antorcha hacia usted mismo o hacia otras personas. Chispas, partículas metálicas y puntas de alambre, pueden causar heridas en los ojos.

- Use máscara de protección. Arcos eléctricos perjudican la visión.

- Use guantes y ropa de protección adecuadas. Arcos eléctricos causan quemaduras en la piel.



- No inhale los humos de la soldadura. Use equipo de protección personal para la soldadura y la máscara PFF2. Condición para la instalación: La antorcha debe utilizarse junto con el sistema de extracción de humos de Sumig.

PRECAUCIÓN:



- No soldar cerca de líquidos inflamables. El arco eléctrico de soldadura en contacto con líquidos inflamables puede causar incendios.

- No soldar sobre piezas pintadas.



- No soldar en ambientes húmedos o sobre piezas mojadas. Choques eléctricos pueden causar serias lesiones e incluso la muerte.

Pt

En

Es



Garantía

La Sumig Soluciones para Solda e Corte Ltda., a través del presente termino de garantía, garantiza, asegura, determina y establece lo siguiente:

- Garantiza que los productos SUMIG son fabricados bajo un riguroso control de calidad y normas productivas.

- Asegura un perfecto funcionamiento y de todas las características de los mismos, cuando sean instalados, operados y mantenidos conforme orientaciones contenidas en el manual de instrucciones del respectivo producto.

- Garantiza la sustitución o reparo de cualquier parte o componente del producto SUMIG, que presente falla en condiciones normales de uso debido a defecto de material o de fabricación y si se encuentra durante el período de garantía designado para cada modelo.

- Establece que la obligación del presente termino está limitada, solamente, a la reparación o sustitución de cualquier parte o componente del producto cuando el defecto sea debidamente comprobado por SUMIG.

- Determina que las piezas bajo el desgaste o deterioro causados por el uso normal del producto o cualquier otro daño causado por la inexistencia de mantenimiento preventivo, no son cubiertas por el presente Termino de Garantía.

- Declara que la garantía es anulada en cualquier producto SUMIG que haya sido alterado, mal usado en su proceso, haya sufrido accidentes o daños causados durante su transportación o condiciones atmosféricas, Instalación o mantenimiento inapropiado, uso de piezas no originales, alteraciones técnicas de cualquier especie realizado o hecho por personas no capacitadas o no autorizadas por SUMIG, o sometida a aplicación distinta para la cual el producto fue planeado.

- Establece que en caso de ser necesario servicios técnicos SUMIG para productos considerados en garantía, deberán ser realizados en las instalaciones de SUMIG, el paquete y los costos con el transporte (flete) serán por cuenta y riesgo del consumidor.

- El periodo de garantía es de un año a partir de la fecha de emisión de la factura de venta hecha por SUMIG o su revendedor autorizado.

Pt

En

Es



Consulte peças de reposição em
See spare parts in
Consulte piezas de repuesto en

www.sumig.com/catalogo

For the United States, Mexico and Canada see www.sumigusa.com



4011.0175

SUMIG III

MATRIZ - BRASIL

- 🏠 Av. Ângelo Corsetti, 1281
Caxias do Sul - RS
- ☎ Fone/Fax: (54) 3220 3900
- 🌐 www.sumig.com
- ✉ sumig@sumig.com

FILIAL SP - BRASIL

- 🏠 Alameda Vênus, 360 - Indaiatuba - SP
- ☎ Fone: (19) 4062 8900

SUMIG USA

- 🏠 1504 Eagle Ct. Ste 8
Lewisville, TX, 75057
- ☎ +1 800 503 9717
- 🌐 www.sumigusa.com
- ✉ sumigusa@sumig.com