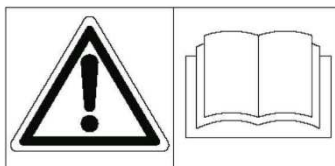
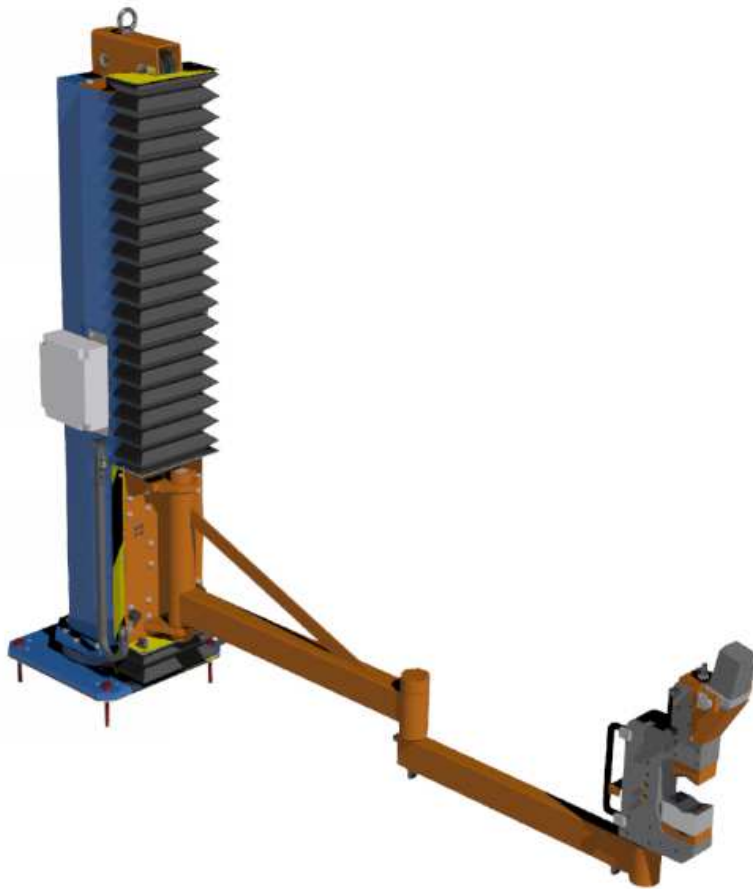


MAINTENANCE AND OPERATING
INSTRUCTION

PNEUMATICAL EXTRACTOR

Mod. AME000001988



**Carefully read the instructions container in this booklet
Before operating the handling system**

**ORIGINAL INSTRUCTION
KEEP FOR FUTURE CONSULTATIONS**

Service and warranty: **SVECOM P.E.**

Special maintenance: **SVECOM P.E.**

This manual is considered an integral part of the unit and must accompany it when transported or resold. It is the responsibility of the user to keep it complete and in good condition.

THE OFFICIAL LANGUAGE CHOSEN BY **SVECOM PE** IS ITALIAN.

We do not take responsibility for translations, in other languages, which do not conform to the original meaning.

REVIEW MATRIX OF THE MANUAL AND ITS PARTS

MANUAL PART	Revision	Date	Revision	Date	Revision	Date
GENERAL INDEX	0.0	29/05/2020				
Chapter 1	0.0	29/05/2020				
Chapter 2	0.0	29/05/2020				
Chapter 3	0.0	29/05/2020				
Chapter 4	0.0	29/05/2020				
Chapter 5	0.0	29/05/2020				
Chapter 6	0.0	29/05/2020				
Chapter 7	0.0	29/05/2020				
Chapter 8	0.0	29/05/2020				
Chapter 9	0.0	29/05/2020				
Chapter 10	0.0	29/05/2020				
Chapter 11	0.0	29/05/2020				
Chapter 12	0.0	29/05/2020				
Date	29/05/2020					

GENERAL INDEX

WARRANTY	4
EXCLUSION FROM WARRANTY	4
CE CERTIFICATION.....	5
1.0 STANDARDS AND GENERAL PRECAUTION.....	6
1.1 SAFETY.....	6
1.1.1 Placement corresponding to points of use	6
1.2 SAFETY STANDARDS.....	7
1.3 SAFETY NOTICES, LOCATIONE, DESCRIPTION.....	8
1.4 RESIDUAL RISKS	8
2.0 PREAMBLE	9
3.0 INTRODUCTION.....	10
5.0 TECHNICAL SPECIFICATION	10
5.1 MACHINE IDENTIFICATION	10
4.0 MACHINE PRESENTATION.....	11
4.1 COMPOSITION.....	11
4.2 FUNCTIONING	12
4.3 ACCIDENT-PREVENTION PROTECTION SCREENS.....	12
4.4 WORK POSITION.....	12
4.4.1 Lighting and health conditions at the work position	12
5.0 TECHNICAL SPECIFICATION	13
5.1 MACHINE IDENTIFICATION	13
5.2 SIZE AND CHARACTERISTICS OF THE MACHINE.....	13
5.3 NOISE.....	14
6.0 TRASPORT – UNLOADING - UNPACKING	15
6.1 TRASPORT - UNLOADING	15
6.2 PACKAGING DATA	15
6.3 UNPACKING	15
6.4 ENVIRONMENTAL OPERATING CONDITIONS	15
7.0 INSTALLATION.....	16
7.1 GENERAL PRINCIPLES	16
7.2 MACHINE ASSEMBLY.....	16
7.3 FASTENING AND LEVELLING MACHINE	17
7.4 CONNECTION	17
8.0 CONTROLS.....	18
8.1 USE OF THE MACHINE.....	19
9.0 ADJUSTMENTS.....	20
10.0 MAINTENANCE	21
10.1 GENERAL INDICATIONS.....	21
10.2 ROUTINE MAINTENANCE	21
10.2.1 Lubrification	22
10.2.2 Tightening of the base bolts.....	22
10.3 SPECIAL MAINTENANCE.....	22
11.0 DEMOLITION AND DISPOSAL	23
12.0 TROUBLESHOOTING	24
13.0 PNEUMATIC SCHEME	25
14. 0 RECOMMENDED SPARE PARTS.....	26

WARRANTY

SVECOM P.E. guarantees the Hoist and its accessories for a period of 12 months from the date of purchase. This warranty implies the repair or replacement free of charge of any parts which, after a careful examination by the Manufacturer's Technical Service, are declared to be defective, excepting the electrical parts. This warranty is limited exclusively to material defects and ceases to have effect if the parts involved have been tampered with or in any case dismantled by non-authorized personnel.

The replacement or repair of materials under warranty does not imply the extension of the warranty period.

The purchaser may in any case only make claims under warranty if he has respected the conditions relative to the performance of the warranty, as specified in the supply contract.

If the parties do not intend to seek arbitration for any conflicts arising from the supply contract or any other circumstances in which the decision of an arbitration panel is requested, the arbitrary jurisdiction lies exclusively with the Court of Vicenza.

EXCLUSION FROM WARRANTY

The warranty excludes responsibility for damage caused directly or indirectly to persons, animals, or things because of machine failure or malfunctioning. The costs relating to the replacement of lubricants, transport, customs duties, VAT, and all others not specified in the supply contract are to be borne by the purchaser.

Upon delivery it is necessary to verify that the machine has not suffered damage during transport and that all accessories supplied are present and complete.

Any claims must be made within 8 days of the delivery of the Hoist.

Further to the conditions specified in the supply contract, the warranty is void:

- If there is an error in handling caused by the operator.
- If the damage is due to insufficient maintenance.
- If the maximum ratings are exceeded.
- If, following repair work carried out by the user without the prior consent of **SVECOM PE**, or because of the fitting of non-original spare parts, the Hoist has been modified and the damage is due to such modifications.
- If the instructions described in this manual are not respected.



CE DECLARATION OF CONFORMITY

IN ACCORDANCE WITH 2006/42/CEE AND SUCCESSIVE AMENDMENTS

WE
SVECOM P.E. Srl
36075 MONTECCHIO MAGGIORE (VICENZA)
ITALIA

DECLARE UNDER OUR SOLE RESPONSIBILITY THAT THE PRODUCT

PNEUMATIC MANIPULATOR

MODEL: AME000001988

Factory N°: 20C1721/01

TO WHICH THIS DECLARATION REFERS, CONFORMS
TO THE ESSENTIAL HEALTH AND SAFETY REQUIREMENTS SPECIFIED IN ANNEX "I"
OF THE DIRECTIVE 2006/42/CEE AND ITS SUCCESSIVE AMENDMENTS
AND IN THE FOLLOWING LEGISLATIVE PROVISIONS:

- DIRECTIVES 2014/30/UE (ELECTROMAGNETIC COMPATIBILITY)
- DIRECTIVE 2014/35/UE (LOW VOLTAGE)

TO VERIFY THE CONFORMITY TO THE LEGISLATIVE PROVISIONS THE FOLLOWING
DOCUMENTS ON STANDARDS AND TECHNICAL SPECIFICATIONS HAVE BEEN USED:

**UNI EN ISO 12100, UNI EN ISO
13857, EN ISO 3746**

Authorized person to make the related technical-file up:
Marin Giancarlo C/o SVECOM PE via della Tecnica, 4 – Montecchio Maggiore (VI)

SVECOM P.E. Srl
Sig. Marin Giancarlo


SVECOM P.E. Srl
Via della Tecnica, 4 - 36075 (VI)
36075 MONTECCHIO MAGGIORE (VI)
Cod. Fisc. e P.IVA 04339030271

Montecchio Maggiore.....15-05-2020

(Signed by the legal representative)

1.0 STANDARDS AND GENERAL PRECAUTION

1.1 SAFETY

This manual is addressed to operators with an average educational preparation.
Before beginning any operations make sure you have read and understood this manual.
If in doubt, please ask for clarification from qualified personnel.

"QUALIFIED PERSONNEL" is defined as those persons who have attended a specialist training course and who are experienced in the installation, set-up, and maintenance of the systems.

"OPERATOR" refers to the person or persons responsible for the installation, operation, adjustment, maintenance, cleaning, repair, and transportation of the machine.

"DANGER ZONES" refer to the zones inside or in the proximity of the machine where the presence of an ex-posed person constitutes a risk to the health and the safety of such person.

"EXPOSED PERSON" refers to any person who enters partly or wholly into a danger zone.

Failing to observe or neglecting the safety standards may be the cause of accidents during machine operation and maintenance.

For any doubts and clarifications please do not hesitate to contact **SVECOM PE**.

Do not affect any modifications and do not carry out any maintenance operations which are not described herein.

If set-up incorrectly, the machine may remain operative and become dangerous over time.

The qualified personnel must also have knowledge of the principles of first aid in the case of accidents.

In all cases the behaviour of the personnel charged with the operation, maintenance, cleaning, inspection etc. of the machine must conform strictly to the accident-prevention standards in the country where the machine is operated.

Before beginning work the operator must be fully aware of the position and function of all of the machine's controls and features.

SVECOM PE is not responsible for damage to persons or things resulting from the inattentive reading or putting into practice of the contents of this manual.

1.1.1 Placement corresponding to points of use

Do not disregard the "DANGER- WARNING - CAUTION" notices reported in this manual and on the unit.

To attract attention and provide safety messages, the dangerous operations are preceded by symbols and notes which highlight the danger and explain the behaviour required to avoid such danger.

These symbols and notes are identified by the words:

 **DANGER: imminent danger which may cause serious injury.**

 **WARNING: risk behaviour which may cause serious injury.**

❖ **The notes preceded by this symbol facilitate operation.**

1.2 SAFETY STANDARDS

Following is a list of the safety standards to be respected before, during and after the operation of the machine.

Pollution

- ◆ It is strictly prohibited to discharge products, production waste (shavings or scrap) or any polluting substances (cleaning solvents) into the sewerage system (washbasins, toilets, bathtubs etc.), into water courses, onto the ground or into the environment.
- ◆ Such products or substances are to be collected in suitable containers, stored, or recycled, and under no circumstances left in the environment.

Connection

- ◆ The installation and connections must be performed by qualified personnel.
- ◆ Check that the source of energy conforms to the type required and that it is in perfect working order (suitable cables/pipes).

Protective clothing

- ◆ Always wear overalls or other protective clothing with elastic wristbands.
- ◆ If materials or substances which are dangerous to the health are used or processed, use suitable protective garments and devices, such as gloves, glasses, masks, headphones, aprons and shoes.

Prohibited clothing

- ◆ Do not wear clothing with loose sleeves, ties, scarves, rings, bracelets and chains or garments or similar objects which may become caught in the moving parts and cause serious injury.

Accidents: third parties

- ◆ During the operation of the unit make sure that no unauthorized persons approach the unit or its controls without due care.
- ◆ No unauthorized persons may enter the work areas and above all the area surrounding the operative units (even when not in operation).
- ◆ In the case of the presence of third parties (unauthorized persons or colleagues) near the unit, the operator must guarantee their safety and warn them of the dangers.

Suspension of operation

- ◆ Following or during pauses in operation do not leave the unit with shaft inserted in the vice. Failure to heed this warning may cause serious accidents.

Prevention: checks

- ◆ Before carrying out any operation, check that the unit is in the rest position (non-operative) and that the protection and safety devices are enabled.

Prohibited: warning

- ◆ Do not place hands or other parts of the body into the unit during the operating cycle and where this warning is signaled.

Obligation: accessories

- ◆ Where required use suitable protective glasses and gloves.

Prevention: cleaning

- ◆ Keep the work and surrounding areas clean and tidy. The following must not be present: grease, oil, water and other objects or materials which may be obstructive or dangerous.

Prohibition: cleaning

- ◆ Do not direct jets of water or steam towards the machine, push-button panel or other electrical devices.

Warning: Dangerous situations





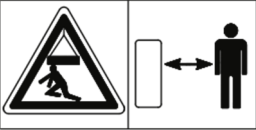



- ◆ The machine is not suited to working in environments where there is the risk of fire or explosion.
- ◆ Do not use the machine incorrectly: the machine must be used only for the purposes for which it was designed.

All other uses are considered dangerous and the manufacturer declines all responsibility for such use.

1.3 SAFETY NOTICES, LOCATION, DESCRIPTION

The machine is fitted with safety notices, signaling prohibition, danger, obligation, and warnings. These signs are solidly attached to the local points of the danger zones and are required for safety reasons. The locations and the descriptions of these signs are reported below.

Tab. 1

GRAPHIC SYMBOL	TYPE	DESCRIPTION
	PROHIBITION	It is forbidden to remove safety devices and protection screens. The machine's safety devices and protection screens must ONLY be removed where this is required by the work, and in this case measures must be adopted immediately in order to minimize the risk deriving from their removal, under the surveillance of direct superiors.
	PROHIBITION	The cleaning, oiling, greasing and repair of any moving parts is strictly forbidden.
	DANGER	Beware of heavy objects on lower limbs.
	DANGER	Beware of the crushing of upper limbs.
	DANGER	Beware of suspended loads, keep a safe distance.
	OBLIGATION	Refer to the operation and maintenance booklet before performing non-standard operations.
	OBLIGATION	Disconnect power at the general switch before performing maintenance.
	OBLIGATION	Use indicated anchoring points for lifting.

1.4 RESIDUAL RISKS

The residual risks remain the crushing of the lower, upper limbs, and suspended loads. These risks are appropriately reported, but they cannot be removed because the machine is manual.

2.0 PREAMBLE

This manual is considered an integral part of the unit and must accompany it when transported or resold. It is the responsibility of the user to keep it complete and in good condition.

The manual contains the instructions for the operation and maintenance of the machine produced by **SVECOM P.E.**, as well as its specifications.

The manual contains all the information necessary for the correct installation of the machine, as well as a description of the functioning of the machine.

Furthermore, it contains all information necessary for the carrying out of adjustments and maintenance operations. For these purposes' advice will be provided on what to **DO** and **NOT DO** regarding:

- ◆ transportation
- ◆ unpacking
- ◆ the environmental conditions for operation
- ◆ the assembly and dismantling of the parts
- ◆ the installation and connection of the power sources
- ◆ the adjustment and set up of the machine
- ◆ guidelines which should be followed for correct and incorrect use
- ◆ troubleshooting
- ◆ maintenance

All operations involving transportation, installation, use, routine, and special maintenance are to be carried out exclusively by specialist and competent operators.

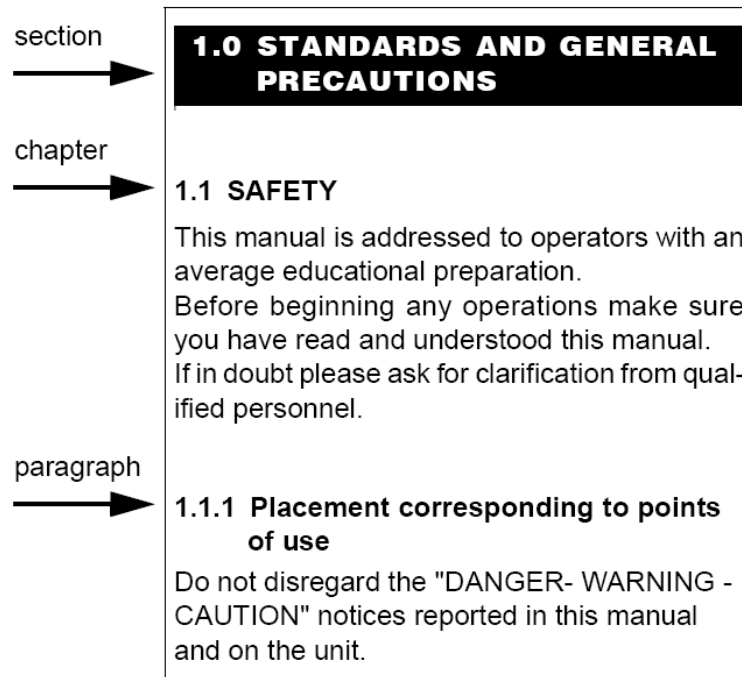
OPERATOR refers to the person or persons responsible for the installation, operation, adjustment, maintenance, cleaning, repair, and transportation of the machine.



All operations for the use and maintenance of the machine not reported in this manual are contained in the relative enclosed publications.

3.0 INTRODUCTION

The text of the manual is divided by subject into sections, chapters, and paragraphs. Here are some examples of how to identify these divisions.



- For the explanation of the "**DANGER-WARNING-CAUTION**" symbols and notices, see "**1.1.1 Placement corresponding to points of use**".
- The number of the reference figure is reported in the title, and the specific reference number is reported in the text in brackets.

Example:

5.0 TECHNICAL SPECIFICATION

5.1 MACHINE IDENTIFICATION

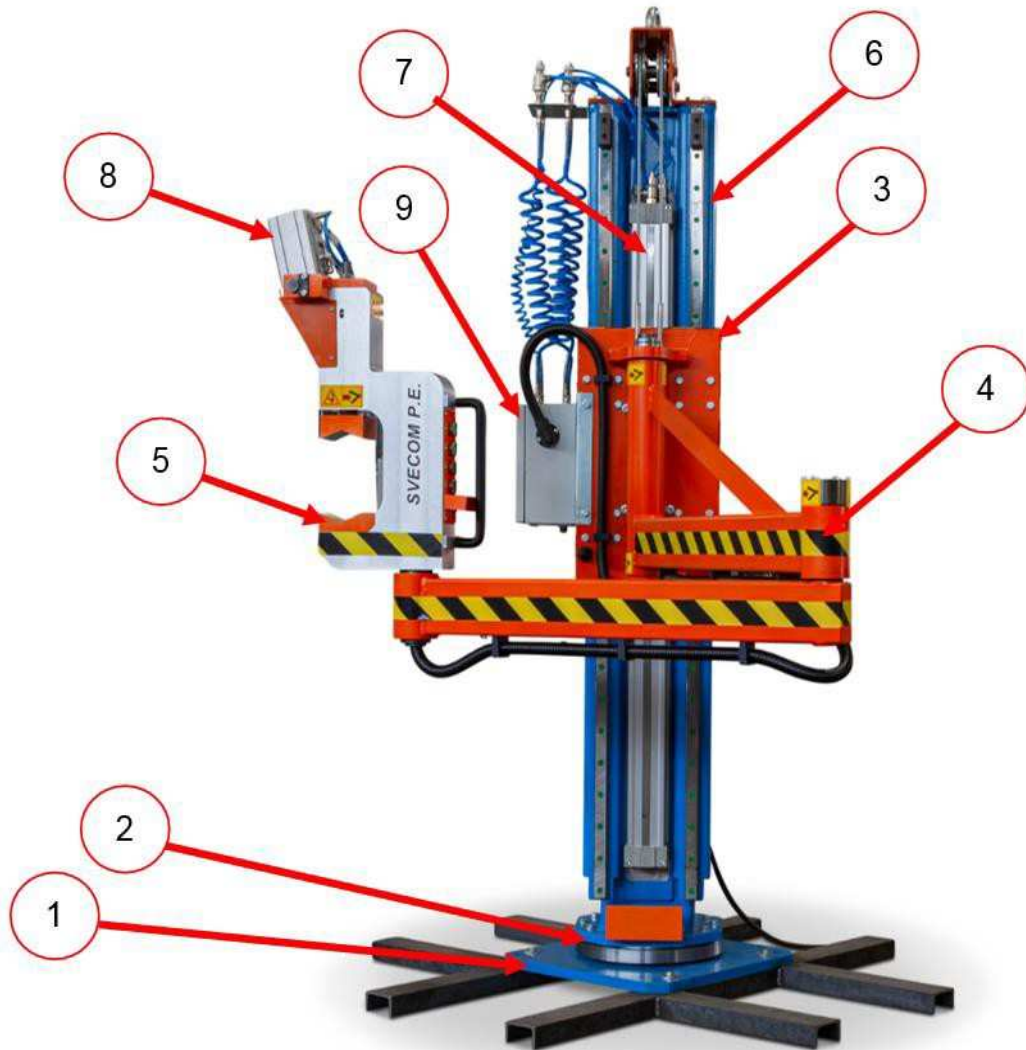
A metal plate placed in evidence on the side, rear, reports:

4.0 MACHINE PRESENTATION

The extractor is a pneumatic machine for solving the problem of handling spool shafts. It can insert and extract expansible shafts from spools and store them.

The machine is floor-mounted (fixed position), connected to the compressed air supply.

It moves to the shaft-grip position along a horizontal axis, with horizontal traverse and manual rotation around the column.



Only for reference

4.1 COMPOSITION

- 1) Base plate
- 2) Tower rotation fifth wheel
- 3) Vertical sliding carriage
- 4) Arm
- 5) Grip head
- 6) Vertical tower
- 7) Pneumatic hoisting cylinder
- 8) Vice pneumatic cylinder
- 9) Pneumatic box

4.2 FUNCTIONING

The functioning of the machine is manual pneumatic. Figure illustrates the machine's axes of movement.

4.3 ACCIDENT-PREVENTION PROTECTION SCREENS

The machine is fitted with the following accident prevention protection screens:

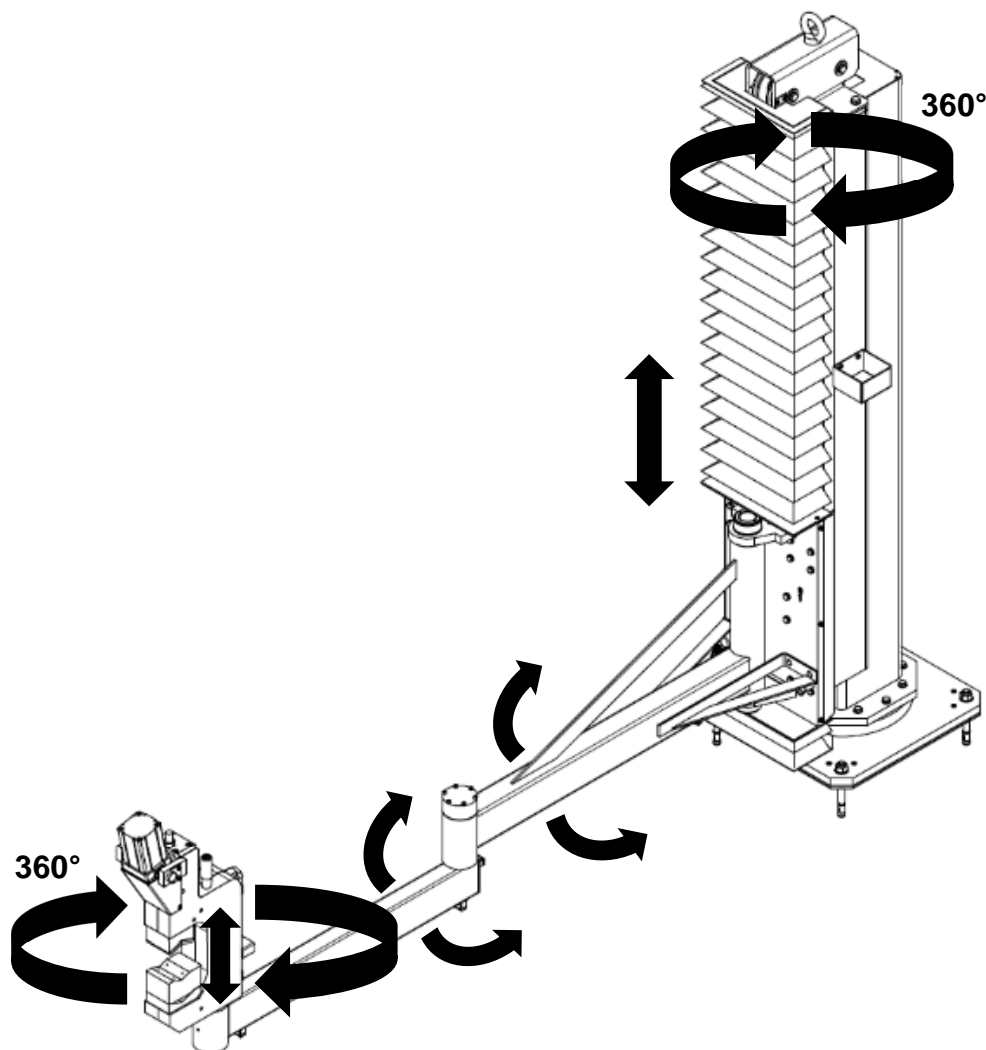
- ◆ Moving parts such as rollers etc. are protected by carter.
- ◆ When the machine is installed, the operating range must be delimited and/or protected with barriers and appropriate signs according to the use of the machine and the work it usually carries out.
- ◆ The operator operates the machine's movements by means of a push-button control panel requiring constant manning, i.e. the various control buttons must remain pressed for the whole time the movement is activated.
- ◆ To lock shaft (vice closed), it is necessary to push simultaneously the two pushbuttons on different sides.

4.4 WORK POSITION

The operator's work position is alongside the machine behind the push-button panel.

4.4.1 Lighting and health conditions at the work position

In line with the provisions for lighting in the work environment, the place where the machine is installed must not have shadowed areas, annoyingly bright lights or dangerous stroboscopic effects due to the lighting present.





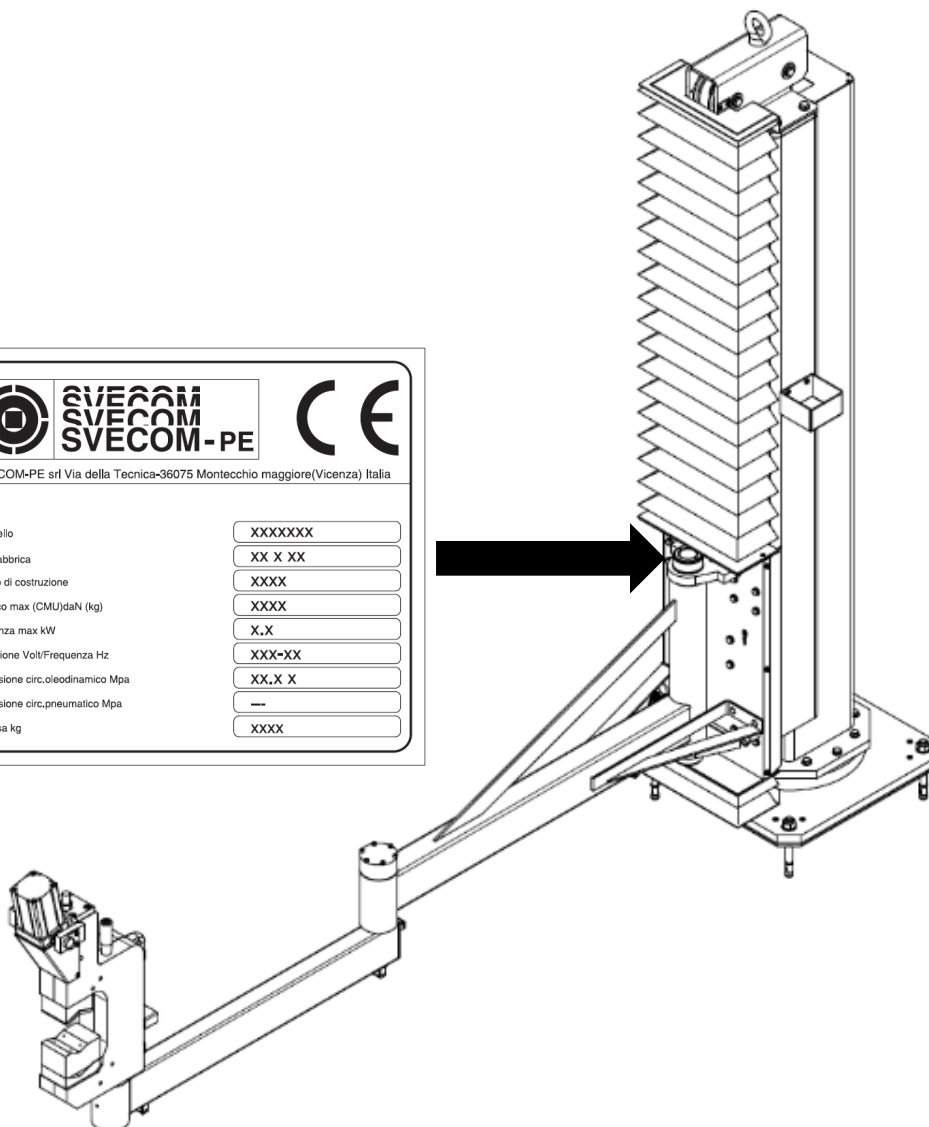
5.0 TECHNICAL SPECIFICATION

5.1 MACHINE IDENTIFICATION

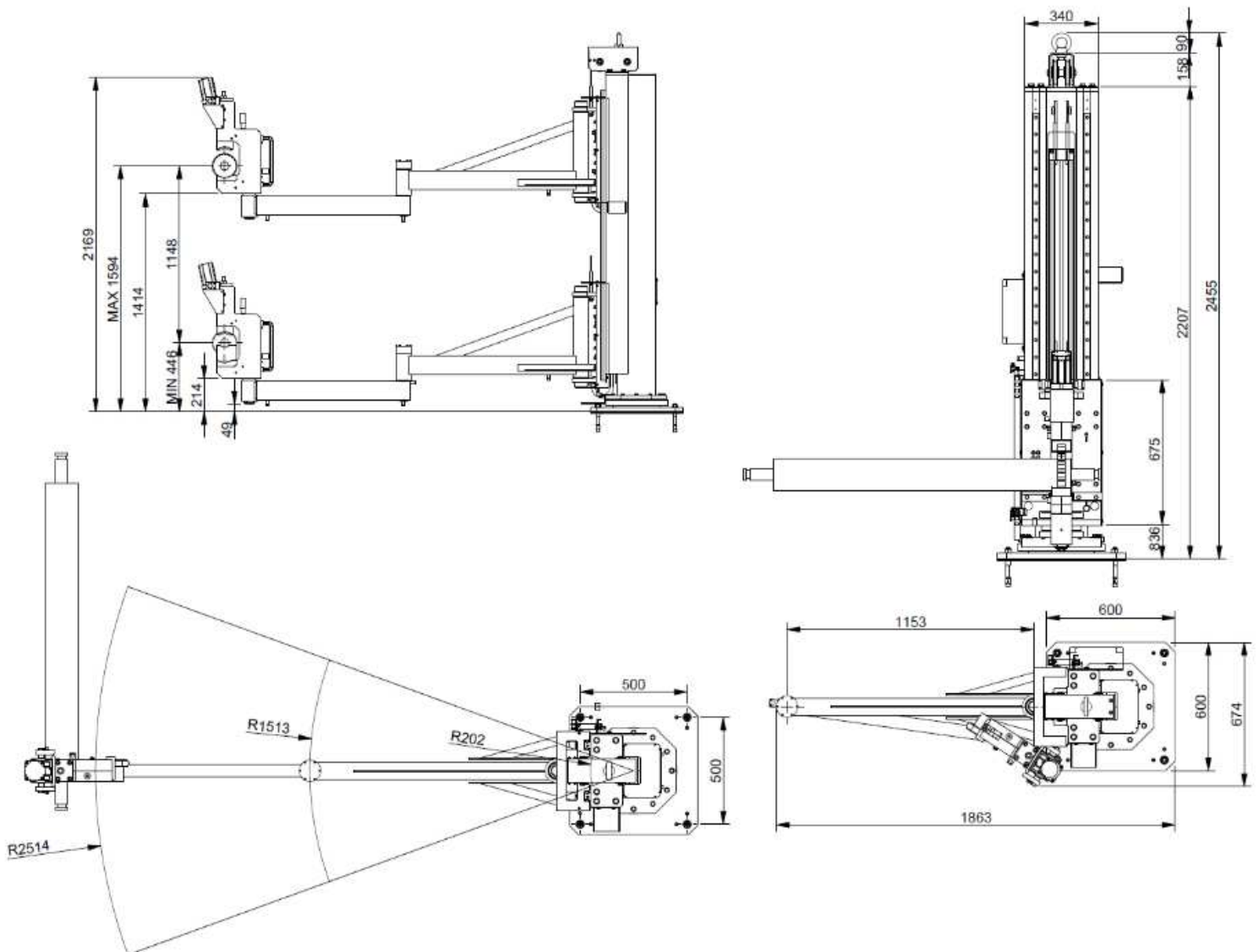
A metal plate placed in evidence on the side, rear, reports:

- Name and address of the manufacturer.
- Model.
- N. Factory
- Year of construction
- Max Load (CMU) in daN
- Maximum power kW
- Supply voltage and frequency ~ V ~ Hz-pressure hydraulic circuit
- Weight in kg

 SVECOM SVECOM SVECOM-PE		
<small>SVECOM-PE srl Via della Tecnica-36075 Montebelluna (Treviso) Italia</small>		
Modello	XXXXXXX	
N. Fabbrica	XX X XX	
Anno di costruzione	XXXX	
Carico max (CMU)daN (kg)	XXXX	
Potenza max kW	X.X	
Tensione Volt/Frequenza Hz	XXX-XX	
Pressione circ.oleodinamico Mpa	XX.X X	
Pressione circ.pneumatico Mpa	---	
Massa kg	XXXX	



5.2 SIZE AND CHARACTERISTICS OF THE MACHINE




5.3 NOISE

The machine has a value of less than 67 dB noise.

6.0 TRASPORT – UNLOADING - UNPACKING

6.1 TRASPORT - UNLOADING


 **WARNING:** Do not underestimate the weight of the machine (see "4.5.2 Overall dimensions). The dimensions or the volume of the machine and its individual parts may deceive.

Check that the capacity of the crane or the equipment used for this purpose is suitable for the weight and the volume of the machine.

 **CAUTION:** DO NOT place the machine on top of other materials or vice-versa during transport and storage.


When moving the machine be careful not to entangle, bend or compress electrical cables or flexible tubing.

Place the machine stably and take steps to prevent it being subject to, or causing, knocks or accidental contact with other materials or things.


 **WARNING:** Before beginning the unloading of the machine, check the integrity of the packaging.

The loading and unloading of the vehicle must be carried out:

- using a crane
- using a fork-lift

 **DANGER:** When lifting and moving the machine in the air (packaged or not), do not pass or rest the suspended load above persons or things.

Check that the ground on which the machine will rest is horizontal, sufficiently stable, and free of obstacles.

 **CAUTION:** Do not drop the machine or bring it to rest forcibly. The knock it sustains may cause damage.

6.2 PACKAGING DATA

The machine is shipped in a nylon protection sheet.

6.3 UNPACKING

- ◆ After having unpacked the machine, check its integrity, making sure that there are no visibly damaged parts.
- ◆ In case of doubt do not use the machine. Contact professionally qualified personnel (the distributor of the machine).
- ◆ The components of the packaging (plastic bags, polystyrene foam, nails, wood screws, etc.) must not be left in the reach of children and must be disposed of properly, as they represent a potential source of danger or pollution. Place the above-mentioned materials in the proper disposal containers according to the local laws in force.

6.4 ENVIRONMENTAL OPERATING CONDITIONS

No special environmental conditions are required other than those specified by the standards relating to work and safety.

⚠ WARNING: A restricted, poorly ventilated, or poorly heated environment may be the cause of accidents.

⚠ WARNING: The lighting in the work environment must have a normal value and not create operating difficulties.

Direct light onto the unit must not create shadowed zones or annoying reflections.

The conditions and dimensions of the environment where the machine is positioned must be such that the operator can work in optimum conditions.

7.0 INSTALLATION

7.1 GENERAL PRINCIPLES

Choose a suitable environment by adhering to the indications described in section "6.0 ENVIRONMENTAL OPERATING CONDITIONS".

⚠ WARNING: Access to the controls must be clear and free of obstacles.

⚠ CAUTION: The non-vertical or unstable positioning of the machine may compromise its performance and affect the quality of work.

Position the machine at a point on the production line which is free of obstacles, to guarantee clear and easy access to each side of the machine.

Check that the operator can observe the entire machine from the control position.

7.2 MACHINE ASSEMBLY

Suitable equipment (for example a bridge crane) must be used to set up the machine in the work position. The tower features a grommet for attaching a cable.

To place the base plate in the pins already prepared. Secure with nuts on the four pins fixed to the floor.

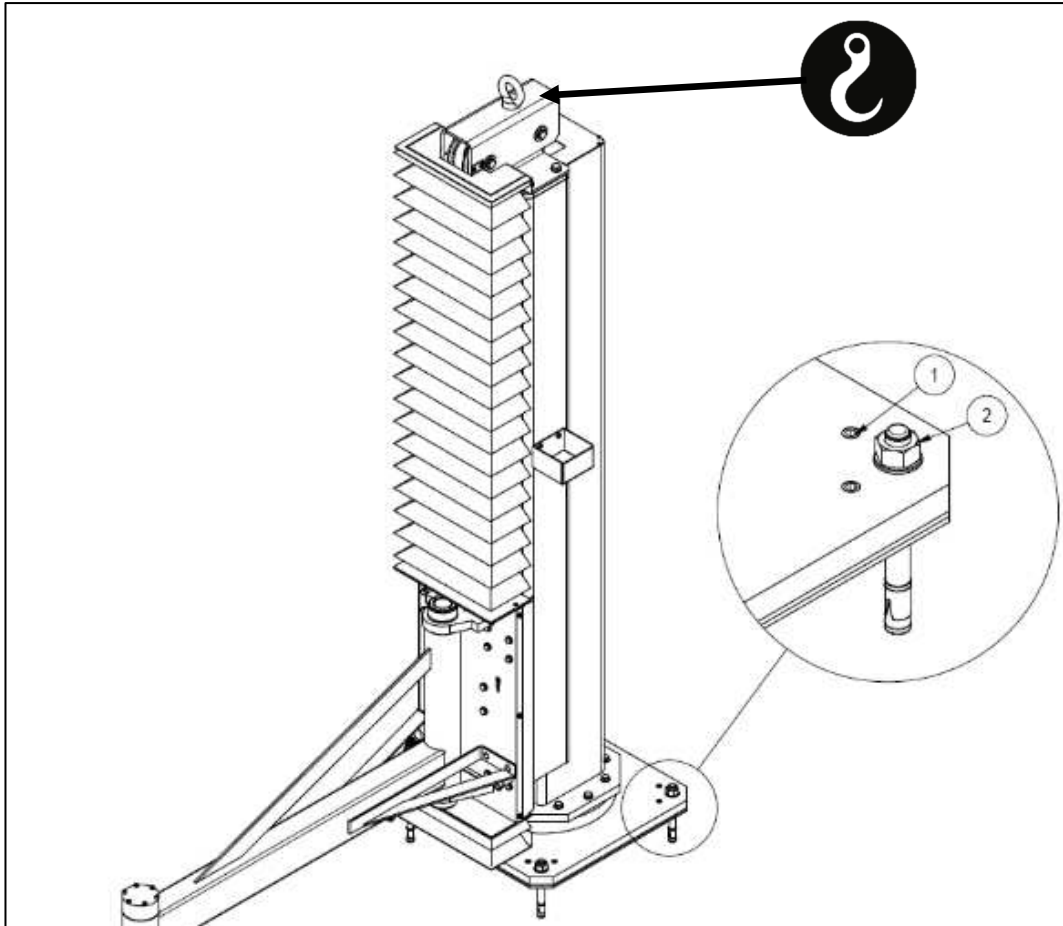
⚠ WARNING: As soon as the machine arrives, disassemble the brackets used for transport and screw the bolts that kept it fixed, failure to observe this note may cause a malfunction



7.3 FASTENING AND LEVELLING MACHINE

- ◆ Fastening of the base plate to the floor.
the operation requires the floor to be made of reinforced concrete.
However, the decision lies with the installer.
- ◆ Prepare the holes where the expansion bolts are due to be inserted.

Perform the longitudinal and transversal levelling by positioning the level on the machine and correct any errors in level with the dowels (1) and to screw the nuts (2) and cut the thread protruding from the anchor sleeve.



7.4 CONNECTION

⚠ WARNING: It is very important that the connection is made correctly. We therefore recommend that the following instructions are carefully adhered to, with the assistance of the functional diagrams reported in this manual.

The machine is supplied with an operating pneumatic circuit.

It is only necessary to connect main compressed air supply to the machine pressure reducer.

- Check eventually air dripping on the pneumatic cylinder's connections or on the pressure reducer connection.

8.0 CONTROLS

FOLLOWING OR DURING PAUSES IN OPERATION DO NOT LEAVE THE UNIT WITH SHAFT INSERTED IN THE VICE.

1-2. "OPEN CLAMP" Button (green)

When pressed at the same time as Button (4), this controls the opening of the press jaw.

3. "CLOSE CLAMP" Button (green)

When pressed at the same time as Button (4), this controls the closing of the press jaw.

4. Pushbutton "UP" "DOWN" (black)

When pressed, it actuates the descent of the vertical sliding carriage

5. "BIMANUAL "Open/Close clamping jaw Button (red)

Two-handed control button. When pressed at the same time as Button (1) or (2) this controls the opening of the clamping jaw or the closing of the clamping jaw.



8.1 USE OF THE MACHINE

Clamping of the shaft in the clamping jaw

- ◆ Deflating the shaft
- ◆ Take the handle positioned on the head and reach the arbour coupling height.
- ◆ Open the clamping jaw by pressing Buttons (1) and (5) at the same time.
- ◆ Position the arbour correctly in the clamping jaw.
- ◆ Close the clamping jaw by pressing Buttons (2) and (5) at the same time.
- ◆ Before moving the shaft, make sure that it is correctly locked in place.

Movement of the shaft

- ◆ For the lifting of the arbour, take the head handle and push it upwards. This movement must occur easily without too much or too little force.
- ◆ To lower the trolley and lower the arbour press Button (3) or (4).

Movement without shaft

- ◆ Perform the same procedure as described above for movement without the arbour clamped in the clamping jaw,


 **WARNING:** AT THE END OF ANY OPERATION ALWAYS BRING THE CART TO A MINIMUM STROKE

9.0 ADJUSTMENTS

Fix the screw for harden the junction.



10.0 MAINTENANCE

 **It is strictly prohibited to discharge products, production waste or any polluting substances into the sewerage system, into water courses, onto the ground or into the environment.**

The filters must be removed and disposed of according to the laws in force, in that their disposal may pollute the environment. Do not discharge oil into the environment. It should be taken in a sealed container to the service station from where the oil is normally purchased or to an oil recycling centre.

10.1 GENERAL INDICATIONS

Before carrying out any operation carefully read the instructions contained in this publication.


The use of suitable instruments in good condition is recommended, as is the use of protective items such as gloves, overalls, and safety boots.

 **WARNING: The following operations must be performed by specialized and competent personnel.**

- ◆ All maintenance operations must be performed when the machine is disconnected from the mains supply.
- ◆ If the electrical devices are live, determine which parts of the machine may present a danger. It is necessary to respect the instructions specified in the previous chapters of this publication and the warning signs on the machine itself.


Once having performed the maintenance operation, before preparing the machine for use check that:

- ◆ Any parts which have been replaced and the tools used for the maintenance have been removed from the machine.
- ◆ All safety devices are working correctly.
- ◆ Any cover cases which had been removed during maintenance have been correctly replaced. Also check that all the warning and/or danger notices are in good order; if necessary, replace them with originals and attach them in the same position (see paragraph 1.3 Safety notices, location, description).

 **The working times listed are guidelines only and are relative to normal working conditions.**

The conditions in fact may be subject to variations in relation to the type of use, the frequency of use and the amount of dust in the environment where the Hoist is operated.

For heavy use, the frequency of the maintenance operations should be increased.

 **It is recommended to always use the same type of oils as those used previously greasing. The grease points should be carefully cleaned with compressed air before lubricating, to prevent mud, dust, or foreign bodies from being mixed with the lubricant itself.**

Before beginning daily operations, check the requirements of the machine, that all controls are working perfectly and that the work area is free of obstacles.

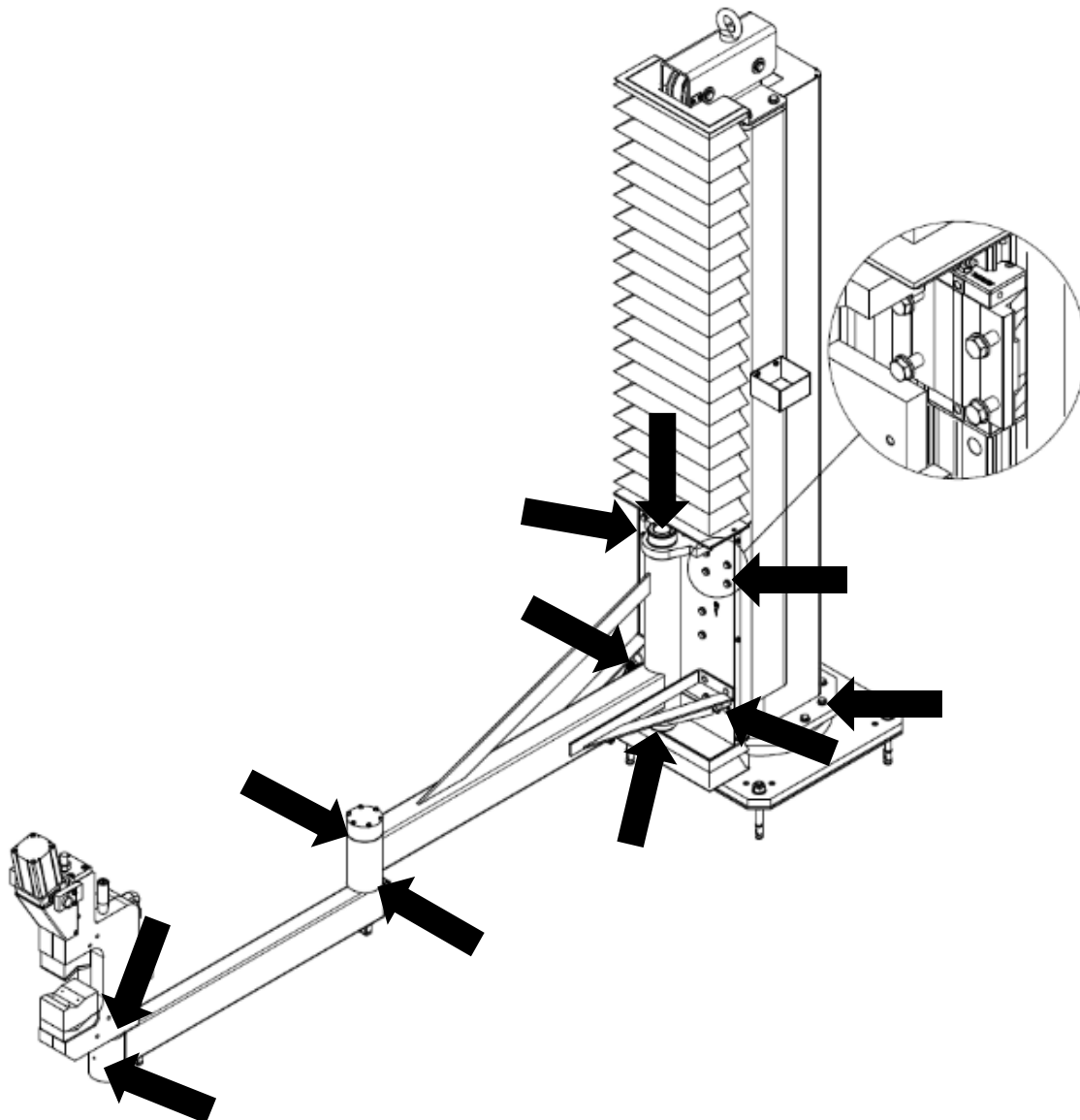
10.2 ROUTINE MAINTENANCE

Routine maintenance operations are simple and are listed as follows:

- ◆ Cleaning of the carriage slide guides
- ◆ Greasing

10.2.1 Lubrification

All movement and articulation points must be lubricated every week. Also lubricate fifth wheel and all points provided with grease



10.2.2 Tightening of the base bolts

The base bolts should be checked, and if necessary tightened, at least once a month.

Also check the state of the structure and the parts and the wear of the machine: if necessary, replace worn or damaged parts. Always use original parts.

Make sure the carriage is aligned exactly with the tower. Make sure all movements slide freely.

Respect the laws in force in the country where the machine is used regarding the application and disposal of products used for the cleaning and the maintenance of the machine.

Also respect the indications provided by the manufacturer of such products.

10.3 SPECIAL MAINTENANCE

Special maintenance operations (the repair of parts or mechanisms) may only be carried out by specialized personnel authorized by the Manufacturer.

11.0 DEMOLITION AND DISPOSAL

Use a firm specializing in the disposal of industrial waste, separating the following materials:

- ◆ Flexible rubber pipes
- ◆ Used oils
- ◆ Electrical cable sheathes

To be disposed of according to the directive relating to the disposal of toxic and noxious waste.

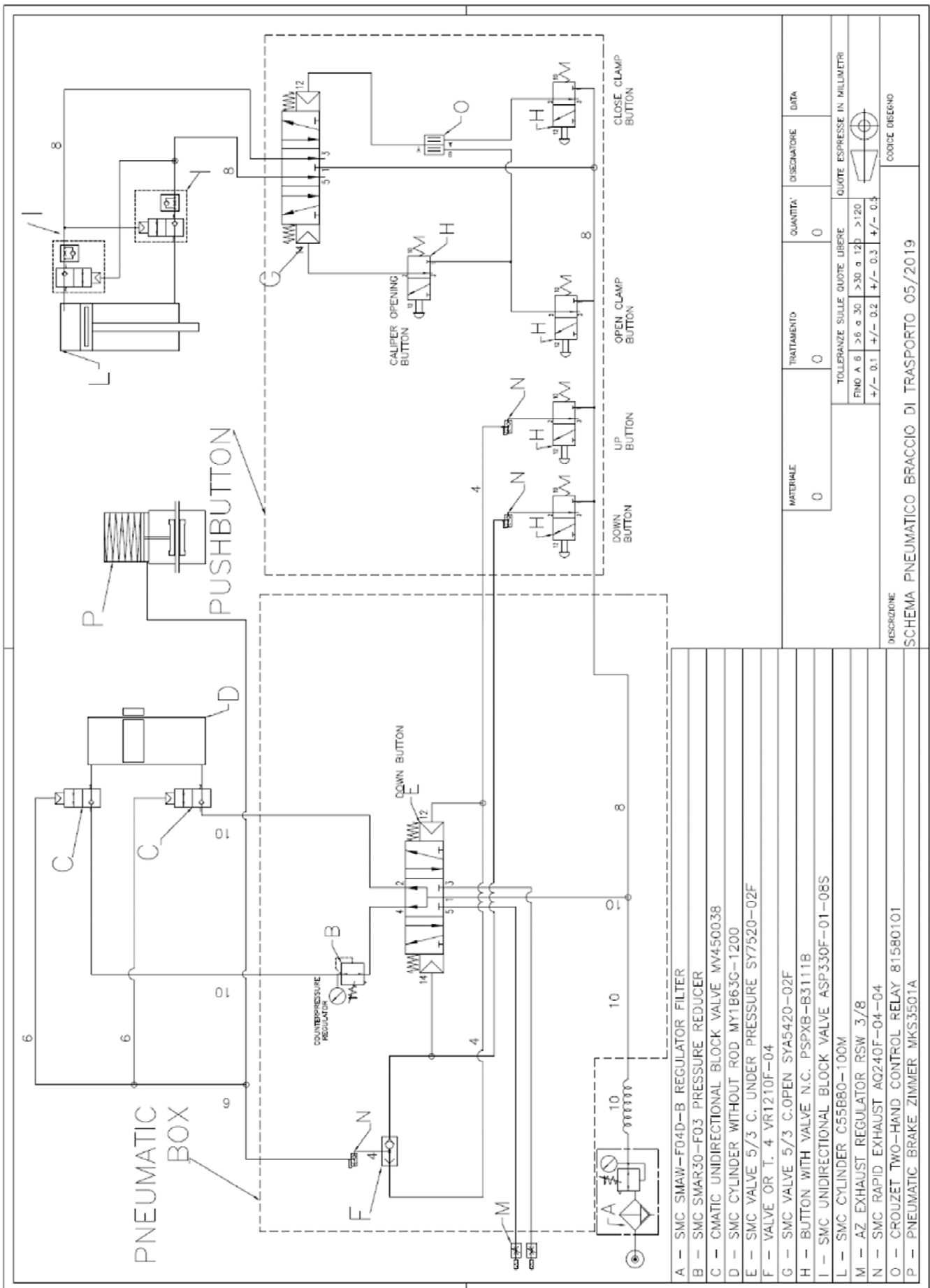
Metals of various types.:

- ◆ To be disposed of according to the directive relating to the disposal of generic waste.

12.0 TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
The machine does not carry out the movements correctly.	◆ Insufficient pneumatic pressure.	◆ Check.
	◆ Burst pipes.	◆ Replace.
	◆ Connectors do not hold.	◆ Replace.
Irregular raising/lowering movement.	◆ Anomalous wear of guides.	◆ Check and/or replace
	◆ Excessive play.	◆ Adjust
Irregular movement of arm.	◆ Anomalous wear of articulation points.	◆ Check and/or replace
	◆ Excessive play.	◆ Adjust
The device does not work.	◆ Insufficient line pressure.	◆ Check the line.
	◆ Burst pipe.	◆ Replace pipes.
	◆ Fittings not sealed.	◆ Replace.

13.0 PNEUMATIC SCHEME



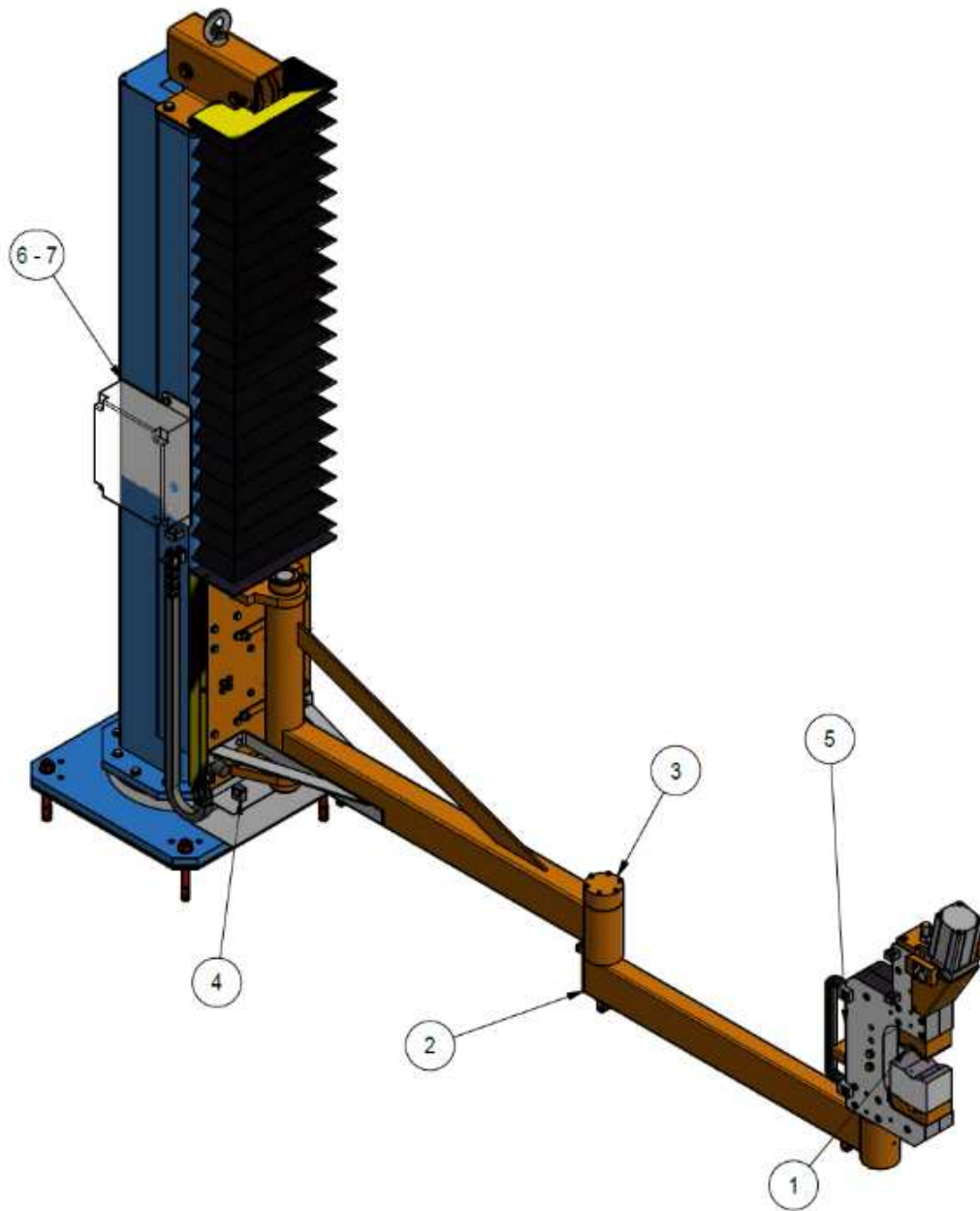
MATERIALE	TRATTAMENTO	QUANTITA'	DISCRIMINATORE	DATA
0	0	0		

TOLLERANZE SULLE QUOTE LIBERE		QUOTE ESPRESSE IN MILLIMETRI	
FINO A 6	>6 a 30	>30 a 120	>120
	+/- 0.1	+/- 0.2	+/- 0.3

DESCRIZIONE
SCHEMA PNEUMATICO BRACCIO DI TRASPORTO 05/2019

CODICE DISEGNO

14. 0 RECOMMENDED SPARE PARTS



POS.	DESCRIPTION	COD. SVECOM	QT. A'
1	SHAFT PROTECTION	AS DRAWING	1
2	JUNCTION BEARING	PCB32010X	1
3	FRICTION LINING	BMP00601512	1
4	ELECTRICAL CLIP	EMI66986	1
5	BUTTON		1
6	AIR FILTER		1
7	BLOCK VALVE		1



SVECOM P.E.
Via della Tecnica
36075 MONTECCHIO MAGGIORE
VICENZA – ITALY
Tel: +39 0444 746211- Fax: +39 0444 498098