Operation Manual
MasterCut 120 CNC

Before starting work every person using or responsible for maintenance work on this device should familiarize with the entire content of these operating manual. This will optimize the use of device potential.

Attention! Prior commencing work, familiarize yourself with the user manual.

Table of contents:

1. Introduction

Thank you for buying the Inverter Plasma Cutter MasterCut 120 CNC MOST. Prior commencing work please familiarize yourself with the user manual. MasterCut 120 CNC is designed for quality plasma jet cutting of metal sheets of up to 20 mm thick (for black steel). We do believe that this product will meet your requirements. This manual may be supplemented with a training conducted by our qualified personnel. If you are interested, please contact the nearest branch of the **RYWAL-RHC** Group.

Recykling

In accordance with Directive 2012/19 / EU WEEE 11 (WEEE - Waste Electrical and Electronic Equipment), after decommissioning, the device must be recycled by a specialized company.
Do not dispose of worn-out equipment with domestic waste!

2. Health and Safety Manual

	Use and maintenance of plasma cutter may be dangerous. To avoid accidents user must observe health and safety regulations. Cutting machines may be used only by qualified personnel. Keep up to date with the national regulations regarding the device operation and accident prevention.
	Remove all combustible materials from the cutting zone before starting work. Do not cut in tanks where flammable liquids (fuel) were stored previously. Place all combustible materials away from cutting spatter. Cutting may be carried out in properly ventilated rooms equipped with permanent or mobile filtering devices.
	Electricity. Correct operation of the device is possible only after a correct installation. Disconnect the device before longer breaks in its usage. Do not leave the equipment unattended. Always make sure that the installation is grounded.

	Operator’s skin is exposed to a risk of contact with plasma arc radiation and aggressive substances. Wear suitable protective clothing. Pay attention to the protection of bystanders against UV radiation emitted by the plasma arc. During the cutting process, harmful gases and fumes are generated. Use respiratory protection. Noise generated during cutting may damage your hearing. Use personal hearing protection.
	Persons with a pacemaker are not allowed to work with this device.
	Danger of burns. Never touch the materials while cutting or shortly after finishing without protective (welding) gloves. Avoid skin contact with particles floating in the air. Do not direct the plasma torch against other persons.
	Keep a fire extinguisher close to the cutting location. After finishing cutting check work station against fire hazard.
	Do not cut without proper eye protection. Pay attention for providing safety for bystanders against welding radiation. Applied eye protection should have minimum 10 DIN safety glasses. Do not direct the plasma torch against faces of other persons.
	Electromagnetic interference The device may influence other devices sensitive to electro-magnetic interference (robots, computers, etc.) Always ensure that the devices within the cutting work station are resistant to interference. For the purpose of limiting interference, it is recommended to use cables as possible and arranged in parallel. Always work in a distance at least 100 m from other sensitive devices. Always make sure that the installation is grounded. In case of interference issues with other devices, properly shield the cables oruse appropriate filters.

ATTENTION!

The following user manual should be read prior installing and starting the device. Manual
OSH manual should be known to every operator and employee responsible for equipment maintenance.

Attention!

Commissioning and normal operation are possible only after reading the carefully reading following manual. Cutting with plasma arc requires fulfilment of conditions resulting from fire regulations. The operator of semi-automatic cutter should be supplied with protective clothing and equipment in accordance with current regulations. It is necessary to use a set of personal protective equipment (PPE) in accordance with according to provisions of the Council Directive 89/686/EEC. Personal protective equipment (PPE) includes: welding mask, welding glasses, welding gloves, welding apron, leather shoes, hearing protectors. Despite the high technical standard of the device, the personnel should represent considerable discipline in approach to health and safety requirements to protect against harmful and health hazardous factors developed from cutting technology.

OPERATING CONDITIONS

This device can operate under severe conditions. It is however important to apply simple preventive measures to ensure long and reliable work:

- do not place or use this device on an inclined surface (of more than 15°),
- do not use the device for pipe defrosting,
- the device needs to be located in a place with free clean air circulation free clean air circulation (to and
- from the fan without obstacles). When connected to electrical network
- the device must not be covered e.g. with a tilt,
- minimize the amount of dirt and dust that can get into the device,
- device has an IP23S protection rating of housing, keep it dry and not locate
- on wet surfaces or in a puddle.
- do not use the device for cutting tanks previously used for flammable substances storing, as there is a
- risk of explosion,
- device is designed to work in industrial conditions and is marked as class A according to PN-EN 60974-10

GASES AND FUMES

Plasma cutting techniques produce harmful gases and fumes containing ozone and hydrogen as well as oxides or metal particles. Therefore, the cutting work station should be fitted with very good ventilation (dust and smoke extraction or airy location) Metal surfaces intended for cutting should be free from chemical contamination, especially degreasers (solvents) that decompose during welding process and produce toxic gases. Cutting of galvanized, cadmium-coated or chromium-plated parts is permitted only when a suction and filtering device is fitted, and with introduction of fresh air to the cutting work station.

RADIATION

Ultraviolet emission radiated when cutting is harmful to eyesight and skin. Therefore a welding mask with protective filters is required.

Cutting work station should meet certain requirements and include:
- adequate lighting system,
- fixed or movable protection screens, governing bystanders (depending on requirements),
- against radiation effects
- location with wall colour providing appropriate for radiation absorption.

FIRE PROTECTION

Cutting work station should be located at a safe distance from flammable materials placed especially on the floor or walls. All flammable materials need fire protection against hot metal drops. It is recommended to fit the work station with fire blankets and fire extinguishers eg powder or snow type.

PROTECTION AGAINST ELECTRIC SHOCK

It is unacceptable to connect the device to an improper installation or to an installation with unverified zeroing efficiency. It is prohibited to use of device with shields removed or remove the external shields while the device is connected to electric network. It is not allowed to work on a suspended device (e.g. using a crane or a gantry). Only authorized persons should perform maintenance and repair works keeping it in compliance with the safety conditions applicable to renovation equipment. The device is marked with the [S] sign which means the possibility of working in an environment with an increased risk of electric shock.

ATTENTION!

Device idling voltage U0 = 380 V, which complies with PN-EN 60974-1 for plasma cutters. Be especially careful when replacing spare parts or the welding torch.

MAINTENANCE

ATTENTION!

In order to carry out any repair or maintenance activity, it is recommended to contact your nearest technical support of **RYWAL-RHC** - a list of authorized service shops is located on the last page of this manual. Any signs of damage should be reported immediately.

The most important issue is the maintenance of the plasma torch. Regularly remove splashes that stick to the cover and the nozzle. Worn parts should be replaced immediately with new ones (electrodes, nozzles, swirl ring - diffuser, covers). Regularly check the patency of channels in the swirl ring. If clogged - should be cleaned (e.g. with compressed air), if it does not bring any improvement, the diffuser should be replaced with a new one. Poor condition of the diffuser affects the cutting quality and may cause damage to the device.

In case the torch cables are damaged, it should be replaced immediately with new ones, as there is a risk of electric shock (high voltage of idling).

General maintenance (daily):

- check the condition of cables and connections, replace if necessary,
- check the condition of high-speed torch parts. If necessary, replace it with new ones. It is recommended that simultaneous replacement of used nozzles and electrodes is performed.
- check condition of plasma torch, replace if necessary,
- check condition and operation of the cooling fan; keep the cooling air inlet and outlet openings clean,
- keep the device clean.

Periodic maintenance (every 3 months at least)

Periodic maintenance frequency can be increased depending on the environment conditions of the device location:

- using the vacuum cleaner to remove dust from the outside of the housing and from the inside of the cutter - do not use compressed air cutter for cleaning,
- check and tighten all the screws,
- check the state of all electrical contacts and correct if necessary.

Mandatory device checks

According to the Labour Code provisions: „All responsibility for the safe use of machinery and equipment shall be borne by the owner."
This results in the obligation to perform periodic and post-repair checks and inspections of equipment. The scope of these tests is defined by PN-EN 60974- standard.
Periodic tests are carried out at least once a year (legal basis PN-EN ISO 17662 clause 4.2), and post-repair tests after each repair that restored welding functionality (legal basis: PN-EN 60974-4 clause 4.6).
All above services re performed by the technical support of **RYWAL-RHC.**

UWAGA!

Sieć zasilająca i sprężone powietrze musi być odłączona od urządzenia przed każdą czynnością konserwacyjną i serwisową. Po każdej naprawie wykonać odpowiednie sprawdzenie w celu zapewnienia bezpieczeństwa użytkowania.

3. Installation and use

The user is responsible for connecting the cutter in accordance with the operating instructions. In the event of electromagnetic interference, the user should rectify the cause. In the event of repeated problems, contact the manufacturer.
Before using the equipment, operator should estimate the possible impact of disturbances on the environment, in particular the presence of persons with pacemakers or hearing aids.
Work with a plasma generator is acceptable, but it must meet certain requirements. It is recommended to use a unit with an asynchronous generator. If the aggregate does not provide adequate power, this results in lowering the arc parameters or turning off the cutter.

Ground cable

It is recommended to use wires as short as possible, placed close to each other, preferably on the floor level or as close to it as possible.

Location of plasma cutter

Observe the following rules:
- ensure easy access to connections, wires and switches.
- do not place the cutter in small, confined spaces.
- do not place the cutter on surfaces with an inclination greater than 15 degrees.

Device installation:
- connection or repair of the device may only be carried out by trained personnel,
- connection of several cutters (in series or in parallel) is forbidden,
- before removing the covers of the device, always disconnect the charger from the power supply,
- periodically carry out the necessary cleaning and maintenance,
- ensure that power and ground are sufficient and adequate.
- before cutting starts, check the condition of the cables and repair or replace them
- in case of damage.
- make sure to use correct spare parts for your plasma torch,

4. Technical data and accessories

Technical parameters	**Unit**	
Electrical power supply	[V/Hz]	3x400/50-60
Network security	[A]	32 A
Max current I_1	[A]	34,7
Max effective current I_{1eff}	[A]	27,8
Idling gear voltage U_0	[V]	380
Cutting current (DC=100%) 1_2	[A]	100
Cutting current (DC=60%li) 1_2	[A]	120
Cutting current (DC=60%) 1.1_0	[A]	120
Maximum thickness of qualitative cutting for black steel	[mm]	20
Air work pressure	[bar]	5,5
Max air pressure	[bar]	8,5
Air consumption	[l/min]	295
Arc ignition		pneumatic-contact
Current adjustment		steeples
Housing protection class		IP23S
Class according to standard EN 60974-1; -10		Class A
Dimensions (H x W x L)	[mm]	240x440x675
Weight	[kg]	32,4

Table 1: MasterCut 120 CNC MOST. Technical parameters

5. Requirements for compressed air supply

- recommended compressed air pressure 5.0 to 8.5 bar.
- approx. air consumption <300 l/min.
- compressed air must be dry and clean.
- compressed air minimum temperature: 3°C.
- maximum oil content is 0.1 mg/m3.
- maximum particle size in the air: 15 microns.
- compressor tank minimum size: 100 litres.
- do not use oil-lubricated air. It may damage the plasma torch.

ATTENTION!

It is recommended to use an additional air dryer at the device inlet, e.g. AT-1000. Complaints on quick parts wears or short circuit in plasma cutter torch, where no additional air dryer was installed will be considered negatively.

Accessories available:

Figure 1: AT-1000 filter and the way of fixing it to the device gas quick coupling.

1	AT-1000 air filter with fixing	617610 5302
2	Paper insert for AT-100	617610 5303
3	AT-1000 filter adaptor (Inlet-outlet fittings)	617610 5304
Accessories available for ordering in each **RYWAL-RHC** branch (see page 24)		

Table 2: MasterCut 120 CNC MOST. Accessories available.

ATTENTION!

Using of improperly cleaned or moist air will result in shorter service life of parts or may damage the torch.

6. The main parts of the device.

Panel przedni i tylni

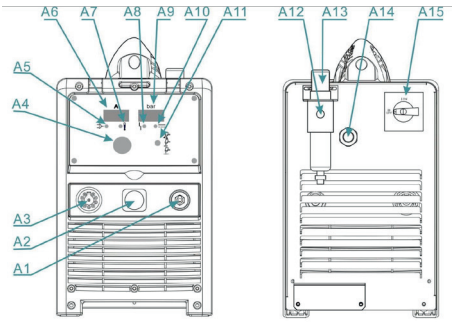

Figure 2: Main parts

Pos.	Description
A1	Mass wire socket
A2	Remote control connector (on request)
A3	Plasma torch socket
A4	Cutting current knob (A)
A5	Power ON LED - ON lights up when device is connected to the network
A6	Cutting current values display
A7	LED indicates overheating of the device. In this case - leave the device turned ON to cool down
A8	Error LED: 1. Flashing - no nozzle cover or cover fitted incorrectly 2. Lit - low compressed air pressure
A9	Manometer
A10	Activity LED of the plasma torch Lights up when button is pressed, the torch is energized
A11	Work mode switch Setting the compressed air pressure Cutting
A12	Air connection
A13	Pressure regulator with filter
A14	Power cord mounting
A15	ON/OFF switch

Table 3: MasterCut 120 CNC MOST. Device construction

7. Torches

Machine torch M-125

Gas cooling

Duty Cykle 60%	125 [A]
Gas	Air/N2
Gas pressure	5,0-6,0 [bar]
Gas flow	295 [l/min]
Ignition	without HF

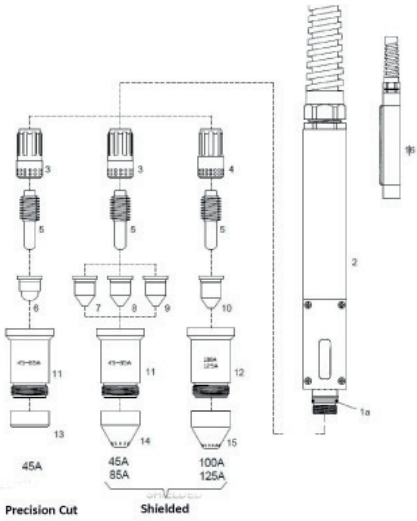

Figure 3: Machine torch M-125 MOST

607610 6071 Start kit M-125 MasterCut 120 CNC

Pos.	Code	Name	Quantity
3	607610 5792	Swirl ring - 45-85A Max Life	1
5*	607610 5794	Electrode - 45-125A	10
6	607610 5795	Nozzle 45A PrecisionCut	2
7	607610 5796	Nozzle 45A	2
8	607610 5797	Nozzle 65A	2
9	607610 5798	Nozzle 85A	2
10	607610 5799	Nozzle 105A	2
10*	607610 5800	Nozzle 125A	5
13	607610 5803	Torch cover 5A	1
14	607610 5804	Torch cover 45-85A TM	1

Table 4: MasterCut 120 CNC MOST. Torch start kit M-125 (607610 6071)

Pos.	Code	Description
	607610 6130	Machine torch M-125 1.3 m Coax MasterCut 120 CNC
	607610 6132	Cable Package 6,7m M-125
	607610 6071	Starter kit M-125
1*	607610 5789	Torch Head M-125
1a*	607610 5790	O-Ring Torch Head M-125
2*	607610 5791	Fibreglass Positioning M-125
3	607610 5792	Insulating diffuser 45-85A Max Life M-125
4*	607610 5793	Swirl Ring 105-125A Max Life M-125
5*	607610 5794	Electrode 45-125A M-125
6	607610 5795	Cutting Tip 45A Precision Cut M-125
7	607610 5796	Cutting Tip 45A M-125
8	607610 5797	Cutting Tip 65A M-125
9	607610 5798	Cutting Tip 85A M-125
10	607610 5799	Cutting Tip 105A M-125
10*	607610 5800	Cutting Tip 125A M-125
11	607610 5801	Shield Cup Body 45-85A M-125
12*	607610 5802	Shield Cup Body 100-125A M-125
13	607610 5803	Deflector Precision Cut 45A M-125
14	607610 5804	Shield Cap Machine 45-85A M-125
15*	607610 5805	Shield cap machine 100-125A M-125
16	607610 5806	Fibreglass Positioning Tube with Rack M-125

**standard torch equipment*

Table 5: Torch operating elements M-125 MOST

Machine torch M-70

Gas cooling

Duty Cykle 60%	70 [A]
Gas	Air/N2
Gas pressure	5,0-5,5 [bar]
Gas flow	185 [l/min]
Ignition	bez HF / without HF

607610 6271 Start kit M-70 MasterCut 120 CNC

Pos.	Code	Name	Q-ty
5	607610 5832	Nozzle 20-50A M-70	5
5*	607610 5937	Nozzle 70A M-70	5
3*	607610 5830	Electrode M-70	10
7*	607610 5833	Torch cover M-70	1
1a*	607610 5790	Torch cover M-70	1
4*	607610 5831	Gas distributor M-70	1

Table 6: MasterCut 120 CNC MOST . Torch start kit M-125 (607610 6271)

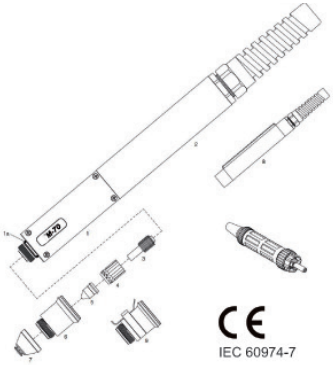

Figure 4: Machine torch M-70 MOST

Pos.	Code	Description
	607610 6131	Machine Torch M-70 1,3m Coaxial MasterCut 120
	607610 6132	CNC
1*	607610 5934	Cable Package 6,7 m M-70
1a*	607610 5790	Machine Torch Head M-70
2*	607610 5791	O-Ring Torch Head M-70
3*	607610 5830	Fibreglass Positioning Tube M-70
4	607610 5936	Electrode M-70
4*	607610 5831	Swirl Ring M-70
5	607610 5832	Swirl Ring M-70 Maximum Life
5*	607610 5937	Cutting Tip 20-50A M-70
6*	607610 5834	Cutting Tip 70A M-70
7*	607610 5833	Shield Cup body M-70
8	607610 5806	Shield Cap M-70
9	607610 5938	Fibreglass Positioning Tube with Rack M-70
		Shield Cap Machine OHMIC M-70

**standard torch equipment*

Table 7: Torch operating elements M-70 MOST

Hand torch H-125

Gas cooling

Duty Cykle 60%	40-125 A
Gas	Air/N2
Gas pressure	5,0-6,0 bar
Gas flow	295 l/min
Ignition	bez HF / without HF

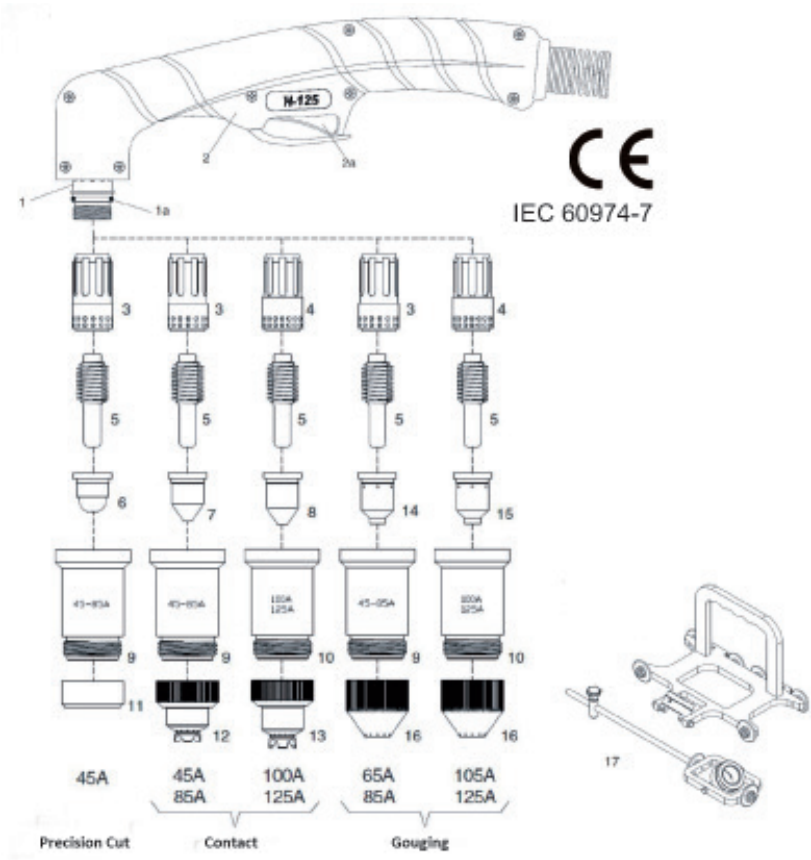

Figure 5: Manual torch H-125 MOST

607610 6071 Pakiet startowy H-125 MasterCut 120 CNC

Pos.	Code	Name	Q-ty
3	607610 5792	Swirl ring - 45-85A Max Life	1
5*	607610 5794	Electrode - 45-125A	10
6	607610 5795	Nozzle 45A Precision Cut	2
7	607610 5796	Nozzle 45A	2
8	607610 5797	Nozzle 65A	2
9	607610 5798	Nozzle 85A	2
10	607610 5799	Nozzle 105A	2
10*	607610 5800	Nozzle 125A	5
13	607610 5803	Torch cover 5A	1
14	607610 5804	Torch cover 45-85A TM	1

Table 8: MasterCut 120 CNC MOST . Torch start pack H-125 607610 6071

Poz./pos.	Kod/Code	Nazwa / Description
	5926	Hand Torch H-125 6m Coaxial
	6071	MasterCut 120 CNC
1	5816*	Starter kit M-125
1a	5790*	Torch Head H-125 handle
2	5927*	O-Ring Torch Head M-125
2a	5011*	Handle with switch H-125
3	5967	Switch H-125
3	5792	Insulating diffusor 45-85A H-125
4	5968	Insulating diffuser 45-85A Max Life M-125
4	5793*	Life H-125
5	5794*	Swirl Ring 105-125A H-125
6	5795	Swirl Ring 105-125A Max Life M-125
7	5796	H-125
7	5797	Electrode 45-125A M-125
7	5798	Cutting Tip 45A Precision Cut M-125
8	5799	Cutting Tip 45A M-125
8	5800*	Cutting Tip 65A M-125
9	5801	Cutting Tip 85A M-125
10	5802*	Shield Cup Body 100-125A H-125
11	5803	Deflector Precision Cut 45A H-125

12	5817	Shield Cap 45-85A H-125
13	5818*	Shield Cap 100-125A H-125
14	5916	Tip 65/85A, gouging H-125
15	5917	Tip 100A, gouging H-125
15	5918	Tip 125A, gouging H-125
16	5919	Shield, gouging H-125
17	5872	Bevel Tolls for H-125

**standard torch equipment*

Table 9: Torch operating elements H-125 MOST

8. Starting the work

ATTENTION!

Cutter may only be operated by authorized personnel:
1. Before starting work, it is necessary to prepare an appropriate network connection (3x400V, 50-60 Hz).
2. Check completeness of parts mounted torch. Nozzle, electrode and nozzle cover should be compatible with each other pre-set set cutting current.
3. Connect plasma torch holder to socket (A3).
4. Check the power cord (A14) connection.
5. Connect compressed air to the a spigot (A12) on the back of the device.
6. Connect grounding cable plug to socket (A1).
7. Set air pressure using pressure knob (A13) to 5.5 - 6 bar.
8. After switching on with ON / OFF (A15) switch, the (A6) display turns on.
9. Set potentiometer (A) to desired value of cutting current.
10. Press the torch trigger and gas will start to flow out of it and the plasma arc will ignite (cutting with a hand torch).
11. To end the cutting process, release the torch trigger (cutting with a hand torch).

ATTENTION!

The device is ready to perform cuts in 15 seconds after being switched on by pressing the button (A15) (cutting with a hand torch).

Cutter operates according to the following scheme:
A. Starting the device with (A12) switch and cutting current setting with the knob (A3).
B. Automatic compressed air test for 10 s.
C. Automatic device test for 6 s.
D. Press the plasma torch button.
E. Air flows for approx. 2 s.
F. Piloting arc appears..
G. After reaching the material with the pilot arc, a cutting arc should appear.
H. If the arc gets too far away from material, than the pilot arc will reappear.
I. Release the plasma torch button.
J. Cutting arc should go out.
K. Gas post-flow (cooling the torch) for approx. 1 min - during this time do not switch the device OFF.

9. Cutting (tips)

ATTENTION!

The device is ready to perform cuts in 15 seconds after being switched on by pressing the button (A15).

- Press the plasma torch button. Piloting arc will appear. Immediately approach with nozzle tip to the material being cut. At this point, a plasma cutting arc between the torch and the material will appear.
- Guide the torch at a constant speed. The cutting speed depends on many factors, such as cutting current, thickness and type of material to be cut and operator's skills. The purpose of repetitive element's

quality cutting is to use a rule or a callipers set.

- For best cutting performance, a distance of 2 mm is recommended between the nozzle tip and the cut material being held by the guide. A longer distance leads to a slower cutting - up to the breaking of the arc. Too short distance can cause faster parts wear.
- Plasma cutting can take place at any position of the torch, but it is recommended to cut in a down position. For forced positions, operator and torch can be exposed to chipping and drops of molten material.
- It is recommended to start cutting from a material edge. Should the cutting be started not from material edge, it is advised to cut out a hole in start location. If it is necessary to start plasma cutting in the center of the material - start cutting with a burner inclined at an angle (Figure 6) and gradually raise it to the vertical setting until it breaks through. This procedure is necessary if the material thickness exceeds 3mm.

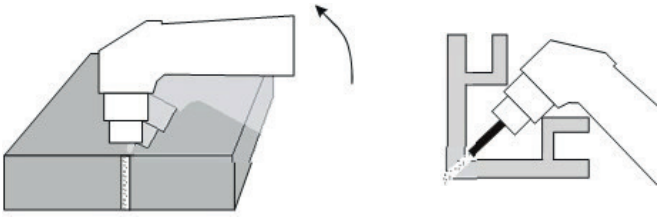

Figure 6: Holes piercing method in the material surface and in the corners

- For cutting corners, it is recommended to use a long nozzle and electrode. Cutting speed is smaller when cutting in corners

Operational observations

- Pilot arc can only be started for a limited time. It affects the wear of spare parts significantly.
- Never switch off the device immediately after finishing the cut, let the torch cool down with outflow of air. Switching off the device immediately after cutting is only possible in case of danger to the operator.
- Grounding clamp must be in good contact with the cut material. Check and if necessary, replace, the quickly wearing parts. Their lifetime is limited to several hours of cutting time and strictly depends on following the instructions in this manual. When replacing a part or disconnecting the plasma torch, always switch the device off from the mains
- MasterCut 120 CNC device is designed to work with MOST torch types M-125 and M-70 and H-125 according to PN-EN 60974-7: 10.1.4. Manufacturer is not responsible for faults resulting from using cutter combined with other torches.
- Improperly dried air can cause quick wear of parts and difficulties in pilot arc development.

10. Problems occurring during work resulting in poor cutting quality

After starting the device, the pilot arc does not appear: Wait for 15 seconds for air test and device test. Then press the torch button.

Figure 7: Problems occurring during cutting.

Incorrect penetration of plasma arc: The cutting quality is low due to too high speed. Make sure that plasma arc angle does not exceed 15 ° (see Figure 7):

- excessive cutting current for the parts in use.
- excessive material thickness.
- incorrect connection of the grounding cable with material.

Plasma arc is unstable and „shoots" or suddenly goes out:

- nozzle (see figure 7) or electrode worn out.
- excessive air pressure.
- pollution in compressed air.
- humidity in compressed air.

Edges of the cut are not perpendicular (see Figure 7):

- switch the device off, unscrew the torch cover and rotate the nozzle 1/4 in relation to the previous position and try to restart the cutting.
- nozzle or electrode damaged - replace.
- position of the torch during cutting not vertical in relation to the material.
- nozzle being too far from the material being cut.

11. Electrical scheme

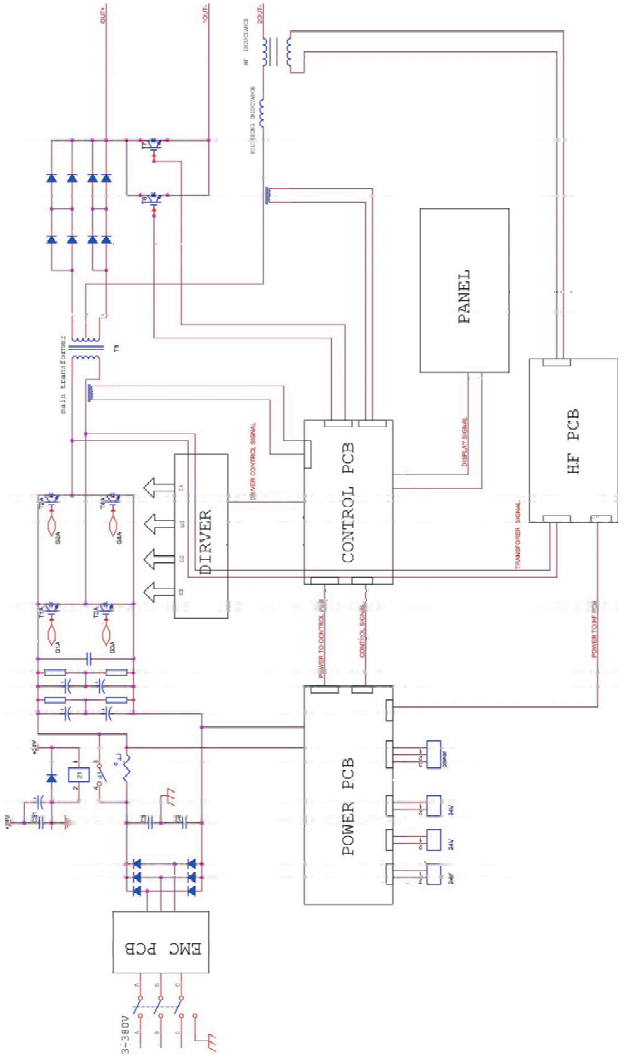

Figure 8: MasterCut 120 CNC MOST Electrical scheme

12. Replacement Parts

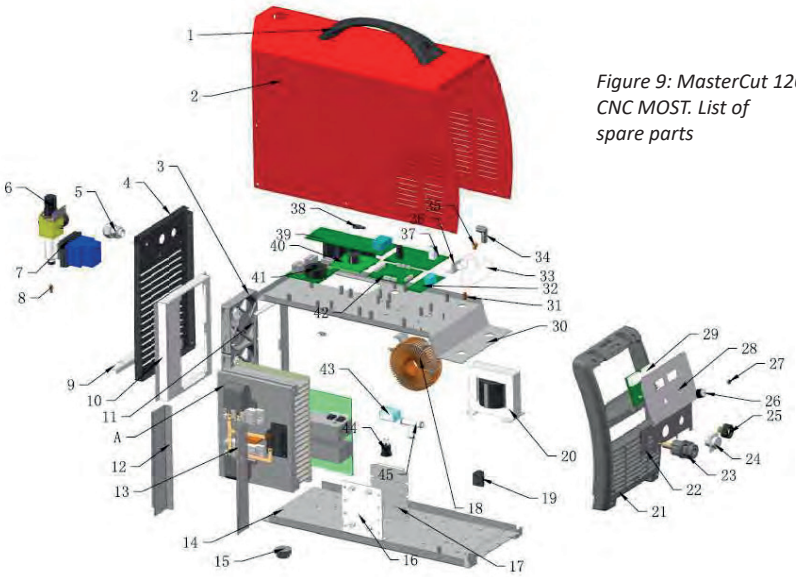

Figure 9: MasterCut 120 CNC MOST. List of spare parts

Position	Item No.	Description	Q-ty
1	8.253.035	Handle	1
2	8.301RM.616-A	Cover	1
3	7.720.055	Cooling fan	2
4	8.068RM.680-A	Rear panel	1
5	7.155.225	Power cable clip	1
6	7.253.465-C	Pressure regulator	1
7	7.232.742	Power switch	1
8	8.462.635	Reduction air	1
9	8.123RM.358	Gas hose holder	1
10	8.122RM.680-A	Fan assembly	1
11	8.123RM.354	Fan cover	1
12	8.123RM.352-A	Assembly part A	1
13	8.123RM.353-A	Assembly part B	1
14	8.055RM.616	Base panel	1
15	8.046RM.002	Support leg	2
16	8.123RM.351-A	Strut	1

17	7.445.256	Resistor	5
18	L.185RM.681	Transformer	1
19	7.321.130	Current sensor	2
20	L.271RM.003	Inductor	1
21	8.069.004	Plastic Front Panel	1
22	8.065RM.607-B	Output assembly	1
23	7.667.021	Central socket (torch)	
24	7.132.114-A	14-Pin Socket	1
25	7.152.002	Euro socket	1
26	7.458.360-BK	Knob	2
27	7.557.031-A	Cap	1
28	8.306RM.616	Front assembly	1
29	W.496RM.545	Front PCB	1
30	8.062RM.616-A	Upper floor	1
31	7.624.122	Connector	1
32	W.496RM.228-1	PCB CNC interface	1
33	7.253.046	Gas valve	1
34	7.624.344	Assembly part (L-shape)	1
35	7.724.024	Assembly part of gas valve	1
36	8.123RM.357	Gas valve holder	1
37	W.496RM.397-E	Power PCB	1
38	7.624.202	Plastic part	1
39	W.496RM.443-A	Capacitor PCB	1
40	W.496RM.451-A	Driver PCB	1
41	W.496RM.286-D	EMC induktance	1
42	WP.496RM.632	Control PCB	1
43	7.321.351	Hall sensor AC/DC PULSE smart	1
44	7.232.637	PREESSURE SWITCH	1
45	7.624.270	CROSSES TEE BARBED "T"	1
A		Modul A	1

Table 10: MasterCut 120 CNC MOST. List of spare parts

DECLARATION OF CONFORMITY

Manufacturer:

RYWAL-RHC Sp. z o.o., Warszawa
Ul. Chełmżyńska 180
04-464 Warszawa,

declares that the plasma cutter
MasterCut 120 CNC

meets the following directives:
low voltage Directive LVD 2014/35/EC,
electromagnetic compatibility EMC Directive 2014/30/EC
and RoHS 2011/65/WE

and it was produced in accordance with the standard

PN-EN 60974-1: 2012
PN-EN 60974-10: 2014

Toruń, 26 Sept. 2018
Place and date of issue

Surname, Name
and a signature of an authorized person

„RYWAL-RHC" Sp. z o.o.
04-464 WARSZAWA, ul. Chełmżyńska 180
NIP: 951-19-98-317
REGON 017180279 KRS 37174
(2)

DYREKTOR PRODUKTU
mgr Krzysztof Blatkiewicz

The devices are subject to constant changes and improvements. Subject to change.
This EC declaration of conformity relates to device in the state as it was released on the market and does not cover components added by end-user or subsequent modifications made without a consent of the manufacturer.
The declaration will expire if the requirements are not met. Installation and operation included in the user manual

Manufacturer:

RYWAL-RHC Sp. z o.o. w Warszawie
ul. Chełmżyńska 180
04-464 Warszawa

Sales and Service network:

Grupa RYWAL RHC

www.rywal.eu

RYWAL-RHC Sp. z o.o.

87-100 **Toruń**, ul. Polna 140 B
tel. 56 66 93 801, -802, fax: 56 66 93 807

15-516 **Białystok**, ul. K. Ciołkowskiego 165
tel. 85 74 10 492, tel./fax 85 74 10 491

85-825 **Bydgoszcz**, ul. Fordońska 112 A
tel./fax: 52 345 38 73, 52 345 38 79

80-298 **Gdańsk**, ul. Budowlanych 19
tel. 58 768 20 00 fax: 58 768 20 01

58-500 **Jelenia Góra**, ul. K. Miarki 42
tel.: 669 605 408

62-510 **Konin**, ul. Spółdzielców 12
tel./fax: 63 243 75 60, 63 243 75 61

75-100 **Koszalin**, ul. Powstańców Wlkp. 2
tel./fax: 94 342 05 31

20-328 **Lublin**, ul. A. Walentynowicz 18
tel./fax: 81 445 01 50 do 52, 81 445 01 55

93-490 **Łódź**, ul. Pabianicka 119/131
tel./fax: 42 682 64 36, 42 682 64 37

10-409 **Olsztyn**, ul. Lubelska 44 D
tel./fax: 89 535 10 00, 89 535 10 01

09-400 **Płock**, ul. Przemysłowa 7
tel./fax: 24 269 22 24

61-371 **Poznań**, ul. R.Maya 1/12
tel. 61 862 61 51, fax: 61 866 69 41

35-211 **Rzeszów**, ul. M.Reja 10
tel. 17 85 90 141, -142, fax: 017 85 90 143

37-450 **Stalowa W.**, ul. Energetyków 49
tel./fax: 15 844 02 63, 15 844 55 16

72-006 **Mierzyn k. Szczecina**, ul. Welecka 22 E
tel./fax: 91 482 36 66, 91 482 36 78

04-464 **Warszawa**, ul. Chełmżyńska 180
tel. 22 331 42 90, fax: 22 331 42 91

42-200 **Częstochowa**, ul. Warszawska 285/287
tel./fax: 34 324 39 98, 324 60 61

31-752 **Kraków**, ul. K. Makuszyńskiego 4
tel./fax: 12 686 37 36, 686 37 35

41-703 **Ruda Śląska**, ul. Stara 45
tel. 32 342 70 00, fax: 32 342 70 01

54-156 **Wrocław**, ul. Stargardzka 9 C
tel./fax 71 351 79 34, 71 351 79 36

65-410 **Zielona Góra**, ul. Fabryczna 14
tel. 68 322 11 81, fax: 68 322 11 87

RME MIDDLE EAST FZCO

Jebel Ali Free Zone
P.O. Box 261839, Dubai,
UAE (United Arab Emirates)
Phone: +971 4 880 8781
Fax: +971 4 880 8782
Mobile: +971 509 149 036
www.rme-me.ae

RYWAL-RHC Romania SRL

Str. Calea Făgărașului, nr. 59
Standurile 60-67, 500053 Brașov,
ROMÂNIA
Telefon: 0368 100 127
Fax: 0368 100 128
Mobile: +40 740 433 592
e-mail: romania@rywal.ro
www.rywal.ro

UAB „RYWAL-LT"

Elektrėnų g. 7,
LT-51193 Kaunas,
LIETUVA
Tel: +370 37 47 32 35
Tel./Faks: +370 37 47 32 58
e-mail: info@rywal.lt
www.rywal.lt

ИООО „РИВАЛ СВАРКА"

г. Минск, переулок Липковский, 30-23
БЕЛАРУСЬ
Тел./Факс: +375 (17) 385-15-75 (76, 77)
Моб. МТС: +375 (29) 505-15-75
Моб. Vel: +375 (29) 185-15-77
e-mail: office@rivalsvarka.by
www.rywal.by

SOLÍK SK, s. r. o.

Odborov 2554
SK 017 01 Považská Bystrica
SLOVENSKO
Telefón/Fax: 042 43 23 425
e-mail: mail@soliksk.sk
www.soliksk.sk

ООО РИВАЛ-РУ

ул. Цимлянская д. 3, стр. 1
г. Москва
РОССИЯ
Тел./факс: +7 495 358 75 56
e-mail: rywal@rywal.ru
www.rywal.ru

Zintegrowany System Zarządzania

POLSKI REJESTR STATKÓW 1936

ISO 9001
ISO 14001

PCA Polskie Centrum Akredytacji
CERTYFIKACJA SYSTEMÓW ZARZĄDZANIA

AC 014
QMS, EMS

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