

CE

ACROS 80SX/150SX

CNC CUTTING TABLE

 **PRITEC**



Manual



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1. General information

Before using this machine, you must first read and understand the operating instructions completely.

This manual contains important information about the proper installation, operation, and maintenance of the equipment described herein. There are several risks of injury or property damage involved in the use of any CNC cutting table. Anyone who comes into contact with the installation, maintenance or operation of the CNC cutting table should be fully familiar with the contents of this manual. To protect against personal injury or property damage, please follow the following directions and instructions in this manual.

Each PRITEC CNC cutting table is produced in accordance with the Machinery Directive 2006/42/EC. Each CNC cutting table comes with a manual including a maintenance overview. These should be well stored and maintained.

Because continuous improvements are made to the equipment in order to improve quality, PRITEC reserves the right to change specifications of the equipment described in the manual.

1.1 Introduction

This manual will help you get started when commissioning your PRITEC ACROS. Read the manual carefully so that you can make full use of your cutting table and cut out the most amazing products.

1.2 How does the process work?

The table has a control program. You can install this program on your laptop by following the steps in this guide.



2. Safety instructions

2.1 Basic principle of safety in the workplace

Most accidents occur because safety regulations are not taken into account or ignored. Safety equipment such as guards, safety goggles, dust masks, hearing protection, etc. reduce the risk of accidents. However, even the best safety precautions do not protect you in the event of poor judgment, inattention or carelessness. Pay attention at all times in the workshop and use common sense. When something seems too dangerous, don't try it, but find a safer solution, even if it may take more time. Remember: your personal safety is your own responsibility.

The user of the machine must be sure of the following:

Persons operating the machine have received instructions/training and have been made aware of the dangers and safety regulations.

The safety regulations are observed and can preferably also be read at the workplace. For this reason, the manual is a part of the machine and should be kept within easy reach of the machine at all times. When the machine is resold, the manual must be handed over!

2.2 Basic safety rules for working with machines

1. Make sure you understand this manual before you start using the machine. Failure to follow this instruction may result in serious bodily injury, property damage, and/or damage to the machine.
2. Make sure you have read and understood all the warnings in this manual and those printed on the machine. Failure to comply with these warnings may result in serious bodily injury.
3. Replace warning labels when they are no longer legible or removed.
4. This machine is designed and intended for use by professional and experienced staff. If you are not familiar with the use of the machine, do not use it until you have gained sufficient experience and knowledge.
5. Do not use this machine for any purpose other than that for which it is intended. If this does happen or if the machine is modified, the warranty will be void and the manufacturer will not be liable for any damage or injury caused as a result.
6. Use ANSI approved safety goggles or face mask at all times when operating this machine.
7. Do not wear jewelry, loose-fitting clothing and/or watch while using the machine, as they may grip in grabbing parts. Long hair should be tied up or tucked into a hairnet. Wearing non-slip footwear or applying anti-slip strips to the floor is recommended.
8. Do not use this machine when you are tired or under the influence of alcohol/medication/drugs.
9. Check that the main power switch is in the 0 position (OFF) before connecting the machine to the power supply.
10. Never use this machine outdoors or expose it to rain and/or moisture.
11. Never operate the machine in a hazardous working environment. Use of power tools in humid environments or in the rain may cause electrocution.
12. Make sure the machine is properly grounded.
13. When an extension cord is used, be sure that it is in good condition and that it can handle the power of the machine. An extension cord that is too light can cause loss of power and overheating. Refer to the EN 60204-1:2006 standard for the correct size. This depends on the length of the cord and the specifications of the machine.
14. When carrying out repairs or maintenance on the machine, the plug must be unplugged from the power supply.



15. Use only accessories and fasteners prescribed by the manufacturer, the use of other accessories/fasteners may cause damage to the machine and/or bodily injury.
17. Remove materials, tools, wrenches and the like from the machine before it is put into operation.
18. Keep safety panels in place at all times when the machine is in use. If these are removed for maintenance, transport, etc., they must be replaced before the machine is put back into service. Before use, check that all safety panels and/or guards are in place.
19. Do not force the workpiece and/or the machine. Doing so may result in damage to the machine and/or bodily injury.
20. If a defect occurs during the start-up or use of the machine, the operator must stop the machine and report the defect to the workshop manager or the technical service.
21. When the machine is not in use, it must be switched off.
22. Observe the prescribed maintenance and inspection instructions at all times, which can be found in the user manual.
23. Make sure the machine is securely secured to a solid, stable surface.
24. Check the machine for defective parts before each use. Before using the machine, it must be checked that a damaged part is still functioning properly and can perform its intended function. Check the alignment of moving parts, the connection of moving parts, broken parts, assembly, and other phenomena that may affect the operation of the machine. In the event of a defective part or protection panel, the machine must be taken out of service until the affected part has been repaired or replaced, this should only be done by an authorised company/technician and defective parts should only be replaced with original PRITEC parts, which are available from your PRITEC point of sale.
25. Make sure there is enough obligation and space around the workplace.
26. Keep the floor around the machine free of sharp materials, oil and grease.
27. Keep visitors at a safe distance from the workplace and keep children away.
28. Make your workshop "child proof" by working with padlocks on the main switches and by removing keys when the machine is not in use.
29. Focus your full attention on your work. Looking around, having conversations, etc., distracts your attention, which can result in serious injuries.
30. At all times, make sure that you have a firm footing and that you never reach over so that you cannot fall into the machine or other moving parts.
31. Never overload the machine. Use the machine at the correct speed and feed rate. Do not force the machine to perform a task for which it is not intended.
32. Maintain your machine carefully. Keep it clean and replace worn parts for the best and safest performance. Follow the instructions for cleaning, lubrication, and replacing parts.
35. Switch off the machine before cleaning or servicing the machine. Use a brush or compressed air to remove dust, chips, chips, and debris, not your hands.
36. Do not stand on the machine. If it falls over, serious injury can occur.
37. Never leave the machine unattended. Turn off the power and do not leave the machine until it has come to a complete stop, as this may cause unauthorised injury.
38. Remove loose objects and unnecessary workpieces from the workstation before starting the machine.

2.3 Specific Safety Regulations for CNC Cutting Tables













1. Do not operate the machine until it has been assembled and installed according to the instructions in this user manual.
2. If you are not familiar with a CNC cutting table or have never worked with it before, please be instructed and/or guided by an experienced/specialized person first.
3. Follow all technical requirements and prescribed electrical connections.
4. Use the guards and guards at all times, check in advance that they are in place and functioning properly.
5. Keep fingers, hands and arms away from the gears and other rotating parts.



6. Avoid strange controls and hand positions where unexpected slipping may result in contact with the plasma head.
7. Never start the machine with the plasma head against the workpiece.
8. If necessary, use an extraction system if the room is not well ventilated.
9. Support long or wide workpieces with material supports/roller stands.
10. Disconnect the machine from the power supply before making any adjustments, installing or removing accessories, or when servicing or repairing the machine.
11. Remove the machine from the power supply and clean the machine and working environment before leaving it.
12. We recommend using the following Personal Protective Equipment (PPE): safety shoes, gloves and goggles.











2.4 Description of Warning Stickers


	CAUTION: Place the CNC cutting table in a well-ventilated area and on a stable surface. Melting metals can cause unpleasant odors and smoke during cutting.		CAUTION: Unplug the power cord in case of emergency or short circuit.
	WARNING: HOT, DO NOT TOUCH The plasma cutter head and cut-out workpieces reach high temperatures during cutting. Make sure everything has cooled down before touching these parts again. Or use the right gloves and PPE for this.		Safety goggles mandatory
	WARNING: MOVING PARTS Be careful with your fingers and other parts of the body when the cutting table is operating. The moving parts of your PRITEC ACROS can potentially cause damage. Do not touch the rotating parts of the cutting table when it is in use.		Safety shoes mandatory
	WARNING: Do not place the cutting table near flammable materials.		Gloves required
	CAUTION: Be careful with electrical voltage. The control box is powered with 220 volts AC and the output voltage is 24 volts DC.		Using the instructions for use
	WARNING: KEEP THE CNC CUTTING TABLE NEARBY WHEN IT IS IN USE.		PLEASE NOTE: The emergency stop is mounted on the control box, it must be within reach at all times during operation.



3. Accessory checklist

Description	Number	
Power cord	1	
USB cable	1	
Cable guide with S-hook	1	
Cable Retention Straps	3	
Laptop mount 3-piece + 4x M5x16 incl. nut and washer (optional)	1	
Cutting strips	Acros 80SX 10 Acros 150SX 22	
Machine leveling feet	4	
Control cable THC controller	1	



Switching control cable on/off plasma cutter	1	
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4. Technical Specifications

4.1 Machine specifications

	Acros 150SX	Acros 80SX
Table dimensions (LxWxH)	1880 x 1260 x 1150 mm	1200 x 1100 x 1100mm
Total weight	109 kg	80 kg
Cutting surface	1500 x 1000 mm	800 x 1000 mm
Cutting range	X-axis: 850mm Y-axis: 1415mm Z-axis: 65mm	X-axis: 635mm Y-axis: 850mm Z-axis: 65mm
Nutrition	220V ~50hz 360W	220V ~50hz 360W
Working voltage	24V DC	24V DC

4.2 Minimum laptop specifications

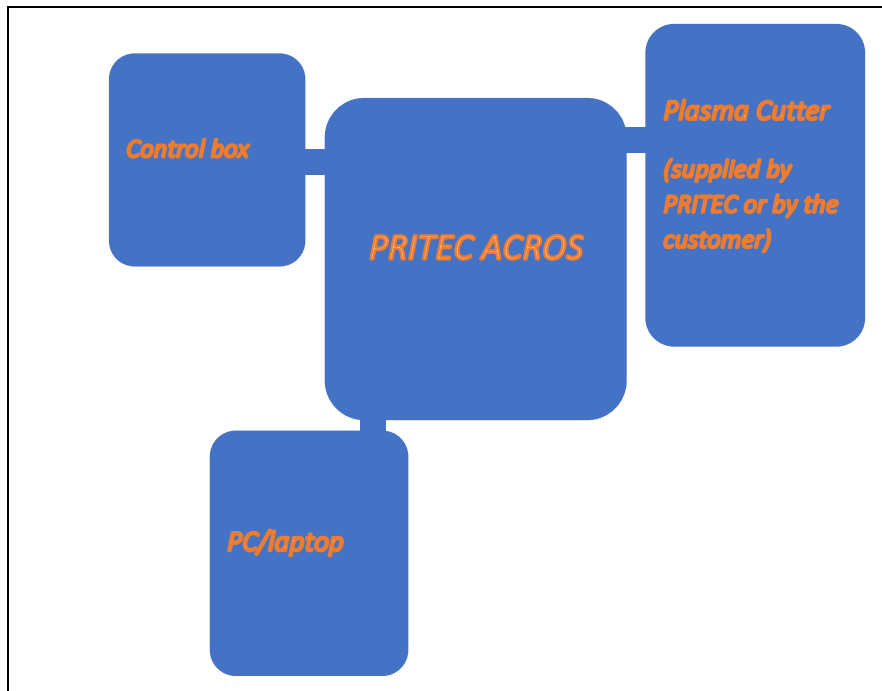
32-bit Version of Windows 2000, Windows XP, Windows Vista, or Windows 7 Operating System
1Ghz CPU.
512MB RAM.
Non-integrated video card with 32MB RAM
1 x USB

4.3 Air Supply Plasma Cutter

Refer to the plasma cutter manual for air supply requirements. We recommend placing an air dryer in the air supply for a better cutting result.



4.4 Machine layout



5. Machine assembly

Tools required for assembly:

- Allen wrench 3.5 and 7 mm
- Spanner 13 mm 2x
- Spanner 24 mm 2x
- Level

Follow the instructions of the assembly drawing on the manuals page on our website.





5.1 Transport and storage

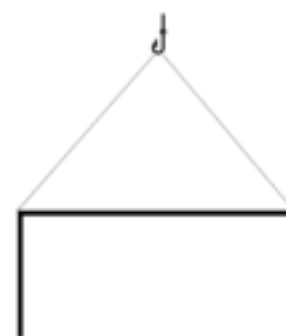
Transporting material

When loading/unloading or transporting the equipment at the workplace, you must use suitable means of transport and hoisting (e.g. crane/forklift, truck). Ensure that the components are carefully lifted and transported so that they cannot fall, taking into account the package size, weight, center of gravity, and fragile parts. Use a forklift or pallet jack to transport the package (Figure 1).



When the machine is out of the packaging, use a lifting strap or round sling to transport the machine (figure 2).

Figure 2



Storage and stacking of packages

Packages containing the machine should be stored in a covered area, out of direct sunlight and low humidity, at a temperature between -10°C and 40°C. Stack up to 3 packages on top of each other.

Unpack

When the machine is delivered, check the package immediately for possible damage as a result of transport and storage. Check that the contents of the package are complete using the parts list and drawing. In the event of damage during transport, the customer must inform the transport company immediately. Packages should be opened with attention to safety, keep a safe distance when opening tires, and be careful not to let any parts fall out of the package during opening.



6. Software Installation

1. Download the software on our website <https://pritec-automation.com/pages/downloads>
2. Check out the instructions <https://pritec-automation.com/pages/instructies-myplasm>

7. Start-up

1. Connect the USB cable to the control box and to your PC.
2. Plug the power cable into the control box and turn on the red switch.
3. Open the software on the PC.
4. Connect to the machine at the top right of the screen.
5. With the arrow keys on your PC you can now operate the machine.

7. 1 Testing

PAY ATTENTION! Make sure the table is level before you start testing.

1. Make sure the plasma cutter is **turned off**.
2. Open a file (see the software manual **Acros CNC system**).
3. Place a plate on the table.
4. Control the machine to the desired position where you want to start cutting. Make sure there is enough space. To be on the safe side, steer to the center of the plate.
5. Refer to the X, Y and Z axis (see the software manual **Acros CNC system**).
6. Select a zero point and press the Play icon (see the software manual).
7. When this is done without complications, you can turn on the plasma cutter and set it to the correct number of amps. Then press Play again and the workpiece will be cut out.

8. Maintenance overview

The following maintenance measures should be carried out on a regular basis:

- Clean and oil the guide rail and rack.
- Oils the conductors.
- Remove built-up melt parts from the cutting strips.
- Empty and clean the water bowl.
- Clean and oil the spindle of the Z-axis.
- Lubricate the guide blocks.



9. Problem Detection

9.1 The machine does not turn on

- Check the power cable of the control box.
- Check that the control box switch is turned on.
- Check the fuse at the power input of the control box.

9.2 Control does not work

- Check that the emergency stop is activated.
- Check the USB cable.

9.3 Plasma cutter does not cut through the material

If the plasma cutter does not deliver good cutting quality, it can have the following causes:

- Check that the negative terminal of the plasma cutter is in good contact with the workpiece to be cut.
- The material is too thick to cut through.
- The distance between the workpiece and the plasma cutter head is too large.
- The cutting speed is too fast.
- The pierce delay is too low.
- The amperes of the plasma cutter are not set correctly.
- The plasma nozzle is worn or incorrect.

For more troubleshooting, please refer to the software manual.

10. Warranty

- The warranty comes into effect on the date stated on the purchase receipt and is valid for 12 months.
- The warranty is not transferable without a written statement of consent from your supplier.
- No warranty claim can be made without a purchase receipt.
- Warranty only applies if the product is used in accordance with the supplied operating instructions and only for the purpose for which it was designed.
- The warranty does not cover damage caused by improper assembly, installation, use, cleaning, use of detergents, maintenance, or repair.
- No modifications should be made to the product.
- The warranty does not apply in the event of improper use.
- Any shipping costs are not covered by the warranty provision
- Repairs should be carried out exclusively by your supplier. Any repair(s) carried out by third parties will void the warranty claim.
- Repair during the warranty period will not extend the validity. However, a three-month warranty on the repair is issued if the regular warranty period expires.
- Any maintenance work to be carried out, described in the operating instructions, must be carried out in a timely manner.
- For warranty, you can only go to the point of sale where you bought the item.



EC - Declaration of Conformity

Manufacturer

Trade name

Pritec Automation

Address

Kiefteweg 11, 7121 LX Aalten, Netherlands

Product

Product Name

Pritec

Definition

CNC Cutting Table

Model/Serial Numbers

ACROS 80 ACROS 80S

ACROS 80SX ACROS 150 ACROS 150S

ACROS 150SX

Applied guidelines

2006/42/EC - Machinery Directive

2014/35/EU - Low voltage

Statement

We hereby declare that the above product (series) complies with the guidelines / standards mentioned in this statement.

CE Responsible:

P. Prinsen

Date:

10-11-2020

Pritec Automation

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Signature