

OPERATION AND MAINTENANCE MANUAL



**Cutting band saw
Art. 0362**



ORIGINAL INSTRUCTIONS

FOREWORD



Read this manual before operating any machinery

ORIGINAL INSTRUCTIONS

Before starting any operation it is compulsory to read this instruction manual. The guarantee that the machine will function and perform properly is strictly dependent upon the application of all the instructions contained in this manual.



Operator Qualification

The operators assigned to using this machine must be supplied with all of the necessary information and instruction and should be provided with adequate training regarding safety in pertaining to:

- a) The conditions of use of the equipment;
- b) Foreseeable abnormal situations, pursuant to Article 73 of Legislative Decree 81/08.

We guarantee the Machine's conformity to the specifications and technical instructions described in the Manual on the date of issuance and listed herein; On the other hand, the machine may also be subject to important technical changes in the future, without the manual being updated.

Therefore, see FERVI for information about modifications that could be implemented.



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1 INTRODUCTION

The purpose of this manual is to provide the knowledge necessary for the use and maintenance of the metal band saw and create a sense of responsibility and knowledge of the capabilities and limitations of the device entrusted to the operator.

As the machine is entrusted to experienced and skilled operators, the following machine must be perfectly known by the operator if you want it to be used safely and effectively.

Personnel selection is important for efficiency and safety, and staff selected for a particular job must have sufficient physical and mental capabilities to learn from training.

GRAPHIC REPRESENTATION OF SAFETY, OPERATIONAL AND RISK WARNINGS

The following boxes are designed to attract the attention of the reader / user for the **proper** and **safe** use of the machine:



Pay attention

This highlights behavioural rules to prevent damage to the machine and/or the occurrence of dangerous situations.



Residual Risks

This highlights the presence of dangers that cause residual risks to which the operator must pay attention in order to avoid injury or damage to property.

For safe and easy operation of the cutting band saw for metals, this manual must be read carefully in order to acquire the necessary knowledge. In other words, the life and performance of the machine are dependent on how it is used.

Even if already familiar with the machine, it is necessary to follow the instructions contained herein, in addition to the general precautions to be observed while working.

- Acquire full knowledge of the machine.

Read this manual carefully to understand: operation, safety devices and all necessary precautions. All this is to allow safe use of the equipment.

- Wear appropriate clothing for the job.

The operator must wear appropriate clothing, so as to prevent the occurrence of unpleasant accidents.

- Maintain the machine with care.



Machine operation

The machine must only be used by qualified personnel trained to use the machine by authorized personnel.



2 SAFETY WARNINGS

2.1 General safety rules for machine tools



Risks associated with using the machine

- DO NOT underestimate the risks associated with using the machine and concentrate on the work in progress.
- Despite the implementation of all safety devices for safe use of the machine, it is necessary to take note of all the accident prevention requirements highlighted in various parts of this manual.



Risks associated with using the machine

Every person who is responsible for the use and maintenance of the machine should first have read the instruction manual, particularly the chapter dealing with safety.

It is recommended that the plant safety manager get written confirmation of the above.



Operator Protection

Before starting any work on the machine, the operator must wear the appropriate personal protective equipment (PPE), such as goggles, gloves and non-slip shoes.

1. Read this manual carefully, in order to work safely.
2. Always check the efficiency and integrity of the machine.
3. Do not start the machine in a poorly ventilated area, or in the presence of a flammable and/or explosive atmosphere. Do not use the machine in damp and/or wet places. Do not expose it to rain.
4. Before use, check that the support surface of the machinery is flat, of suitable strength and of sufficient ergonomics.
5. Avoid starting accidentally.
6. Before starting the machine, get used to ensuring that no remaining adjustment or maintenance wrenches have remained inserted.
7. Check in advance, that the workpiece is properly secured between the jaws of the vice.
8. Keep the workplace tidy and free from hindrances; disorder causes accidents.
9. Make sure that the work environment is forbidden to children, non-employees and animals.
10. Do not perform tasks on the machine other than those for which it was designed. Only use the machine in the manner in which it was intended, as described in this instruction manual.

11. Work without disturbances.
12. Work areas must be well lit.
13. Always wear eye protection and protective gloves while working. If dust is produced, use the appropriate masks.
14. Wear appropriate clothing. Loose clothing, dangling jewellery, long hair, etc., can get caught in the moving parts, causing irreparable injury.
15. Do not move away from the machine until the blade and other moving parts, have completely stopped. For this purpose, only use the stop controls to stop the machine.
16. Replace worn and/or damaged parts, check that the repairs and protections work properly before operating. If necessary, have the machine checked by the service support personnel. Use only original spare parts.
17. **Unplug the power cord of the machine when :**
 - the machine is not being operated;
 - is left unattended;
 - you are performing maintenance or adjustment because the machine does not work properly;
 - the power cable is damaged;
 - replace the tape (blade);
 - in case the machine is being moved to another location;
 - you are cleaning the machine.
18. It is recommended that users of this publication, for maintenance and repair, have a basic knowledge of mechanical principles and of repair technique procedures.
19. **Management in charge of safety is to make sure that the staff responsible for using the machine has read and understood this manual in its entirety.**
20. **Management is responsible for safety and verification of the company's risk status according to Legislative Decree 81/08 and subsequent modifications and amendments.**



2.2 Safety regulations regarding the electric system of machine-tools



Changes in the Electrical System

- Do not modify the electrical system of the machine in any way.
- Work carried out in the electrical system of the machine must be carried out only by authorized personnel.
- If one hears unusual noises, or feels something strange, immediately stop the machine.
- Carry out an inspection and, if necessary, perform any repairs as required.

1. The supply voltage must correspond to that stated on the label and in the technical specifications: 230 V / 50 Hz
2. **Never use any other type of power supply!**
3. The use of a device for the automatic interruption of the power supply is necessary, coordinated with the on-board machine system, capable of detecting short circuits, overcurrents and ground faults.
4. The power plug must have a grounding conductor.
5. Any extension cords must be of equal or greater length than the power cord on the machine and must also be equipped with a grounding connection.
6. The power supply cable (and its possible extension cable) should never come in contact with hot objects, sharp edges, wet or oiled surfaces.
7. The power cord should be checked regularly and before each use to check for signs of damage or wear.
8. **If these are not in good condition, do not use the machine and replace the cable immediately.**
9. Do not use the power cord to detach its plug from the socket.
10. Do not switch off the machine by unplugging it.

2.3 Technical support

For any problems or concerns, please do not hesitate to contact the dealer who sold the item.

2.4 Other provisions


IT IS FORBIDDEN TO TAMPER WITH SAFETY DEVICES

The first thing to do when starting work is to check for the presence and integrity of the protections and the operation of the safety devices.

If any defect is encountered do not use the machine!

It is strictly forbidden to modify or remove guards, safety devices, labels and caution signs.

3 TECHNICAL SPECIFICATIONS

Description (unit of measurement)	Art. 0362		
Height (mm)	450		
Width (mm)	700		
Depth (mm)	360		
Net weight (kg)	22		
Rated voltage (V)	230		
Power (W)	500		
Frequency (Hz)	50		
Blade size (mm)	1435 x 12.7 x 0.65		
Blade speed (m/min)	35- 80		
Cutting angle	0° ÷ 60°		
Bar section	o	□	
0° (mm)	125	125 x 125	130 x 125
45° (mm)	76	76 x 76	76 x 90
60 ° (mm)	76	53 x 53	53 x 76



4 DESCRIPTION OF THE MACHINE

The Cutting band saw must only be used for cutting metal materials with the characteristics indicated below and within the limits recommended by the manufacturer.

The machine is designed and manufactured for cutting metal bars (section bars) with the following characteristics:

- circular section, solid or hollow, with a maximum diameter of 125 mm;
- circular section, solid or hollow, with a maximum size of 125 mm;
- circular section, solid or hollow, with maximum dimensions of 125x130 mm.

Other types of use, or the extension of use beyond that envisaged, does not correspond to the designation attributed by the manufacturer, and therefore the latter cannot accept any responsibility for any damage resulting therefrom.



Intended use and materials

- The machine was designed and manufactured for a specific use, different uses and non-compliance with technical parameters established by the Manufacturer may be hazardous to the operator.
- In particular, with regard to the type of material: **DO NOT TRY TO SAW "hardened" or "cemented" steel.**

The band saw consists of:

- the base;
- the vice clamp to lock the piece;
- the moveable swivel head, on which are installed the electric motor, the pulleys and the blade;
- the lever with handle and blade start button.

Refer to section 4.1 of this manual to view the different parts of the machine in detail.

The band saw art. 0362 has a continuously adjustable rotation speed, from a minimum of 35 m/min to a maximum of 80 m/min.

The adjustment can be made by means of a potentiometer located on the motor housing.



Figure 1 – Speed adjustment.

The band saw for metal must be installed and used on flat supporting surfaces, with suitable ergonomic characteristics and strength.

The machine can only be operated in closed work environments (production halls, warehouses, etc.), where there is no danger of fire or explosion.

The operating temperature is within the range of +5 / +50°C.

The environment must also be sufficiently illuminated so as to ensure operation in maximum safety (at least 200 lux is recommended).

4.1 Main machine parts



Figure 2 – Close-up of the main parts of the saw.

1	Support base	8	Guide blade and sliding shield
2	Head locking lever	9	Start/Stop buttons
3	Vice closing screw	10	Electric motor
4	Workpiece clamping vice	11	Identification plate
5	Blade tension handwheel	12	Speed regulator
6	Swivel and movable head	13	Head locking pin
7	Handle		



4.2 Plate and pictograms

On each machine there is:

- a) an identification plate on the motor casing box;
- b) a pictogram with main safety rules, on the front of the movable head;
- c) a pictogram indicating the direction of blade rotation, on the movable head;
- d) a pictogram with the rotation direction of the blade tensioner;
- e) the graduated scale for the inclination of the movable head;
- f) the graduated scale for adjusting the speed of rotation;
- g) reset for thermal protection of the motor;
- h) a pictogram indicating the prohibition to remove the guards at the back of the movable head.

See the following figure.

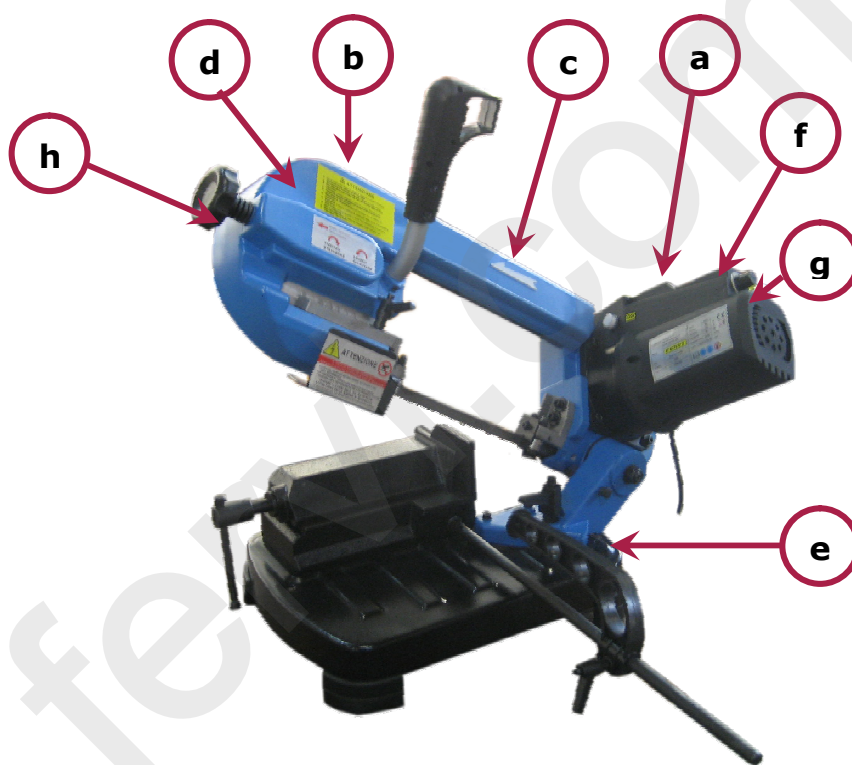



Figure 3 – Position of the plates and pictograms.

a) Identification plate

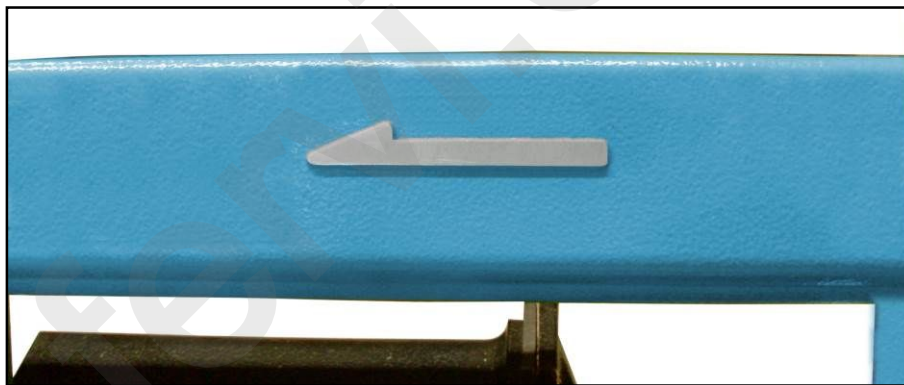
Fabbricante	 Via del Commercio 81 41058 Vignola (MO) – ITALY	Potenza	<input type="text" value="400"/>	W	 Made in PRC 
Tipo	<input type="text" value="Segatrice a nastro"/>	Tensione	<input type="text" value="230"/>	V	
Modello	<input type="text" value="0362"/>	Frequenza	<input type="text" value="50"/>	Hz	
Lotto n°	<input type="text"/>	Velocità lama	<input type="text" value="35-80"/>	m/min	
Anno	<input type="text" value="2013"/>	Lama	<input type="text" value="1435x12.7x0,65"/>	mm	

b) Pictogram with the main safety rules

ATTENTION

- For your own Safety please read and ensure you understand the instruction manual before using the machine.
- Do not expose the machine to rain or use in damp places.
- Do not wear jewellery or loose clothing while using the machine.
- Wear protective goggles or face shields during use.
- Always make check the tension of the blade, the guides and the bearings.
- Maintain adequate protection devices in the place where the machine is used.
- Keep your hands at a safe distance from the operating area of the blade.
- Do not rotate the head when the blade is in motion or when the head is lowered.
- Clamp the workpiece firmly in the vice and do not hold it with your hands.

c) Pictogram indicating the direction of rotation of the blade



d) Pictogram for adjusting the blade tensioner

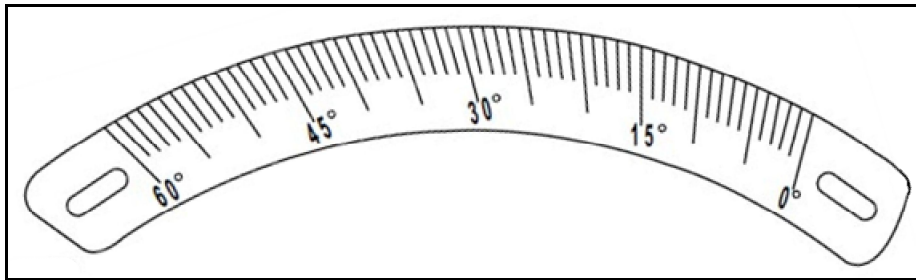
Blade Tensioner
Tensionatore

TIGHTEN
STRINGERE

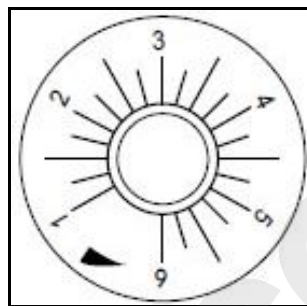
LOOSEN
ALLENARE



e) Graduated scale for the inclination of the movable head



f) Graduated scale for adjusting the speed of the blade













g) Reset for thermal protection of the motor



h) Pictogram indicating the prohibition of removing the guards



4.2.1 Translation of the plates

PLATE IN ITALIAN		PLATE IN ENGLISH
<div style="border: 1px solid black; padding: 5px;">   <p>ATTENZIONE</p> <p>È VIETATO ESEGUIRE LAVORI SU APPARECCHIATURE ELETTRICHE SOTTO TENSIONE</p> <ul style="list-style-type: none"> • EVENTUALI DEROGHE DEVONO ESSERE AUTORIZZATE DAL CAPO RESPONSABILE • IN CONDIZIONI DI PARTICOLARE PERICOLO DEVE ESSERE PRESENTE UN'ALTRA PERSONA OLTRE A CHI ESEGUE IL LAVORO <p>INIZIARE I LAVORI SOLO AD AVVENUTA ATTUAZIONE DELLE MISURE DI SICUREZZA</p> <p><small>In ottemperanza al D.Lgs. 81/08 relativo alla prevenzione infortuni</small></p> </div>		<div style="border: 1px solid black; padding: 5px;">   <p>ATTENTION</p> <p>IT IS PROHIBITED TO WORK ON LIVE ELECTRICAL EQUIPMENT</p> <ul style="list-style-type: none"> • ANY EXCEPTIONS MUST BE APPROVED BY THE HEAD MANAGER • UNDER PARTICULARLY DANGEROUS CONDITIONS, ANOTHER PERSON MUST BE PRESENT WHO IS NOT PERFORMING THE WORK <p>ONLY BEGIN WORKING WHEN SAFETY MEASURES HAVE BEEN IMPLEMENTED</p> <p><small>In accordance with Legislative Decree 81/08 on accident prevention</small></p> </div>
<div style="border: 1px solid black; padding: 5px; background-color: yellow;">  <p>ATTENZIONE</p> <ul style="list-style-type: none"> • Per la Vostra Sicurezza si prega di leggere e capire il manuale d'istruzioni prima dell'uso della macchina. • Non esporre la macchina a pioggia o usare in luoghi umidi. • Non indossare abiti lesi o gioielli durante l'utilizzo della macchina. • Indossare occhiali protettivi o schermi facciali durante l'uso. • Accertarsi sempre sull'adeguato tensionamento della lama, delle guide e dei cuscinetti. • Mantenere le adeguate protezioni nel luogo ove si utilizza la macchina. • Mantenere le mani a distanza di sicurezza dalla zona di lavorazione della lama. • Non ruotate la testa quando la lama è in movimento o quando la testa è abbassata. • Bloccate saldamente il pezzo da lavorare nella morsa e non trattenetelo con le mani. </div>		<div style="border: 1px solid black; padding: 5px; background-color: yellow;">  <p>ATTENTION</p> <ul style="list-style-type: none"> • For your own Safety please read and ensure you understand the instruction manual before using the machine. • Do not expose the machine to rain or use in damp places. • Do not wear jewellery or loose clothing while using the machine. • Wear protective goggles or face shields during use. • Always make check the tension of the blade, the guides and the bearings. • Maintain adequate protection devices in the place where the machine is used. • Keep your hands at a safe distance from the operating area of the blade. • Do not rotate the head when the blade is in motion or when the head is lowered. • Clamp the workpiece firmly in the vice and do not hold it with your hands. </div>
<div style="border: 1px solid black; padding: 5px; background-color: yellow;">  <p>ATTENZIONE</p> <p>AL FINE DI EVITARE INCIDENTI È VIETATO RIMUOVERE LE PROTEZIONI DURANTE L'USO.</p> </div>		<div style="border: 1px solid black; padding: 5px; background-color: yellow;">  <p>ATTENTION</p> <p>TO PREVENT ACCIDENTS IT IS FORBIDDEN TO REMOVE THE PROTECTION DEVICES DURING USE.</p> </div>



4.3 Description of controls

The electrical and control panel is installed on the right side of the machine (see figure 4).

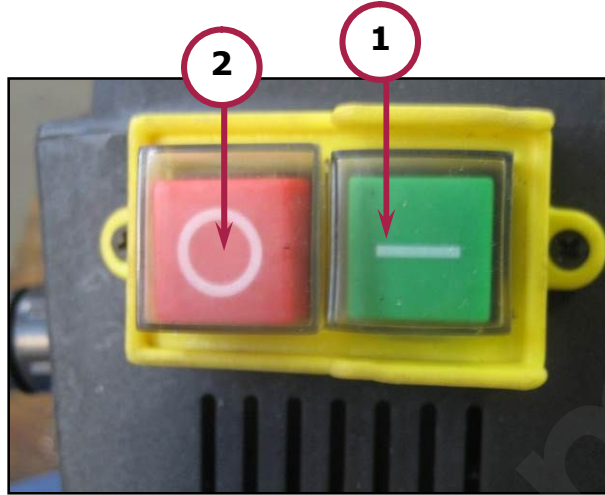


Figure 4 – Start/Stop Buttons

Start button (1)

This has the function of disconnecting the power supply. When pressed, the motor is powered.

Stop button (2)

To disconnect the machine from the power supply, press the 0 button.



Figure 5 – Confirmation button.

Manual control button (3)

On the handle located on the control lever of the movable head, there is the button for blade activation in manual mode (ref. 3 in Figure 5).

This button is a command that requires a human presence (or is held down), in the sense that the blade rotates while the button continues to be pressed down. Conversely, when releasing the button the saw blade stops immediately.

This button is equipped with a device for protection against accidental and undesired operation, for example in the event of a collision.

To perform manual cutting operations:

- hold the handle with your right hand and place your index finger inside the protection ring;
- press and hold down the button (3).



Cutting hazard

- It is absolutely forbidden to by-pass the safety feature constituted by holding down the start button, by trying to lock the button in the "PRESSED" position.
- While working, keep your left hand away from the cutting area and the blade. Otherwise, it could lead to serious personal injury!

During manual operation, with the start switch held down, this button also performs the function of emergency stop when released.



How to act in the event of an emergency

During manual operation, in the event of an emergency, immediately release the start button (3) and move away from the machine.

4.3.1 Head locking lever

At the front of the saw, under the coolant collection tank and the vice, the locking lever of the saw head is located.

This lever is used to rotate the head when it is necessary to make angled cuts (with angles from 0 to 60°).

- **Lever to the left (A):** head unlocked.
- **Lever to the right (B):** head locked.

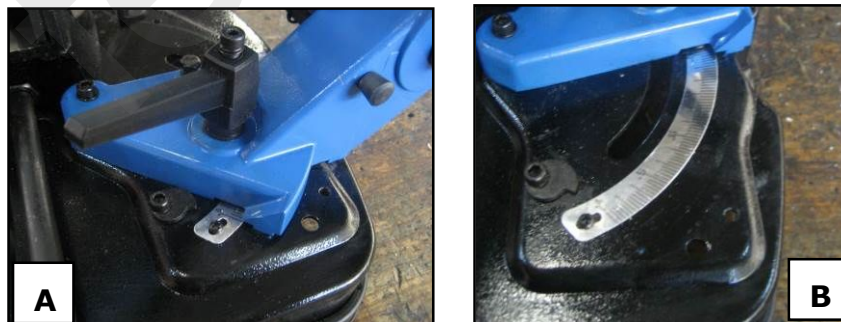


Figure 6 – Head locking lever.



4.3.2 Vice adjustment screw

Located at the front of the band saw is the vice tightening screw.

- **Screw clockwise:** to clamp the workpiece in the vice.
- **Screw anti-clockwise:** to unlock the workpiece in the vice.



Figure 7 – Vice adjustment screw.

4.3.3 Blade tension adjustment handwheel

At the front part of the head, there is a handwheel for adjusting the tension of the blade.

- **Handwheel clockwise:** to increase the tension of the blade (TIGHTEN).
- **Handwheel anti-clockwise:** to reduce the tension of the blade (LOOSEN).



Figure 8 – Blade tension handwheel.

4.3.4 Adjusting the blade cover

At the point where the blade exits its casing, so as to leave the cutting part of the blade exposed, there is an adjustable blade cover. A lever locks it in position.

- **Lever to the right:** blade cover unlocked.
- **Lever to the left:** blade cover locked.



Figure 9 - Blade cover locking lever.

5 SAFETY DEVICES ON THE MACHINE

5.1 Electrical safety devices

In the event of malfunction or breakdown, the **BAND SAW** is equipped with a power cable with a **grounding connection**, which provides a path of least resistance for electric current and reduces the risk of electric shock.

The plug must be plugged into an appropriate outlet, earthed in accordance with current regulations. Extension cables must be of a section equal to or greater than the power cable of the machine.



Electric shock.

Improper connection of the machine's grounding conductor can result in the risk of electric shock.

Check with a qualified electrician if you don't understand the grounding instructions or if you have any doubts about grounding the machine.

SAFETY START SWITCH

The control device of the Band saw has a safety switch (button) which is held down (human presence required).

This prevents the danger of unwanted and/or accidental starts of the machine, since the activation of the blade can only be activated through a voluntary action suitable for the given purpose.

As said, the command requires maintained action, so the rotation of the blade continues until the operator releases the button itself.

5.2 Mechanical risk safety devices

PROTECTIVE CASING

They have the task of preventing parts of the operator's body, particularly hands and/or fingers, from coming into direct contact with the bandsaw blade.

Furthermore, this prevents the splinters, workpiece or blade fragments that eventually get separated from being thrown towards the operator's face.



Checking the Safety devices

Each time you use the band saw, check the proper functioning and integrity of the safety devices.



Use of PPE

In any event, ALWAYS use appropriate personal protective equipment (PPE, see Figure 10) such as:



Safety shoes



Gloves



Goggles or face shields



Overalls or
aprons

Figure 10 – Personal Protective Equipment.

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6 IMPROPER USE AND CONTRAINDICATIONS

The following actions described, which obviously can not cover the entire range of potential possibilities of "misuse" of the machine, are to be considered **strictly prohibited**.



IT IS STRICTLY FORBIDDEN!

- To use the machine without the guide blade installed and regularly placed;
- To hold the piece to be cut with your hand;
- To use the machine for purposes other than those for which it is designed, in particular, for cutting steel "hardened or cemented";
- To use the machine to cut wood or similar materials;
- To exceed the cutting capacity stated by the manufacturer;
- To leave the machine unattended with the plug inserted;
- To allow untrained staff to use the machine;
- To operate this machine if you are not psychophysically fit;
- To use the machine without due attention;
- To use the machine in the presence of strangers, children or animals;
- To use the machine without the use of appropriate personal protective equipment, such as shoes and safety gloves, goggles or shields;
- To use the machine in unforeseen environmental conditions (weather, high magnetic fields, etc.);
- To use the machine in potentially explosive atmospheres;
- To use the machine in inadequate light;
- To let the machine come into contact with foodstuffs;
- To tamper with equipment and/or safety devices;



7 TRANSPORT AND LIFTING

7.1 Machine transport

The transport of the machine must be carried out using closed vans, in order to protect the machine from the elements. The dimensions must be suitable for the load to be transported.

The **BAND SAW** weighs around 22 kg, so it can be lifted and moved by hand by a single operator. To do so it is necessary to:

- lock the movable head using the appropriate locking pin,
- check that the power cord is not connected to the mains,
- hold the machine under the base, with both hands;

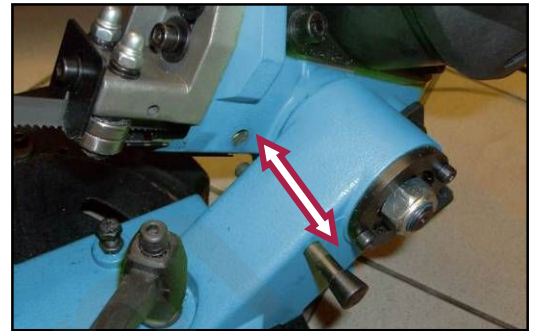


Figure 11 - Locking pin.

The machine is supplied in a cardboard box.



Machine transportation

All transportation operations are **ALWAYS** made when the machine is stopped and there are no metal workpieces in the machine vice.

ALWAYS disconnect the power plug.

8 ASSEMBLY AND COMMISSIONING

8.1 Unpacking instructions

The **BAND SAW** is delivered packed inside a cardboard box.

Before disposing of packaging, check that no parts of the machine, including the user manual or other documentation, are going to be thrown away.

Also, make sure that at the time of unpacking, the parts of the machine are in perfect condition.

The manufacturer is not liable for any defects or missing parts five days after delivery.



Standard packaging

Packaging materials (plastic bags, polystyrene foam, etc.) must not be left within reach of children as these are potentially dangerous.



8.2 Connection to the power supply and start-up test

1. Insert the power supply plug into a grounded double pole socket (10/16 A, 250 V).
2. Press the start button so that it is in the ON position and then press the button on the handle to make sure that the rotation direction of the blade is the same as that indicated by the arrow on the protective casing.
3. Before starting the cutting operation, check the saw as follows:
 - let it spin freely for at least 5 minutes with the protection devices in place without the presence of staff.



Impact of thrown parts

During the test run, no operator and no other person should be within range of the machine.



9 OPERATION

9.1 Instructions for Use



Machine operation

- The band saw should only be used with certain metallic materials (structural steel, stainless steel, copper, aluminium and its alloys).
- Do not cut "hardened or case-hardened" steel parts.
- Do not cut pieces and/or structural steel exceeding the maximum permissible size (see the Technical Specifications).



Risk of abrasion and accident

- Before using the machine, make sure that it is rigidly fixed to the floor to prevent unwanted movement or loss of stability.
- Wear appropriate personal protective equipment (PPE) such as gloves, goggles, overalls or aprons and safety shoes.

9.2 Setting the speed

The band saw can operate at different speeds, depending on the material being cut.

To set the rotation speed of the band just rotate the speed regulator located on the motor casing box:

- | | | |
|---------------------------------|---|----------|
| 1 - to select the lowest speed | → | 35 m/min |
| 6 - to select the highest speed | → | 80 m/min |

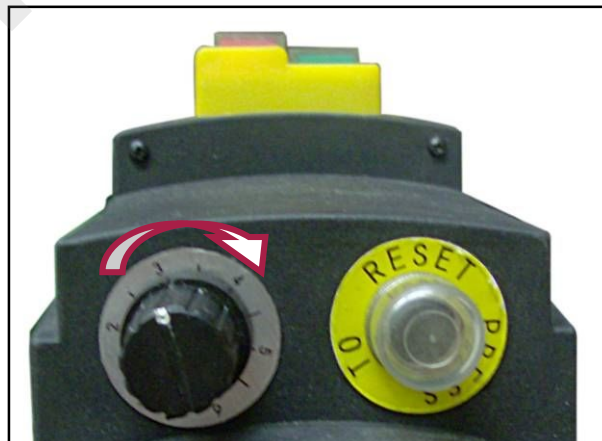


Figure 12 – Speed selection.

9.3 Commissioning and adjustments

The machine is adjusted and used as follows:

1. To adjust the position of the head and perform angled cuts between 0 and 60° it is necessary to rotate the lever, located at the front right of the machine, backwards into the unlocked position (see Figure 13) then manually rotate the head aligning the indicator along the graduated scale to the desired position.
2. After positioning the head, rotate the lever forward, into the locked position.



Figure 13 – Adjusting the head position.



Adjusting the head

- Remember to always lock the head before starting the cut. Otherwise, sudden movements are possible with consequent breaking of the belt.
- Do not exceed the cutting capacity, angled positions correspond to smaller sizes, check the specifications given on page 8.
- The values on the graduated scales are indicative, if precision cutting is needed more precise means will be required.

9.4 Performing cutting

After making the above adjustments it is possible to carry out the cutting of the section bar.



Fire or explosion

Some metallic materials (such as magnesium) may generate chips which are easily flammable.

Proceed with caution when removing them and cleaning the machine.

1. Insert the piece / section bar to be cut within the vice resting it against the fixed jaws (piece-holder) and then approach the movable jaw by rotating the vice tightening screw clockwise (Figure 14).



Figure 14 – Adjustment and locking of the vice.



2. Adjust the position of the guide blade unit (see Figure 15) that, in addition to being a useful guide for the band saw, also acts as a protection device to cover the part of the blade that does not serve the purpose of cutting.

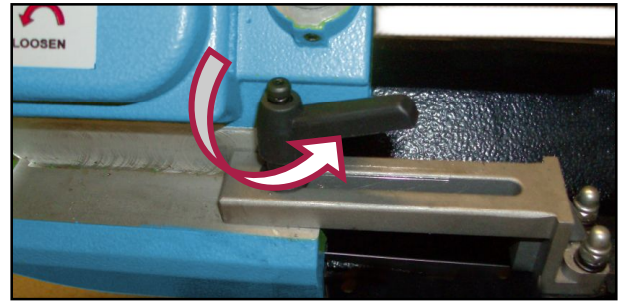


Figure 15 – Unlocking the blade guide screw.

To do this:

- Loosen the fixing screw by turning the locking lever anti-clockwise.
- Hold the lever of the blade guide unit and move the blade guide and the guard into the desired position.
- After the blade guide has been positioned, tighten the fixing screw by turning the locking lever in a clockwise direction.

9.5 Performing cutting

1. Press the green button to start the machine;
2. Unlock the movable head so that it is free to fall and rise, by pulling out the locking pin (Figure 11).
3. Hold the handle on the head lever with your right hand, press and hold down the start button with your index finger to activate the blade and then slowly lower the head to start the cutting phase.



Cutting hazard

- It is absolutely forbidden to by-pass the safety feature constituted by holding down the start button, by trying to lock the button in the "PRESSED" position.
- While working, keep your left hand away from the cutting area and the blade. Otherwise, it could lead to serious personal injury!



How to act in the event of an emergency

During manual operation, in the event of an emergency, immediately release the start button and move away from the machine.

4. At the end of the cutting operation, release the start button and then lift the head.
5. To start a new cutting cycle, it is necessary to:
 - open the vice by using the tightening screw;
 - clamp the workpiece in the vice;
 - press the button to start the blade and repeat step 3.

At the end of the work raise the movable head and lock it using the pin.
Press the stop button to disconnect the machine from the power supply.

10 MAINTENANCE

Any maintenance, except for that specifically listed in this manual should be performed by qualified staff authorized by the manufacturer.

This manual does not elaborate information on disassembly and maintenance, as these operations should always be carried out exclusively by Technical Assistance staff.

10.1 Routine maintenance

AT THE END OF EACH MACHINING



Electric shocks / Cuts

Before maintenance or checks, turn off the machine and ALWAYS unplug the plug from the power outlet to avoid the risk of electric shock. This is so that there is no risk of electric shock or cuts.

Regularly clean and take care of the machine to guarantee proper efficiency and a long working life.

Use a compressor to blow off the shavings, filings and dust accumulating on the floor of the machine and on the workbench at the end of each machining operation.



Working with compressed air

ALWAYS wear the protective goggles when using compressed air.

Check the state of the band saw **Errore. Nome della proprietà del documento sconosciuto.** and the CE plate and warning plate at the same time; if these are no longer legible request replacements.

Do not use the Band saw if there are any defects!!

Use only a dry cloth to clean the outside of the machine.



Cleaning the machine

DO NOT use detergents or any solvents; the plastic parts are easily damaged by chemical agents.

PERIODICALLY

Every 6 months of the machine's life, perform a thorough inspection of operation and wear.

Disconnect the power supply and check the length and efficiency of the electric motor brushes, which should not be less than 6 mm.

Otherwise, replace them with identical parts.



10.2 Changing the bandsaw blade



Electric shock

Before replacing the blade, turn off the machine and ALWAYS remove the plug from the power outlet. This is so that there is no risk of electric shock or undesired activation of the machine.



Wear PPE

ALWAYS wear suitable protective gloves (to reduce the risk of cut) when replacing the blade.

When you notice excessive wear in the teeth of the blade, with the resulting loss of the ability to cut, replace it.

In this regard, use a replacement blade with equivalent characteristics to those indicated by the manufacturer (see Technical Specifications on page 8).

1. Remove the plug from the mains socket.
2. Unscrew the 6 screws that hold the rear blade cover in place, located on the left side of the movable head (see Figure 16).

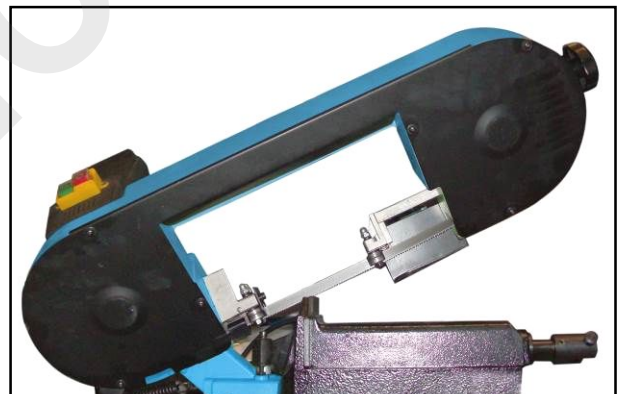


Figure 16 - Opening the Protective Casing.

3. Hold the casing with both hands.
4. Loosen the tension of the band saw blade by turning the knob anti-clockwise located at the front of the head.
5. Remove the blade from the saw, with the aid of a tool



Figure 17 - Blade tension reduction.

6. Insert the new blade on the saw, paying attention to the cutting direction.

First fit the blade into the guide and then onto the pulleys, verifying the central alignment of the belt with respect to the pulleys.

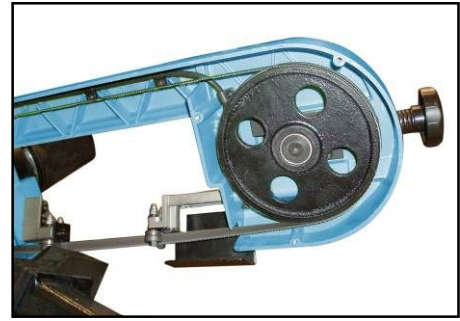


Figure 18 – Close-up of the blade.

7. Rotate the handwheel clockwise to increase the tension of the blade, this will automatically go into cutting position when the motor begins to turn.
8. Refit the protective blade guard remembering to tighten all the screws.



First cut with new blades

To preserve the effectiveness of the blade over time, do not use maximum cutting pressure during the first 4-6 cuts.

10.3 Conservation of the bandsaw blade

Arrange a suitable place for the conservation of the bandsaw blade, away from the reach of children, animals and strangers.



Cuts

Always wear safety gloves when handling the bandsaw blade.



11 REPLACEMENT PARTS

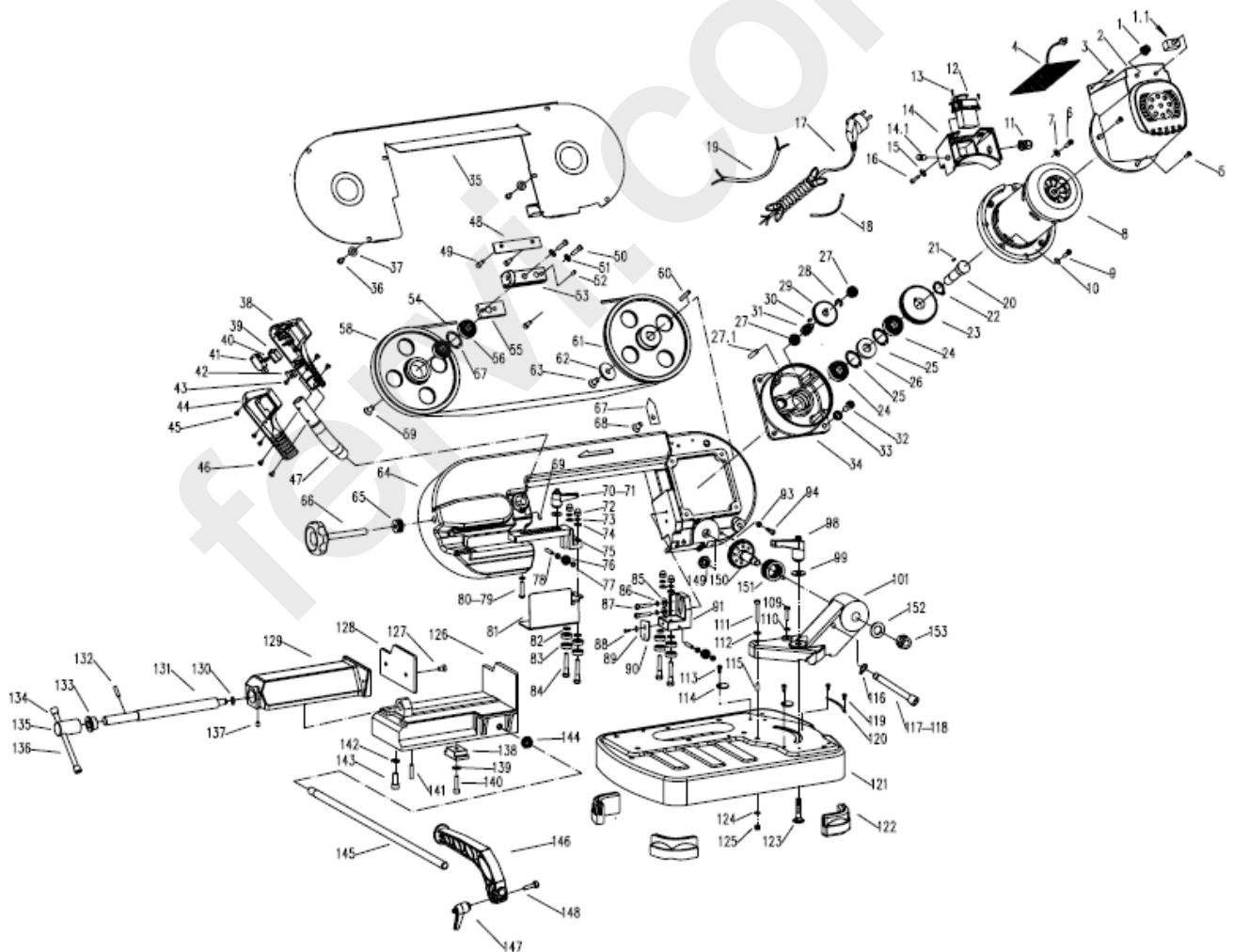
Always clearly indicate:

- the symbol and the serial number of the machine;
- the code number of the parts;
- number of parts;
- exact address of your company.



Genuine Parts

The manufacturer disclaims any liability for damages of any kind caused by the use of non-original spare parts.



Ref.	Description	Ref.	Description
0362/001	Speed regulator	0362/036	Socket hex head screw
0362/001.1	Overcurrent protection device	0362/037	Flat washer
0362/002	Motor guard	0362/038	Handle
0362/003	Self-tapping screw	0362/039	Button
0362/004	Speed adjustment circuit	0362/040	Button spring
0362/005	Socket hex head screw	0362/041	Micro switch
0362/006	Socket hex head screw	0362/042	Electric cable terminal
0362/007	Washer	0362/043	Socket hex head screw
0362/008	Motor	0362/044	Handle
0362/009	Socket hex head screw	0362/045	Self-tapping screw
0362/010	O-ring	0362/046	Socket hex head screw
0362/011	Filter	0362/047	Handle
0362/012.1	Main switch	0362/048	Support bracket
0362/012.2	Switch cover	0362/049	Hex bolt
0362/013	Self-tapping screw	0362/050	Hex bolt
0362/014	Switch box	0362/051	Spring lock washer
0362/015	Flat washer	0362/052	Locking screw
0362/016	Self-tapping screw	0362/053	Sliding housing
0362/017	Electric cable	0362/054	Bandsaw
0362/018	Internal conductors	0362/055	Shaft
0362/019	Internal conductors	0362/056	Bearing
0362/020	Driving pulley bearing	0362/057	Retainer ring
0362/021	Shaft	0362/058	Neutral pulley
0362/022	Retainer ring	0362/059	Hex bolt
0362/023	Gear	0362/060	Pin
0362/024	Bearing	0362/061	Small wheel
0362/025	Bearing	0362/062	Retainer ring
0362/026	Oil seal	0362/063	Hex bolt
0362/027	Bearing	0362/064	Base
0362/027.1	Bolt	0362/065	Washer
0362/028	Retainer ring	0362/066	Handle
0362/029	Gear	0362/067	Cable terminal
0362/030	Shaft	0362/068	Socket hex head screw
0362/031	Gear	0362/069	Hex bolt
0362/032	Bolt	0362/070	Handle
0362/033	Spring lock washer	0362/071	Washer
0362/034	Speed regulator box	0362/072	Nut
0362/035	Pulley guard	0362/073	Spring lock washer



Ref.	Description	Ref.	Description
0362/074	Flat washer	0362/123	Bolt
0362/075	Lock guide	0362/124	Flat washer
0362/076	Bearing	0362/125	Anti-loosening lock nut
0362/077	Flat washer	0362/126	Fixed part of the vice
0362/078.1	Grub screw	0362/127	Hex bolt
0362/078.2	Grub screw	0362/128	Moveable plate of the vice
0362/079	Hex bolt	0362/129	Moveable part of the vice
0362/080	Spring lock washer	0362/130	Retainer ring
0362/081	Blade guard	0362/131	Screw
0362/082	Flat washer	0362/132	Grub screw
0362/083	Bearing	0362/133	Threaded closing element
0362/084	Shaft bearing	0362/134	Bolt
0362/085	Flat washer	0362/135	Bolt housing
0362/086	Spring lock washer	0362/136	Casing
0362/087	Hex bolt	0362/137	Hex bolt
0362/088	Hex bolt	0362/138	Vice lock
0362/089	Flat washer	0362/139	Spring lock washer
0362/090	Guard	0362/140	Hex bolt
0362/091	Guide housing	0362/141	Light indicator
0362/093	Nut	0362/142	Spring lock washer
0362/094	Hex bolt	0362/143	Hex bolt
0362/098	Handle	0362/144	Hex nut
0362/099	Flat washer	0362/145	Locking shaft
0362/101	Base guard	0362/146	Lock
0362/109	Hex bolt	0362/147	Key
0362/110	Hex bolt	0362/148	Hex bolt
0362/111	Hex bolt	0362/149	Nut
0362/112	Flat washer	0362/150	Rotation shaft
0362/113	Hex bolt	0362/151	Spring
0362/114	Washer	0362/152	Washer
0362/115	Casing	0362/153	Locking nut
0362/116	Retainer ring		
0362/117	Grub screw		
0362/118	Guard		
0362/119	Bolt		
0362/120	Head rotation graduated scale		
0362/121	Base		
0362/122	Rubber supports		

12 WAREHOUSE STORAGE

In the event that the machine should be stored and unused for some time, it must be kept in a closed environment free of moisture to avoid damage and/or deterioration.

13 DISPOSAL OF PARTS AND MATERIALS

If the machine is to be scrapped, its parts must be disposed of separately.



Respect the environment!

Contact a specialist centre for the collection of metallic materials.

The structure of the **Band saw** and the blade is made from steel, while some parts such as the handle, the casing of the electric motor, etc. are made from polymeric material. In this regard, differentiate the materials according to their nature, with the assistance of specialist companies authorized for waste disposal, in compliance with the requirements of the law.

In compliance with Directive 2011/65/EC it is forbidden to dispose of the machine with normal household waste.

Contact your dealer to arrange for its disposal.



Respect the environment!

Dispose of cuttings (chips, filings cutting etc.) in accordance with local regulations.



14 TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION
Noisy operation	<ul style="list-style-type: none"> A. Damaged bearings. B. Bearings not lubricated. C. Blade friction. D. Blade loose. 	<ul style="list-style-type: none"> A. Contact Technical Support. B. Lubricate. C. Remove / replace the blade and check sliding. D. Turn the blade tensioning handwheel.
The motor will not start.	<ul style="list-style-type: none"> A. Electrical power supply. B. Wiring connections C. Burnt motor windings. D. Blown fuses. E. Broken switch. F. Thermal protection trip 	<ul style="list-style-type: none"> A. Check the mains power supply. B. Check the wiring connections. C. Contact Technical Support. D. Replace the fuses. E. Contact technical support. F. Reset the thermal protection
Poor cutting efficiency or excessive overheating of the blade.	<ul style="list-style-type: none"> A. Excessive pressure on the workpiece. B. Blade worn or does not cut well. C. Material too hard. 	<ul style="list-style-type: none"> A. Apply less pressure. B. Check the blade sharpness and wear. C. Lubricate as you work.

15 WIRING PLAN

