

CUTTING MACHINE MANUAL

CUT225

EN



Bfluid
hose assembly equipment

English

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C. GENERAL INFORMATION

1. Company overview

BFLUID is a market leading Portuguese company in the manufacture and distribution of industrial flexible hydraulic hoses, components and machinery.

It's a dynamic SME, with the motto «If better is possible, being good is not enough», which translates into an ongoing research towards providing client satisfaction in terms of know-how, quality, expertise, innovation, flexibility and naturally good prices.

In this context, we were the first Portuguese company of the sector to obtain the **EN NP ISO 9001: 2000 certification**.

Recognized by the **IAPMEI** and the **Portuguese Ministry of Economy and Innovation**, we were distinguished with the status of **PME Excelência 2009 (SME Excellence)**, and **PME Líder (Leading SME)**, this status values the national companies with best economic and financial performances thus strengthening the general image and reputation of those companies in the market.

For all this, thank you for choosing our products.

BFLUID

2. Manufacturer Identification



Image 1 - **BFLUID Name Plate**

BFLUID

Estrada D. Miguel 2734-2758, D-E-F-G

4510-243 Gondomar

Portugal

TELEFONE: +351 224 664 690

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EMAIL: barboflex@barboflex.pt

3. CE Declaration

CE DECLARATION OF CONFORMITY

(Directive 2006/42/CE, Annex II, Chapter A)

Manufacturer information:

BFLUID

Estrada D. Miguel 2734-2758, F-G-D-E

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Identification of the person authorized to compile the technical file:

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BFLUID declares that the CUT225 cut machine with the following details:

Function: Cutting hydraulic hose

Brand: BFLUID

Serial N.º: _____

Complies with the guidelines of the following community directive:

- **Directive 2006/42/CE of the European Parliament and of the Council of 17 May**, on machinery,
transposed into Portuguese law by Decree-Law 103/2008 of 24 June;

Reference standards applied:

EN ISO 12100:2010 EN13849-1:2008 EN ISO 13850: 2008 EN
ISO 13849-1: 2008/AC:2009 EN 1037:1995 A1:2008
EN1088:1995+A2: 2008 EN953:1997+A1:2009 IEC 60204-1:2009

V.N. Gaia _____ of _____ of 20 _____

(Management)

4. Machine model and serial number

Each machine will be provided with a label placed on its back, containing the following information:

- Name
- Address
- Machine description
- Machine model
- Serial number
- Year of manufacture
- Supply voltage
- Engine power
- Weight



Image 2 - Identification of each machine

Note: This plate must never be removed, this will result in loss of warranty.

D. WARRANTY AND LIABILITY

Warranty: The supplier ensures product compliance. This means the product is manufactured without defects and meets the provisions of the contract between the parties.

The warranty is valid for one year from the documented date of purchase. The same warranty covers parts or components' parts replaced, from the day of its replacement.

Within the warranty period, the supplier is liable for defects reported in writing by the customer. The customer has up to eight days after the delivery of the machine to make claim for apparent defects. Regarding proven defects, the supplier undertakes to repair or replace free of charge the components or parts that are proven to be defective, within a reasonable time.

The return of defective goods should always be authorized by the supplier in writing. Furthermore, the goods must be returned in their original packaging.

During the term of this warranty, BFLUID will repair or replace the equipment - at your option - assuming the costs arising therefrom, provided that it is informed by the client within three (3) days after the onset of the operation interruption or defect.

The damaged parts or equipment will be owned by BFLUID, provided they have been replaced by new parts.

The warranty expires if the product has not been properly assembled or used, received insufficient maintenance or has been modified or repaired without the supplier's permission.

The supplier is not liable for defects resulting from normal wear of the components, which by their nature are subject to rapid and constant wear.

Supplier liability: The supplier shall be solely responsible for the proper functioning of the product, as well as the characteristics and performances specifically stated. However, the supplier will not assume any responsibility for any failure to operate the machine or system with the supplier's components, by the customer or by third parties.

E. INSTRUCTION MANUAL PURPOSE

This manual was developed by BFLUID's technical department and aims to compile all necessary information in order to establish guidelines concerning the assembly, installation, maintenance and operation of the cut machine. These rules are essential to assure the proper function of the machine while maintaining the necessary safety requirements.

The cut machine was designed and built based on the European safety standards board. When handled conveniently, its operation, adjustment and maintenance are carried out without posing any danger to the people performing them.

1. Safety Regulation :



DO NOT USE the equipment without reading this manual and **UNDERSTANDING ITS CONTENT.**



WARNING! Improper use of this equipment can result in injury. The operator must never come in contact with moving parts or work within their reach.

Cutting operations are safe provided that the guidelines listed below are followed.

- **WARNING!** It is absolutely essential that all the work operations are performed by only one operator.
- The equipment's owner is responsible for maintaining and handing the manual to the operator, as well as making sure the operator is aware of his/her responsibilities.



- Shields, protections or safety sensors must never be removed.
- Before switching on, make sure there is an appropriate protection on the power line and that it has a ground wire.
- Check if the mains voltage and frequency match those indicated in the engine's name plate.
- Never use faulty or unregulated wires or extensions.

- Make sure the cut is always performed in safe conditions, never insert hands into the cutting area when the engine is running and always keep them at a minimum distance of 200mm from the blade.



- Use appropriate gloves and protective gear.
- During the operation, always follow the instructions indicated on the machine's label.
- The cut machine must only be operated by qualified adults.
- Moving parts must be kept clean and well lubricated.
- Original spare parts must be used in order to maintain its original characteristics and the validity of the certification and warranty.
- Keep the power cable away from the work area and make sure it does not impair operations.
- Our equipment is designed according to the security specifications in accordance with CE rules.
- Operators are advised to strictly comply with the instructions provided in this manual.

F. TRANSPORTATION



Transportation and workplace: even though the machine is strong and easy to carry, it is necessary to ensure its proper handling and conditioning.

Even though the machine is strong and easy to carry, precautions must always be taken in order to put it in the best working position and on a solid, leveled surface.

Always work in safe conditions and with the necessary space around the machine.

The manufacturer is not liable for any damages caused by negligence.



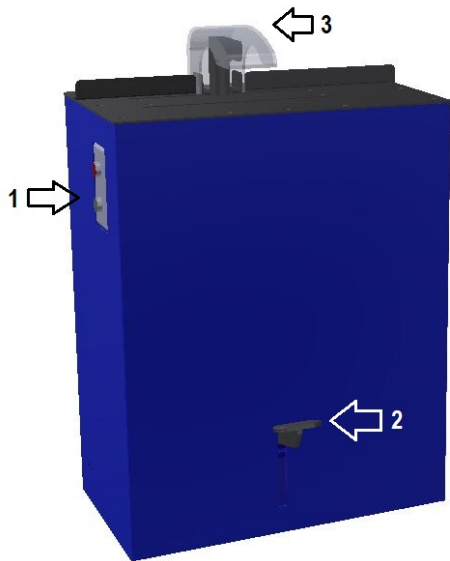
Production residues: Production residues are comparable to municipal solid waste and can be easily disposed of.

If the machine is installed in countries with specific rules in force, the production residues must be disposed of in accordance with those rules.

G. EQUIPMENT SPECIFICATIONS

TÉCNICAL INFORMATION MEASUREMENTS	Corte CUT 225 SINGLE-PHASE	CORTE CUT 225 THREE-PHASE
Cutting capacity	3/16>2"	3/16>2"
Engine Power	2.2KW	2.2KW
Revolution p/ Min.	2900RPM	2900RPM
Disc	Ø250MM	Ø250MM
Measurements	1025mm x 706mm x 563mm	1025mm x 706mm x 563mm
Voltage	220V 50-60HZ	230V-400V 50-60HZ
Controls	ELÉCTRICAL	ELÉCTRICAL
Weight	100kg	100 kg
Noise Level	70 dBA	70 dBA
Safety button	INCLUDED	INCLUDED
Disc protection	INCLUDED	INCLUDED

H. MACHINE INSTRUCTIONS



CONTROLS:

1-Switch ON and Emergency Button

2-Foot pedal

3 -Acrylic protection

Image 3 – **Controls components**

1. Protection system and machine description

This machine was designed for cutting hydraulic hoses.

The machine consists of a rotating blade in a geared electric gearmotor, used to cut hydraulic hoses internally and externally. The disc is protected by two metal sheets to prevent the operator from being hit with rubber or steel particles.

2. Three-phase circuit diagram

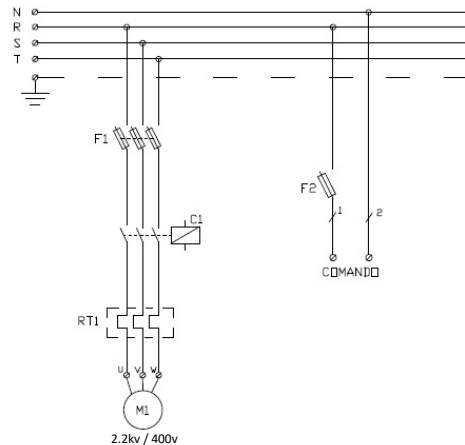


Image 4 - **Electrical diagram**

3. Three-phase circuit diagram

1	Motor 2.2KW 400V 50Hz	
1	Disjuntor motor	5,5/8A

I. MACHINE INSTRUCTIONS

1. Adjusting and refining instructions

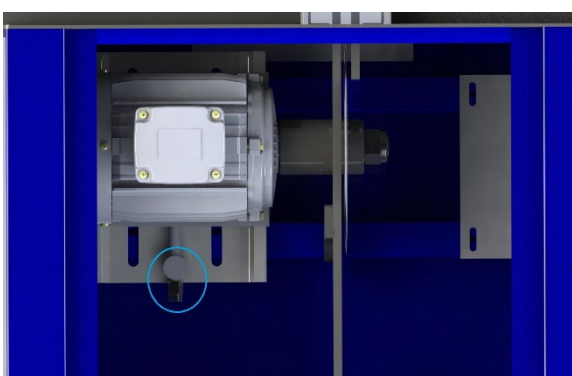


Image 5– **Blade refining**

- Remove plastic part.
- Place Key
- Rotate in the intended direction (Right – Go up / Left – Go Down)

2. Blade Replacement

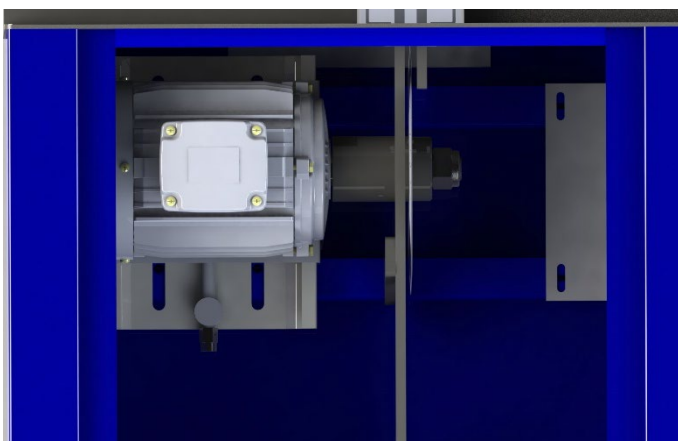
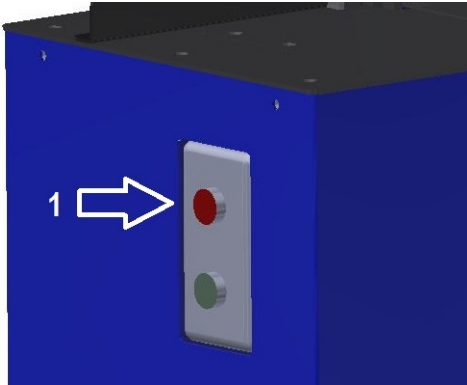


Image 6– **Blade replacement**

- Open the inspection box on the rear of the machine.
 - Loosen the disc's height adjustment bolt, 3 to 4 cm.
 - Loosen the disc locking nut.
 - Clean and lubricate all parts.
- Adjust the new or sharpened disc.
- Tight the disc's height adjustment bolt.
- The disc must be about 5 mm below the security box.

- The tool must be installed as shown in image 6.

3. Emergency Stop



1. Emergency Button

Image 7 – **Emergency Button**

4. Information on prohibited operation methods

- It is strictly forbidden to use the cut machine for purposes other than those previously mentioned.
- It is forbidden to remove any included machine protection.
- It is mandatory to read the instructions manual before operating this equipment.
- The machine can only be operated by qualified adults after reading the instructions manual.

5. Possible Malfunctions and solutions

- Engine does not start:
 - Check the fuses.
 - Check if all wires are properly connected.

6. Instructions concerning personal protective equipment that must be used



- Workwear
 - Work gloves

The operator must wear the mentioned personal protective equipment at all times, as well as attend to all basic safety principles during the assembly and use of

the indicated tools.

J. INITIAL CHECK-UP

Place the machine on a stable surface.

Make sure the power cord is equipped with a safety differential circuit breaker and overload cut-out.



- A ground connection in accordance with the provisions of the electrical installation safety standards is mandatory.

The manufacturer disclaims any liability for any damage to persons or property arising from faulty ground wire connection or lack of this connection.

- It is mandatory to connect the machine to an electrical outlet.
- Never connect the machine directly to the power frame.
- The electrical outlet, the plug and the power cable must be the same type and comply with the rules in force. Check if the voltage and frequency network values correspond to those listed on the identification label, avoid using adaptors or shunts. Never remove the plug by pulling the power cord. After installation, the plug must be accessible. In the case of damage to the power cord, it must be replaced by a qualified technician. After replacing the power cord, make sure that the cable anchor bracket is secured properly.
- Make sure all moving parts are clean and lightly lubricated.
- The engine does not work when the emergency switch is activated.
- Check if the wall switch matches the machine's poles.
- Check if the wall switch fuse is blown.
- Never remove the machine's protections.

THE MANUFACTURER DECLINES ANY LIABILITY FOR DAMAGES TO PERSONS OR PROPERTIES, RESULTING FROM BREACHING THE ABOVE PRESCRIPTIONS, MODIFICATION OF ANY PART OF THE EQUIPMENT OR USE OF NON-ORIGINAL SPARE PARTS.

1. Rotation Direction

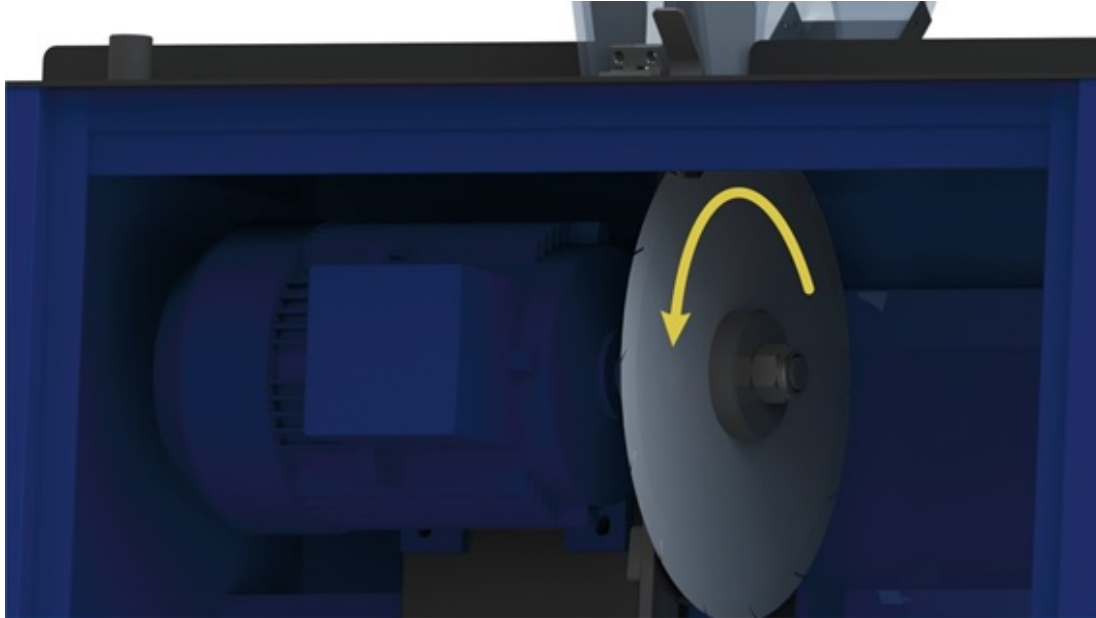
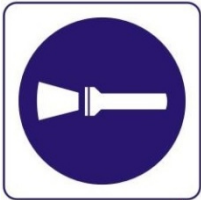


Image 8- Rotation direction

K. LIGHTING



The equipment does not have its own lighting and so it should be used in properly lit areas.

If the visibility on site is not appropriate, it's necessary to use artificial lighting equipment.

L. MAINTENANCE INSTRUCTIONS



To ensure the proper functioning of the cut machine, as well as its durability, it is essential to carry out a series of maintenance activities. If these activities are not carried out, the manufacturer cannot be held responsible for any damage caused by the machine on its direct or indirect users.

1. Maintenance Instructions



The indicated activities must be carried out by qualified personnel.

The following maintenance activities are essential, and must be carried out quarterly:

- Check the tightness of all screws used;
- Check the machine levelling, and proceed with the necessary adjustments;
- Clean inside the machine, engine and electrical boxes, using compressed air (less than 2 bar), do not use cleaning products that can cause adverse reactions in the machine's constituent materials; (It is mandatory to use facial protection mask, goggles, gloves and workware).
- Lubricate hinges and moving parts;
- Check the cut machine components and replace the damaged ones;
- Check springs tension.
- Check circuit and electrical components;
- Check wear of the cutting disc.

2. Routine Maintenance



- Ensure that the moving parts are always slightly lubricated.

- Periodically check the wear of the main parts.
- Check springs tension.
- Check machine levelling.

M.SPARE PARTS

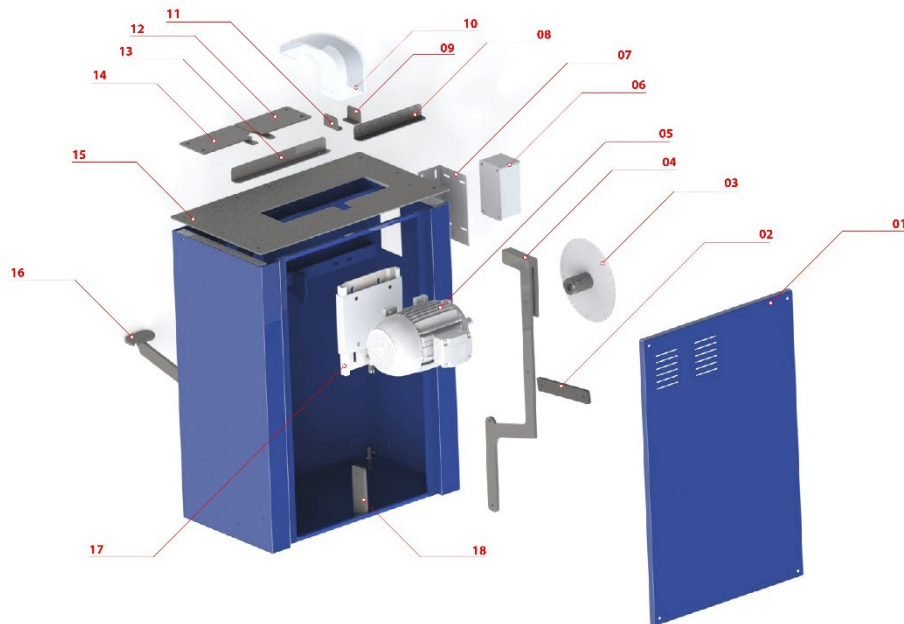


Image 9- Spare parts

Components:

- | | |
|---------------------------------|-----------------------------|
| 1 – Rear inspection box | 10 – Protection |
| 2 – Connection rod | 11 – Fixing left protection |
| 3 – Blade set | 12 – Open plate |
| 4 – Cutting system | 13 – Right Ruller |
| 5 – Engine | 14 – Open Plate |
| 6 – Electrical box | 15 – Cover |
| 7 – Plate for the eletrical box | 16 – Pedal |
| 8 – Left Ruler | 17 – Engine’s support |
| 9 – Fixing right protection | 19– Machine’s structure |

N. MANUFACTURER RECOMMENDATIONS

Cutting machines were developed based on principles that ensure a hazard-free operation, provided that there is a correct usage in compliance with the safety rules. The lack of understanding or failure to comply with these rules may put operators and others in hazardous conditions which may cause serious damage to persons and properties. It is therefore crucial to understand and respect the rules, as well as to perform the maintenance activities required to ensure the machines' correct functioning and the safety of its operators.

Before using, the operators must be informed about the cutter's correct use. It is mandatory to carefully read the instructions supplied with the equipment, as well as to learn about its characteristics by ensuring that:

- The equipment will be installed exclusively by qualified and specialized personnel.
- The machine installation will always be performed on a smooth and stable surface.
- The equipment is properly installed.
- The existing light is sufficient to conduct operations safely, with no obstacles and no unskilled personnel in the working area.
- Fully understand the operation as well as its technical limitations.
- Under no circumstances modify the equipment's structure and components without the manufacturer's approval.
- Know and respect the equipment's nameplate.
- Do not perform any tasks for which the equipment was not designed.

βfluid

hose assembly equipment

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