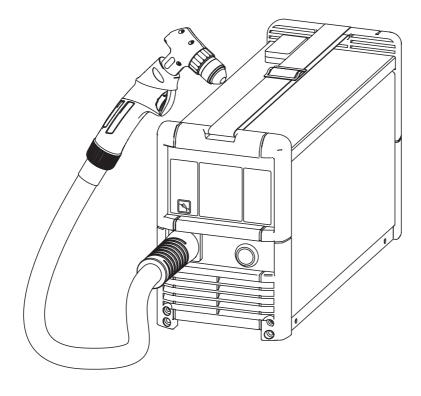
TransClean 130



Plasma cleaning device



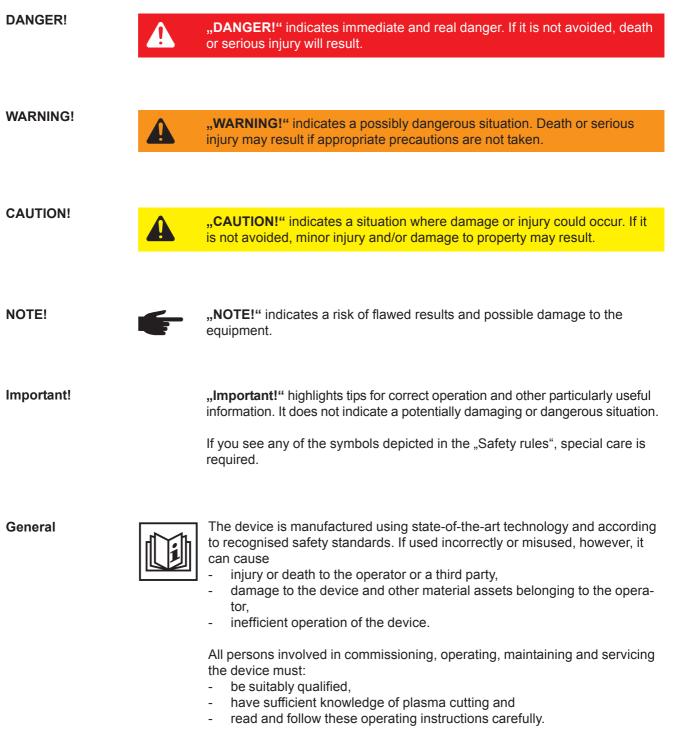
Dear Reader

Introduction

Thank you for choosing Fronius - and congratulations on your new, technically highgrade Fronius product! This instruction manual will help you get to know your new machine. Read the manual carefully and you will soon be familiar with all the many great features of your new Fronius product. This really is the best way to get the most out of all the advantages that your machine has to offer.

Please also take special note of the safety rules - and observe them! In this way, you will help to ensure more safety at your product location. And of course, if you treat your product carefully, this definitely helps to prolong its enduring quality and reliability - things which are both essential prerequisites for getting outstanding results.

Safety rules



The operating instructions must always be at hand wherever the device is being used. In addition to the operating instructions, generally applicable and local regulations regarding accident prevention and environmental protection must be made available and observed.

All safety and danger notices on the device

- must be kept in a legible state
- must not be damaged/marked
- must not be removed
- must not be covered, pasted or painted over.

1

General (continued)

Before switching on the device, remove any faults that could compromise safety.

Your personal safety is at stake!

Utilisation in accordance with "intended purpose"



The device is to be used exclusively for its intended purpose.

The device is designed exclusively for plasma cleaning. Utilisation for any other purpose, or in any other manner, shall be deemed to be "not in accordance with the intended purpose". The manufacturer shall not be liable for any damage resulting from such improper use.

Utilisation in accordance with the "intended purpose" also includes

- reading all operating instructions carefully and following them thoroughly
- studying and obeying all safety and danger notices carefully
- performing all stipulated inspection and servicing work.

The device is designed for use in industry and the workshop. The manufacturer accepts no responsibility for any damage caused through use in a domestic setting.

The manufacturer likewise accepts no liability for inadequate or incorrect results.

Environmental conditions



Operation and/or storage of the device outside the stipulated area will be deemed as "not in accordance with the intended purpose." The manufacturer shall not be liable for any damage resulting from such improper use.

Ambient temperature:

- during operation: -10 °C to + 40 °C (14 °F to 104 °F)
- during transport and storage: 25 °C to + 55 °C (-13 °F to 131 °F)

Relative humidity:

- up to 50 % at 40 °C (104 °F)
- up to 90 % at 20 °C (68 °F)

Ambient air: free from dust, acids, corrosive gases and substances, etc.

For use at altitudes above sea level: up to 2000 m (6500 ft)

Obligations of the operator



The operator undertakes to allow only such people to work with the device who:

- are familiar with the fundamental instructions regarding safety and accident prevention, and have been instructed on how to use the device
- have read and understood the "Safety rules" section and warning notices in these operating instructions, and then signed them to confirm this
- are trained to produce the required results.

Checks must be carried out at regular intervals to ensure that operators are working in a safety-conscious manner.

Obligations of personnel



Before using the device, all persons instructed to do so undertake:

to follow the basic instructions regarding safety at work and accident prevention

to read the "Safety rules" section and warning notices in these operating instructions, and sign them to confirm that they have understood them and will follow them.

Before leaving the work area, ensure that no-one or nothing can come to any harm in their absence.

Protecting yourself and others



- Anyone involved with plasma cleaning exposes themselves to numerous risks e.g.:
- parts may chip off
- arc radiation, which can damage eyes and/or skin
- hazardous electromagnetic fields, which risk the lives of those using cardiac pacemakers
 - risk of electrocution from mains current and operating current
- greater noise pollution
- harmful smoke and gases

Anyone who works on the workpiece while cleaning is in progress must wear suitable protective clothing with the following properties:

- flame-resistant
- insulating and dry
- cover the whole body
- undamaged and in good condition
- trousers with no turn-ups

Protective clothing refers to a variety of different items. Operators should:

- protect eyes and face from UV rays, heat and sparks with regulation protective goggles with side protection.
- wear solid footwear that provides insulation even in wet conditions
- protect the hands with suitable gloves (electrically insulated and providing protection against heat).

Insulated ear protection should be worn to reduce the harmful effects of noise and to prevent injury.



Keep all persons, especially children, out of the working area while devices are running or cleaning is in progress. If, however, there are people in the vicinity,

- make them aware of all the dangers (risk of dazzling by arc, injury from parts chipping off, inhaling smoke, noise, possible danger from mains or operating current, etc),
- provide suitable protective equipment and
- erect suitable safety screens/curtains.



The smoke produced during cleaning contains harmful gases and vapours.

This smoke contains substances which may, under certain circumstances, cause birth defects or cancer.

Hold your head away from any developing smoke or gases. Developing smoke and harmful gases

- must not be breathed in
- must be extracted from the working area using appropriate methods.

Make sure the area is well ventilated. Otherwise, a protective mask with air supply must be worn.

If there is any doubt about whether the extraction system is powerful enough, then the measured toxic emission values should be compared with the permissible limit values.

The following components are responsible, amongst other things, for the smoke's degree of toxicity:

- the composition of the surface
- coatings
- cleaners, degreasers, solvents etc.

The relevant material safety data sheets and manufacturer's specifications for the listed components should therefore be studied carefully.

Flammable vapours (e.g. solvent fumes) should be kept away from the arc's radiation area.

Danger from flying sparks



Never clean in the vicinity of flammable materials.

Flying sparks may cause fires or explosions.

Flammable materials must be at least 11 metres (35 ft) away from the arc, or alternatively covered with an approved cover.

A suitable, tested fire extinguisher must be available and ready for use.

Sparks and hot parts may also get into adjacent areas through small gaps or openings. Take appropriate precautions to prevent any danger of injury or fire.

Danger from mains current and operating current



An electric shock can be fatal. Every electric shock is potentially life threatening. Do not touch live parts either inside or outside the device.

Make sure that you and others are protected with an adequately insulated, dry temporary backing or cover for the earth or ground potential. This temporary backing or cover must extend over the entire area between the body and the earth or ground potential.

All cables and leads must be complete, undamaged, insulated and adequately dimensioned. Loose connections, scorched, damaged or inadequately dimensioned cables and leads must be repaired/replaced immediately. Danger from mains current and operating current (continued) Do not sling cables or leads either around the body or parts of the body.

Never immerse the plasma torch in liquids (e.g. for cooling purposes)

Arrange for the mains and device supply to be checked regularly by a qualified electrician to ensure the PE conductor is functioning properly.

The device must only be operated on a mains supply with a PE conductor and a socket with an earth contact.

If the device is operated on a mains without a PE conductor and in a socket without an earth contact, this will be deemed to be gross negligence. The manufacturer shall not be liable for any damage resulting from such improper use.

If necessary, provide an adequate earth connection for the workpiece.

Switch off unused devices.

Wear a safety harness if working at great heights.

Before working on the device, switch it off and pull out the mains plug. Attach a clearly legible and easy-to-understand warning sign to the device to prevent anyone from reconnecting it to the mains and switching it on again.

After opening the device:

- discharge all live components
- ensure that all components in the device are de-energised.

If work on live parts cannot be avoided, appoint a second person to switch off the main switch at the right moment.

EMC and EMF measures



It is the operator's responsibility to ensure that no electromagnetic interference occurs in electrical and electronic devices

If electromagnetic interference is detected, the operator is obliged to take action to rectify the situation.

Check for possible problems, and check and evaluate neighbouring devices' resistance to interference according to national and international requirements:

- safety components
- power, signal and data transfer lines
- computer and telecommunications devices
- measuring and calibrating devices

EMC and EMF measures (continued)



Supporting measures for avoidance of EMC problems:

a) Requirements for the mains connection

if electromagnetic interference arises despite correct mains connection, additional measures are necessary (e.g. use a suitable line filter).

High-performance devices can affect the quality of mains voltage through their current input. For certain types of device, therefore, there may be special application restrictions or minimum requirements in respect of the maximum permissible mains impedance (see Technical data). In this event the plant operator (if appropriate after consultation with the power supply company) must check whether the connection conditions are appropriate.

- b) Current-carrying cables and leads should be
- as short as possible
- run closely together (to avoid EMF problems)
- kept well apart from other leads
- c) Equipotential bonding
- d) Shield, if necessary
- screen off other devices nearby

Electromagnetic fields may pose as yet unknown risks to health:

- effects on other persons' health, e.g. those with pacemakers and hearing aids
- Those with pacemakers must seek advice from their doctor before approaching the device or when cleaning is in progress
- For safety reasons, keep distances between the cables and the operator's head/torso as great as possible
- Do not carry cables or hosepacks over the shoulders or wind them round any part of the body

Specific areas of
riskCovers and side panels may only be opened/removed while maintenance or repair work
is being carried out.

During operation

- ensure that all covers are closed and all side panels are fitted properly.
- keep all covers and side panels closed.



If steam is escaping from the plasma torch, a serious risk of injury exists (scalding of hands, body, face, eyes, etc.). The plasma torch should therefore be held away from the body at all times.



Never touch the workpiece or head of the plasma torch during or after cleaning - risk of burns.

Plasma torches and other parts with a high operating temperature must be allowed to cool down before handling.

8

Specific areas of risk (continued)



Special provisions apply in areas at risk of fire or explosion - observe relevant national and international regulations.



Power sources that are to be used in rooms/areas with increased electric risk (e.g. near boilers) must carry the "Safety" sign. However, the power source must not be located in such areas.



Use only suitable load-carrying equipment supplied by the manufacturer when transporting devices by crane.

If the device has a carrying strap or handle, this is intended solely for carrying the device by hand. The carrying strap is not to be used if transporting with a crane, fork-lift or other mechanical hoist.

Risks from the operation medium



The cartridge containing the operation medium (TransCut Liquid - 40,0009,0092) is under pressure and may burst if damaged. Protect the cartridge from direct sunlight, temperatures above 50°C, mechanical impact, naked flames, sparks and arcs.

Never use any operation medium unless it is in good condition and suitable for the application in question. A flammable gas/air mixture may develop during use.

Only use in well-ventilated areas, and never inhale an aerosol spray.

If the fluid gets into the eyes, rinse with copious amounts of water and seek medical attention if necessary. If swallowed, call a doctor immediately and show him/her the packaging or label.

Do not use force to open the operation medium cartridge and do not incinerate it, even when it is empty. Keep the cartridge in a well-ventilated place and out of the reach of children. Leave the protective cap on the cartridge when storing it. Do not refill the cartridge.

Do not dispose of the cartridge with domestic waste, and do not allow the operation medium to enter the waste water/sewage system. Full or part-full cartridges should only be disposed of as special waste. Only recycle completely empty and depressurised cartridges.

The manufacturer's instructions must be observed as well as applicable national and international regulations. A safety data sheet may be obtained from your service centre or downloaded from the manufacturer's website.

Safety measures at the installation location and during transport

A device that topples over can easily kill someone. Place the device on a solid, level surface. The maximum permissible slope is 10°.



Special regulations apply in rooms at risk of fire or explosion. Observe relevant national and international regulations.

Use internal directives and checks to ensure that the workplace environment is always clean and clearly laid out.

Only set up and operate the device in accordance with the degree of protection shown on the rating plate.

When setting up the device, ensure there is a clearance of 0.5 m (1.6 ft.) all round so that cooling air can enter and exit unhindered.

When transporting the device, observe the relevant national and local guidelines and accident prevention regulations. This applies especially to guidelines regarding the risks arising during transportation.

After transporting the device, and before commissioning, you MUST carry out a visual inspection to check whether it has been damaged in any way. Any damage must be repaired by trained service technicians before commissioning takes place.

Safety measures in normal mode



Only operate the device when all protection devices are fully functional. If the protection devices are not fully functional, there is a risk of

injury or death to the operator or a third party,

damage to the device and other material assets belonging to the operator,

inefficient operation of the device.

Any safety devices that are not functioning properly must be repaired before switching on the device.

Never bypass or disable protection devices.

Before switching on the device, ensure that no one is likely to be endangered.

- Check the device at least once a week for obvious damage and proper functioning of safety devices.
- Only use suitable original operation medium from the manufacturer.
- Always check the fill level of the operation medium before cleaning.

Maintenance and repair



It is impossible to guarantee that bought-in parts are designed and manufactured to meet the demands made on them, or that they satisfy safety requirements. Use only original replacement and wearing parts (also applies to standard parts).

Do not carry out any modifications, alterations, etc. without the manufacturer's consent.

Components that are not in perfect condition must be changed immediately.

When ordering, please give the exact designation and part number as shown in the spare parts list, as well as the serial number of the device. Disposal



Do not dispose of this device with normal domestic waste! To comply with the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment and its implementation as national law, electrical equipment that has reached the end of its life must be collected separately and returned to an approved recycling facility. Any device that you no longer require must be returned to your dealer, or find out about the approved collection and recycling facilities in your area.

Ignoring this European Directive may have potentially adverse affects on the environment and your health!

Safety Inspections



The operator is obliged to carry out a safety inspection of the device at least once every 12 months.

The manufacturer recommends that the power source is calibrated during the same 12 month period.

A safety inspection must be carried out by a qualified electrician

- after any changes are made
- after any additional parts are installed, or after any conversions
- after repair, care and maintenance has been carried out
- at least every twelve months.

For safety inspections, follow the appropriate national and international standards and directives.

Further details on safety inspection and calibration can be obtained from your service centre. They will provide you on request with any documents you may require.

Safety symbols



Devices with the CE marking satisfy the essential requirements of the low-voltage and electromagnetic compatibility directive (e.g. relevant product norms from the EN 60 974 series).

EMC device classes in accordance with EN/ IEC 60974-10



Class B devices comply with EMC requirements for industrial areas and residential areas with a direct power supply from the public low-voltage grid.

Class A devices are not designed for use in residential areas with a direct power supply from the public low-voltage grid. When Class A devices are used in such areas, problems may arise in terms of guaranteeing electromagnetic compatibility and with regard to both line-bound and radiated interference.

Copyright



Copyright of these operating instructions remains with the manufacturer.

The text and illustrations are all technically correct at the time of printing. We reserve the right to make changes. The contents of the operating instructions shall not provide the basis for any claims whatsoever on the part of the purchaser. If you have any suggestions for improvement, or can point out any mistakes that you have found in the instructions, we will be most grateful for your comments.

General

Principle

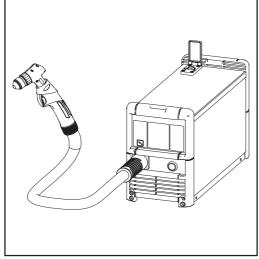


Fig.1 TransClean 130 plasma cleaning system

The TransClean 130 plasma cleaning system uses a fixed, handheld plasma torch.

This plasma torch is based on a system with regenerative cooling that uses a liquid operation medium rather than gas or compressed air.

The operation medium (TransCut Liquid) is transferred from the integrated tank to the plasma torch, where it is converted into gaseous form. The operation medium is held in practical cartridges that are easy to refill.

The plasma cleaning tool operates on the principle of a resonance inverter and offers a number of advantages:

- Outstanding cleaning properties
- Lightweight and compact
- Excellent portability
- **Device concept** The plasma cleaning system is small and compact, but at the same time so robust that it can function reliably even under harsh operating conditions. A powder-coated sheet-metal housing with protected controls allows the unit to satisfy the most stringent requirements. The carrying strap facilitates easy transportation, both in-house and on-site.

Uses The TransClean 130 plasma cleaning system is primarily used for portable applications on building sites owing to its integrated liquid operation medium supply and its compact design. But even when used as a stationary unit in workshops or industrial facilities, the device is a powerful and economical alternative.

- Building/facade cleaning
- Removing paint (graffiti)
- Removing algae, moss
- Automotive sheet-metal work/bodywork (cleaning corroded surfaces)
- Industrial plant and pipeline construction
- Metal and gantry construction / fitting shops and forges
- Maintenance

Control elements and connections

General

WARNING! Operating the equipment incorrectly can cause serious injury and damage. Do not use the functions described until you have thoroughly read and understood the following documents:

- these operating instructions
- all the operating instructions for the system components, especially the safety rules

Controls



Fig. 2 Controls

No. Function

(1) 'Standby' indicator

- flashes on and off while the device is in its warm-up and reheating phase
- flashes on and off while the plasma torch is in its cool-down phase
- lights steady when the device is ready for use

(2) Fill button

For filling the hosepack and plasma torch with the operation medium. Required every time the tank is filled and when the device has not been used for a while.

(3) Torch indicator

- comes on when wearing parts of the plasma torch are fitted incorrectly or worn
 comes on when the plasma torch's protective cap is fitted incorrectly
- (4) Fill level indicator
 - comes on when most of the operation medium has been used up. Keep a new cartridge of operation medium at the ready, or fill up the tank.
 - flashes on and off if the tank is empty

(5) Overtemperature indication

- comes on when the device is too hot
- (6) Error indication
 - comes on if a malfunction occurs

Connections

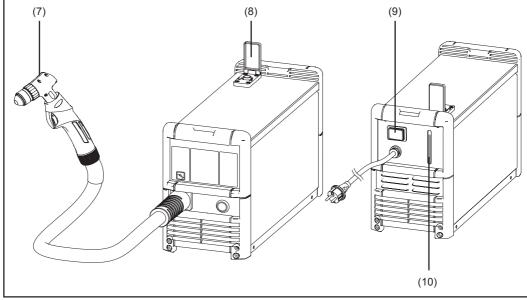


Fig. 3 Connections on the front and rear of the plasma cleaning device

No. Function

- (7) Plasma torch
- (8) Fill valve with safety clamp for topping up with operation medium
- (9) Mains switch
- (10) Fill level inspection glass

Before commissioning

General

- **WARNING!** Operating the equipment incorrectly can cause serious injury and damage. Do not use the functions described until you have thoroughly read and understood the following documents:
 - these operating instructions
 - all the operating instructions for the system components, especially the safety rules

Utilisation in accordance with "intended purpose" The device is designed exclusively for plasma cleaning.

Utilisation for any other purpose, or in any other manner, shall be deemed to be "not in accordance with the intended purpose". The manufacturer shall not be liable for any damage resulting from such improper use.

Utilisation in accordance with the "intended purpose" also includes

- following all the information in the operating instructions
- carrying out all the specified inspection and servicing work

Setup regulations

WARNING! A machine that topples over or falls from its stand can easily kill someone. Place device on a solid, level surface in such a way that it remains stable.

The power source is tested to IP 23S, meaning:

- protection against ingress of solid bodies with diameters greater than 12.5 mm (.49 in.)
- Protection against direct sprays of water up to 60° from the vertical

You can therefore set up and operate the device outdoors in accordance with IP 23S. If it is raining or snowing, however, the machine must not be used. Built-in electrical parts must be protected from direct wetting.

Mains connection

The device is designed to run at the mains voltage indicated on the rating plate. The required mains supply fuse protection can be found in the "Technical data" section. If there is no mains cable or mains plug on your machine, fit one that conforms to national standards.



NOTE! Inadequately dimensioned electrical installations can lead to serious damage. The incoming mains lead and its fuse must be dimensioned to suit the local power supply. The technical data shown on the rating plate applies.

Generator-powered operation

The device is completely generator-compatible, provided the maximum apparent power delivered by the generator is at least 4 kVA.



NOTE! The voltage supplied by the generator must never rise above or fall below the mains voltage tolerance specified in the "Technical data" chapter.

Commissioning

General

WARNING! An electric shock can be fatal. If the device is plugged into the mains supply during installation, there is a high risk of very serious injury and damage. Only carry out work on the machine when

- the mains switch is in the "O" position,
- the device is unplugged from the mains.

Fill the tank and hosepack

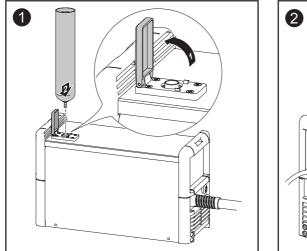
CAUTION! Danger of scalding from escaping steam. Hold the plasma torch so that it points away from your face and body.

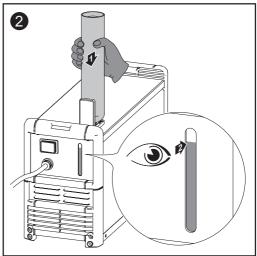
Each time the device is started you should check that there is sufficient operation medium in the tank. When filling the tank, make sure that the filling valve is free of dust and other dirt and that the plasma torch is at the same level as the machine.



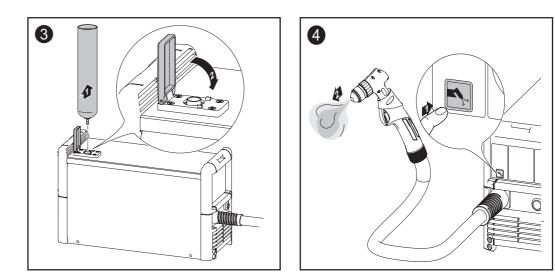
NOTE! Danger of damage from leaking operation medium. If the tank is overfilled, surplus operation medium will run off via the underside of the device. Any materials that are sensitive to liquids must not be stored in the immediate vicinity of the device, and it may be wise not to fill the tank to the brim.

Before starting the cleaning process make sure that the device and plasma torch are filled with operation medium.





Fill the tank and hosepack (continued)



Cleaning

General

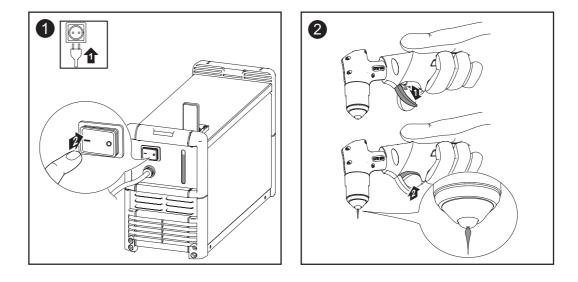
WARNING! Operating the equipment incorrectly can cause serious injury and damage. Do not use the functions described until you have thoroughly read and understood the following documents:

- these operating instructions
- all the operating instructions for the system components, especially the safety rules



- **CAUTION!** Danger of injury or damage from escaping steam and hot parts chipping off. When you press the cleaning button
 - Hold the plasma torch so that it points away from your face and body
- Do not point the plasma torch at people

Igniting the plasma jet



Cleaning

Important! We recommended that you practice cleaning on a location that is hidden from view before starting to clean in earnest.

No special handle is needed when cleaning surfaces. Just a little practice can achieve great results.

Cleaning tips:

- To begin with, clean the workpiece of any particularly coarse soiling. Then clean the entire area to achieve a clean and uniform surface.
- Do not target a single point on the workpiece with the plasma torch for too long.

CAUTION! Danger of burns from hot plasma torch. The plasma torch must be allowed to cool down before it can be cleaned or any wearing parts are replaced. Switch the device off and allow the plasma torch to cool down.

The wearing parts and the plasma torch become extremely hot even after operating for just a short time. These high temperatures mean that the nozzle and electrode are subject to a certain amount of wear.

Before the device is started the wearing parts should always be checked for damage and wear. The following illustrations can be used to determine whether or not wearing parts need to be replaced.

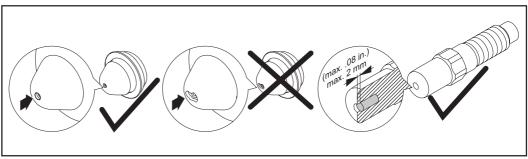
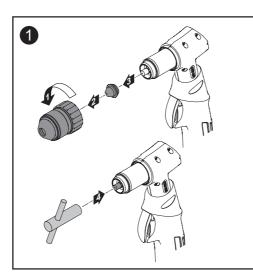
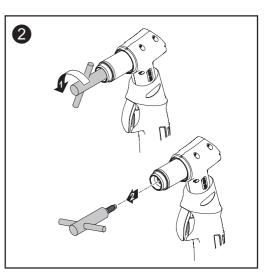
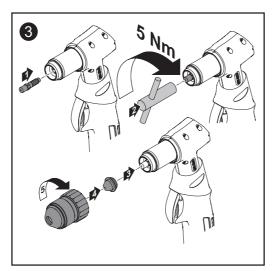


Fig. 6 Wearing parts

No tools are needed for replacing wearing parts other than the special spanner which was supplied with the device. Undo the torch cap by hand with the aid of a pair of gloves. Next, remove the nozzle and, if appropriate, unscrew the electrode.







Troubleshooting

General

- **WARNING!** An electric shock can be fatal. Before opening the unit • Turn the mains switch to the "O" position
 - Unplug the unit from the mains
 - Put up an easy-to-understand warning sign to stop anybody inadvertently switching it back on again
 - Using a suitable measuring instrument, check to make sure that electrically charged components (e.g. capacitors) have discharged

CAUTION! Inadequate PE conductor connections can cause serious injury and damage. The housing screws provide a suitable PE conductor connection for earthing (grounding) the housing and must NOT be replaced by any other screws that do not provide a reliable PE conductor connection.

Fault diagnosis	Reduced cleaning performance			
	Cause: Remedy:	Very long mains lead extension Use shorter mains lead extension		
	Cause: Remedy:	Wearing parts are worn excessively Replacing wearing parts		
	Arc breaks during cleaning			
	Cause: Remedy:	Wearing parts are worn excessively Replacing wearing parts		
	Cause: Remedy:	Very long mains lead extension Use shorter mains lead extension		
	Cause: Remedy:	Insufficient generator output Use more powerful generator		
	Steam escaping between body of torch and protective cap			
	Cause: Remedy:	Protective cap fitted to plasma torch incorrectly Tighten protective cap on plasma torch		
	Cause: Remedy:	Nozzle cone dirty or damaged Clean or replace the nozzle		

Displayed service codes	Excess temperature indicator lit		
	Cause: Remedy: Fill level indic	Device overheating Leave device switched on and wait until it has cooled down. The indicator is turned off automatically as soon as the device is ready for operation again.	
	Cleaning can nevertheless continue		
	Cause: Remedy:	Most of the operation medium in the tank has been used up Keep a cartridge of operation medium at the ready or refill tank	

B

Displayed service codes (continued)	Fill level indicator flashing Cleaning can no longer be continued		
	Cause: Remedy:	No operation medium in tank Refill with operation medium	
	Torch indicator lit		
	Cause: Remedy:	Protective cap fitted to plasma torch incorrectly Fit protective cap correctly	
	Cause: Remedy:	Wearing parts on plasma torch fitted incorrectly Fit wearing parts correctly	
	Cause: Remedy:	Wearing parts faulty or worn Replacing wearing parts	
	Error indicator lights up		
	Cause: Remedy:	Internal machine fault Switch device off and on again. If the error recurs after the device is switched on again you should notify After-Sales Service immediately.	

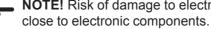
Care, maintenance and disposal

General

Under normal operating conditions the cooling unit requires only a minimum of care and maintenance. However, it is vital to observe some important points to ensure the plasma cleaning system remains in a usable condition for many years.

WARNING! An electric shock can be fatal. Before opening the unit Turn the mains switch to the "O" position Unplug the unit from the mains Put up an easy-to-understand warning sign to stop anybody inadvertently switching it back on again Using a suitable measuring instrument, check to make sure that electrically charged components (e.g. capacitors) have discharged **CAUTION!** Danger of burns from hot plasma torch. Do not attempt to clean the plasma torch or replace any wearing parts until the plasma torch has cooled down. At every start-up Check wearing parts of torch and replace them as necessary Check fill level of operation medium and top up as necessary **NOTE!** Use only original operation medium from the manufacturer when filling the device. Other operation media are not suitable and can damage the device. Check the mains plug, mains cable and plasma torch for damage Check whether the all-round clearance of 0.5 m (1 ft. 8 in.) is kept to ensure that the cooling air can easily flow and escape **NOTE!** Air inlets and outlets must never be covered, not even partially. **Every 6 months** Dismantle device side panels and clean inside of device with dry reduced compressed air NOTE! Risk of damage to electronic components. Do not bring air nozzle too

Disposal



Dispose of in accordance with the applicable national and local regulations.

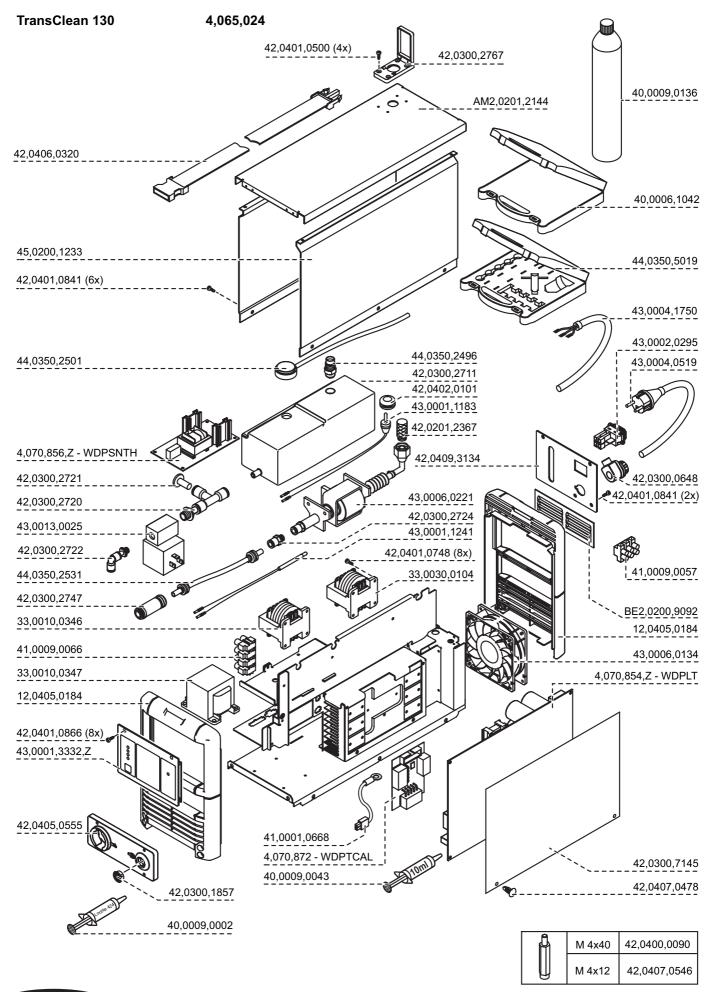
Technical data

Special voltages For devices designed for special voltages, the technical data on the rating plate applies.

TransClean 130

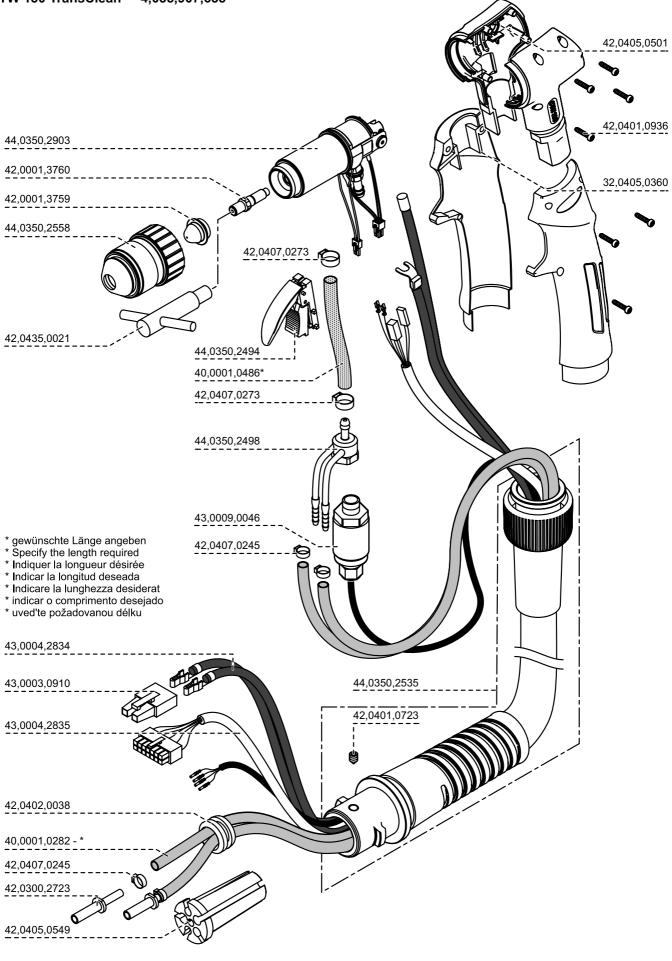
Maina valtaga	230 V
Mains voltage	
Mains voltage tolerance	+ 10 % / -15 %
Mains frequency	50 / 60 Hz
Mains fuse protection	16 A slow-blow
Cos phi	0.99
Operating current	13 A
Tank capacity	1.5
	0.4 gal
Operating time (per tank)	approx. 3 hrs.
Degree of protection	IP 23S
Marks of conformity	CE
Safety symbols	S
EMC device class	A
Dimensions I x w x h	460 x 180 x 275 mm
	18.11 x 7.09 x 10.85 in.
Length of the plasma torch	4.7 m
	15 ft. 5 in.
Weight (including plasma torch)	14.6 kg
/	32.19 lb.

D Ersatzteilliste Schaltplan
GB Spare Parts List Circuit Diagram
F Liste de pièces de rechange Schéma de connexions
Lista parti di ricambio Schema
E Lista de repuestos Esquema de cableado
P Lista de peças sobresselentes Esquema de conexões
NL Onderdelenlijst Bedradingsschema
N Reservdelsliste Koblingsplan
CZ Seznam náhradních dílů Schéma zapojení
(RUS) Список запасных частей Электрическая схема
SK Zoznam náhradných dielov Schéma zapojenia





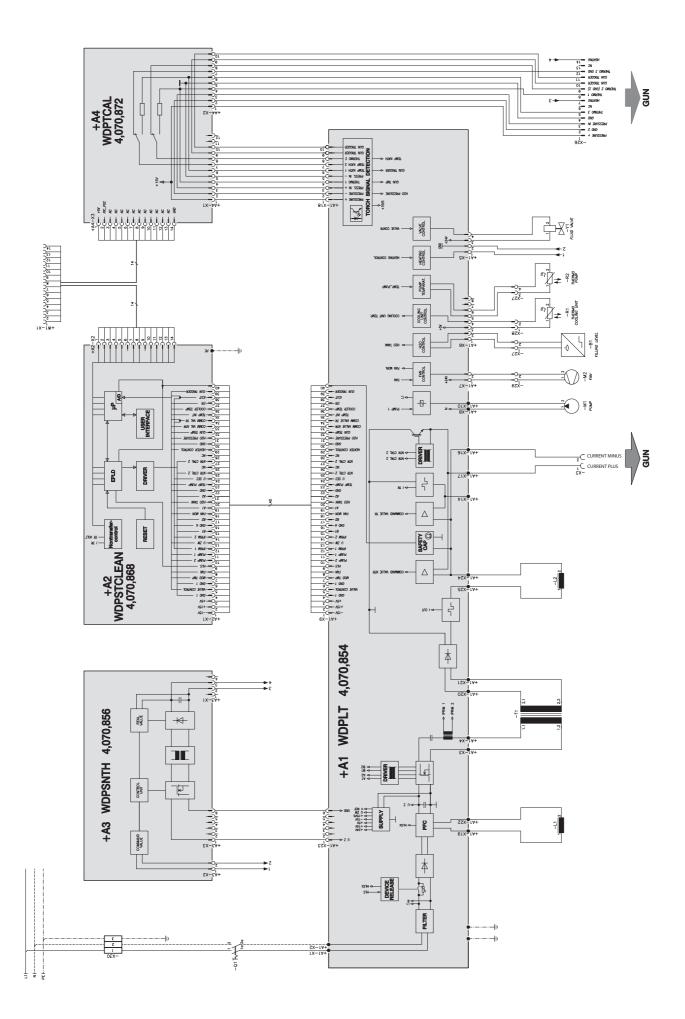
TransClean 130



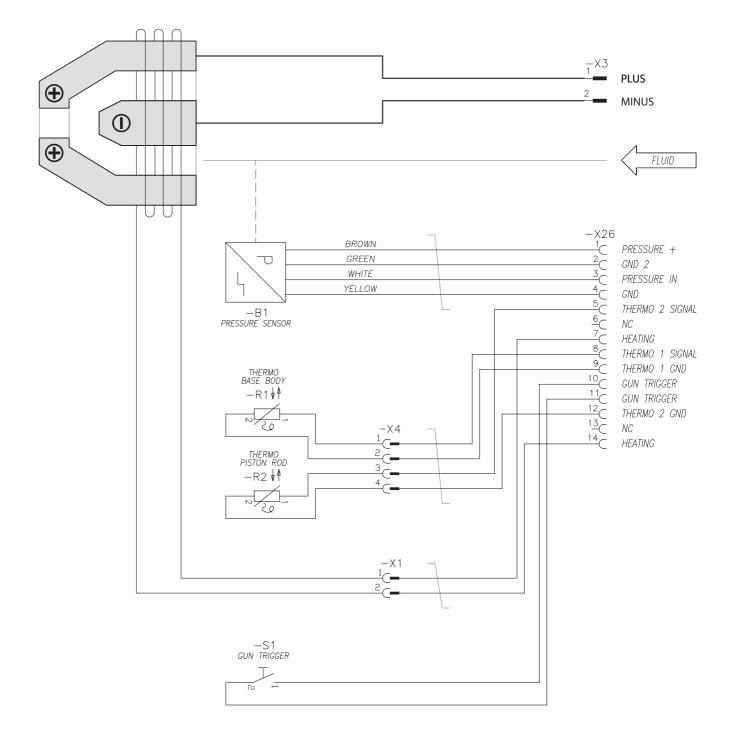


CTW 130

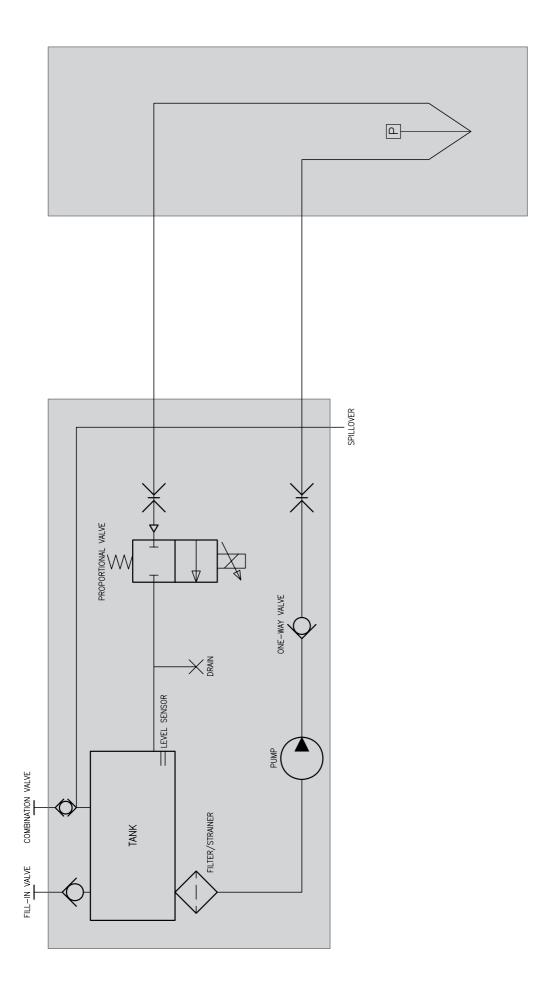
TransClean 130 - plasma cutting device



TransClean 130 - cutting torch



TransClean 130 - functional principle





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