

MANUALE DI USO E MANUTENZIONE USE AND MAINTENANCE MANUAL

QUASI MACCHINA THE PARTLY COMPLETED MACHINERY

**MODELLO ADV R00 1A+1S 30/155 EX BH
MODEL**

**NUMERO DI MATRICOLA C1410A-30ADV
SERIAL NUMBER**

**CLIENTE U.S. BOTTLERS
CUSTOMER MACHINERY COMPANY
Ref. Luxco**

**ANNO DI FABBRICAZIONE 2022
MANUFACTURING YEAR**

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ATTENTION !



THE PICTURES OF THE MANUAL AND THE REAL PRODUCT MAY NOT EXACTLY MATCH IN RELATION TO THEIR SHAPE, COLOUR, SIZE OR ACCESSORIES.

THE PICTURES AND THE TEXT HAVE TO BE USED TO GET A GENERAL INFORMATION, WITHOUT A SPECIFIC REFERENCE TO A SPECIFIC PRODUCT.

THEY MAY CHANGE WITHOUT ANY ADVICE.

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1 Standards and general information



1.1 General Advice

The instructions contained in this manual must be read with due care and attention. In order to put to work and take advantage of the opportunities offered by the “ADVANCE” series partly completed machinery, it is necessary to thoroughly understand its performance levels and possibilities of use.

It is a requirement that everyone involved (People in charge and Operators) receive instruction on the “SAFETY STANDARDS” described in this manual, before the partly completed machinery is put to use. Before starting work the operator must be aware of the layout and the operation of the controls, the partly completed machinery’s characteristics, and must have read this manual in its entirety.

All of the instructions, warnings and accident prevention regulations contained in this manual must be complied with.

Maintenance of this partly completed machinery involves only a few simple operations that can also be undertaken by the operator assigned to the partly completed machinery. In order to obtain the maximum lifespan and the best possible levels of service efficiency from the partly completed machinery it is advisable to meticulously comply with the standards contained in this publication.

Any modifications to or replacement of any of the partly completed machinery’s parts, without the express authority of the manufacturer, may constitute the potential risk of an accident and therefore relieves the manufacturer from any or all penal and civil responsibilities.

1.2 The importance of this manual

This operation and maintenance manual supplies all the information, suggestions, and detailed instructions as well as all the attached documentation, required for the correct installation, start up and maintenance of the partly completed machinery in conditions of total safety for any of the personnel assigned to it. It is nevertheless still of particular importance that the indications below be observed and adhered to.

This instruction manual is to be considered an integral part of the product.

The manual must be retained for the entire duration of the partly completed machinery’s operating life.

Ensure that any amendments received are inserted into the manual.

The manual must be passed on to any subsequent users or owners of the partly completed machinery.

Before continuing, and in order to ensure a better understanding of this manual, the terminology listed below is explained in more precise detail:

DANGER ZONE:

This is an area that is either inside the partly completed machinery or in close proximity to it, in which the presence of an operator could be considered as dangerous and a risk to the health and well being of that individual.

OPERATOR:

This is an individual who has the responsibility for the installing, operating, adjusting, and the day-to-day maintaining and cleaning of the partly completed machinery.

QUALIFIED TECHNICIAN:

This is an individual who is qualified and specifically trained and capable of performing maintenance or repair operations that require a specialised knowledge of the partly completed machinery, its parts, its operation, its safety devices, and their methods of operation.



WARNING:

Operator accident prevention measures



CAUTION:

The partly completed machinery and its components could be damaged.



IMPORTANT ADDITIONAL ADVICE:

Additional advice relating to the operation in course.

NOTES:

Supplies useful additional information.

1.3 How to consult this manual

Consulting this manual is rendered particularly easy thanks to the insertion, on the first page, of a general Drawing of contents. This allows a particular item of interest to be located quickly and simply. The chapters are laid out hierarchically which makes for easy reference. Every chapter is preceded by a Drawing of contents.

1.4 Glossary

Termine	Significato
Motorization ⇒	Refers to a part of the partly completed machinery consisting of an electrical motor controlled by means of a frequency converter, with which the output speed can be adjusted.
Gripper ⇒	Refers to one of the partly completed machinery's components: the bottleneck grip item. It is responsible for turning the bottle upside down for the time required for treatment and drainage.
buffer ⇒	Refers to one of the partly completed machinery's components: a high resistance element. It is responsible for the gripping the bottle by the neck.
Manifold ⇒	Refers to one of the partly completed machinery's components. Its function is that of delivering the product (liquid – gas) into the treated bottle.
Angle of treatment ⇒	Indicates the maximum angle that can be treated with this partly completed machinery.
Angle of treatment ⇒	Angle at which the treatment fluid is injected into the bottle. This is calculated on the basis of the treatment time to which the bottle has to be subjected.
Nozzle ⇒	Refers to one of the partly completed machinery's components: its function is that of injecting the product into the treated bottle.
No bottle-no spray ⇒	Refers to one of the partly completed machinery's components: device by which it is possible to allow the product to flow from the gripper, only when the bottle is present.
Twist ⇒	Refers to one of the partly completed machinery's components: a helicoidally shaped part. Its function is that of turning the grippers upside down.
Lay-out ⇒	Refers to the attachments supplied with this manual: drawings of the customised positioning of the partly completed machinery based on the service flow's connections and of the client's specific requirements.

Glossary

1.5 Storing the manual

This manual must be stored well away from any sources of heat and humidity.

No part of this manual should be removed, torn out or re-written.

This manual should be used in such a way as to avoid the risk of its contents being totally or partially damaged.

After use, the manual should be kept in an easily accessible and local Drawing place

This manual must be updated every time that any type of modification is carried out to the partly completed machinery.

1.6 Methods of updating

Because of the way in which the manual has been produced, with the use of chapters, updating any of the sections, depending of the type of modification that has been carried out on the partly completed machinery becomes a simple task.

In cases where substantial modifications have been carried out on the partly completed machinery exclusively by the costumer personnel or undertaken with the explicit permission of the same, copies of updated the manual will be supplied, and the user will be expected to remove all the previous parts of the manual and replace it with the new ones.

Notes:

WAB declines responsibility for any errors or damage resulting from the failure to update the manual in the user's possession, or the failure to insert new parts of the manual that have been supplied subsequent to the delivery of the partly completed machinery.



1.7 Reproduction and copyright restrictions

All rights reserved to the costumer.

The lay-out and content of this manual cannot be reproduced even in part without the express permission of the costumer.

Furthermore, it is also forbidden to store this manual in any form (digital, magnetic, magnetic-optical, optical, microfilm, photocopied form, etc).

1.8 Reference standards

1.8.1 Directives concerning the safety of the partly completed machinery

Machinery Directive 2006/42/CE..

Directive 2004/108 / EC on Electromagnetic -Compatibility as amended.

Directive 2006/95 / EC on low voltage, as amended.

1.8.2 Directives concerning safety in the work place

For disposal, it is expected to behave according to the rules in force in their country.

1.8.3 Reference harmonized standards

EN 12100-1; EN 12100-2; EN 60204-1

1.9 Technical assistance and requesting technical service

The costumer places its own Technical Service Assistance at the disposal of its clients in order to help solve any type of problem relating to the operation and maintenance of the partly completed machinery.

A request for help from the Technical Service Assistance must be made only after a detailed analysis has been carried out of the problems and their causes.

Please send us an email to the following address:

WAB S.r.l. – Unipersonale
Strada Provinciale per Neviano, 86
43029 Traversetolo PARMA (Italy)
Fax. ☎ 0039/0521/844473
E-mail: ✉ - customer_service@wab.it

All requests must contain the following information:

- ✓ Model of partly completed machinery
- ✓ Serial number
- ✓ Voltage.
- ✓ Year of manufacture.
- ✓ Problems encountered.
- ✓ Precise address of where the partly completed machinery is installed.
- ✓ Name of contact person.

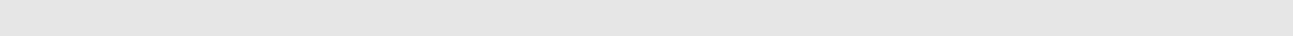
1.10 Ordering spare parts

All requests for spare parts should be sent in writing and by E-mail to the following address:

WAB S.r.l. – Unipersonale
Strada Provinciale per Neviano, 86
43029 Traversetolo PARMA (Italy)
Fax. ☎ 0039/0521/844473
E-mail: ✉ - spare_parts@wab.it

In order to make spare part identification faster and more accurate, always include the following information:

8. Model of partly completed machinery
9. Partly completed machinery serial number
10. Voltage.
11. Year of manufacture.
12. Drawing number and the position in which the part is found.
13. Spare part code
14. Quantity of spare parts required



2 *Information about the partly completed machinery*

2.1 Partly completed machinery's use and operation

The turret serious ADVANCE is a partly completed machinery rotating type, with which it is possible to reclaim or clean bottles, making use of flows (liquid or gaseous) injected into the bottle. It is possible to treat many different types of bottle, guaranteeing a firm and secure grip at all times.

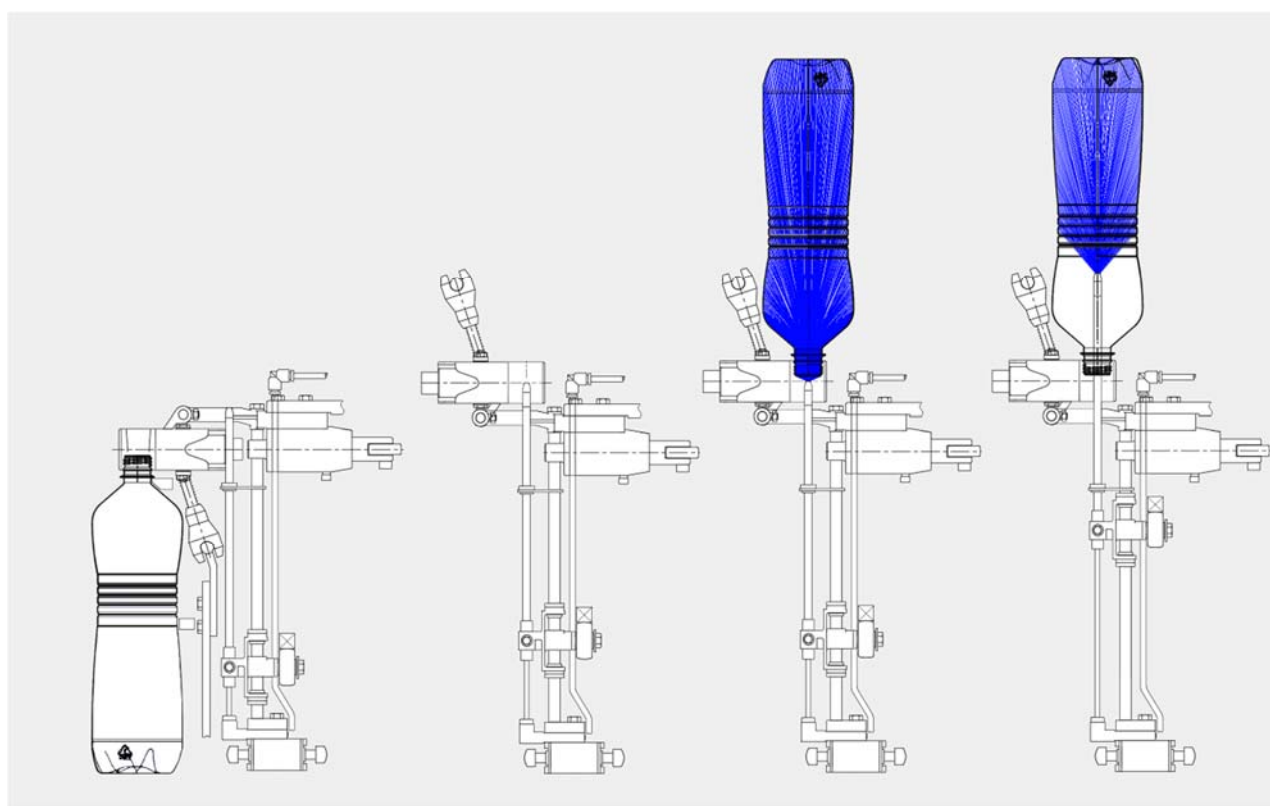
The partly completed machinery consists of a central carousel on which a number of grippers, that may vary according to the client's own production requirements, are installed.

These will grip the bottle by the neck and, making use of the twist's helicoidal shape, turn it upside down by 180° so that the treatment's flow can then be injected into it.

Where the fluid that is used happens to be liquid, the treatment phase is followed by a dripping phase. The fluid that has been used for the treatment will drip into the chute. Where a recovery tank is envisaged, the fluid will be re-circulated, otherwise it will be allowed to go to waste.

2.2 Treatment cycle

Some of the treatment cycles, i.e. basic, that can be performed using our rinsing partly completed machinery.

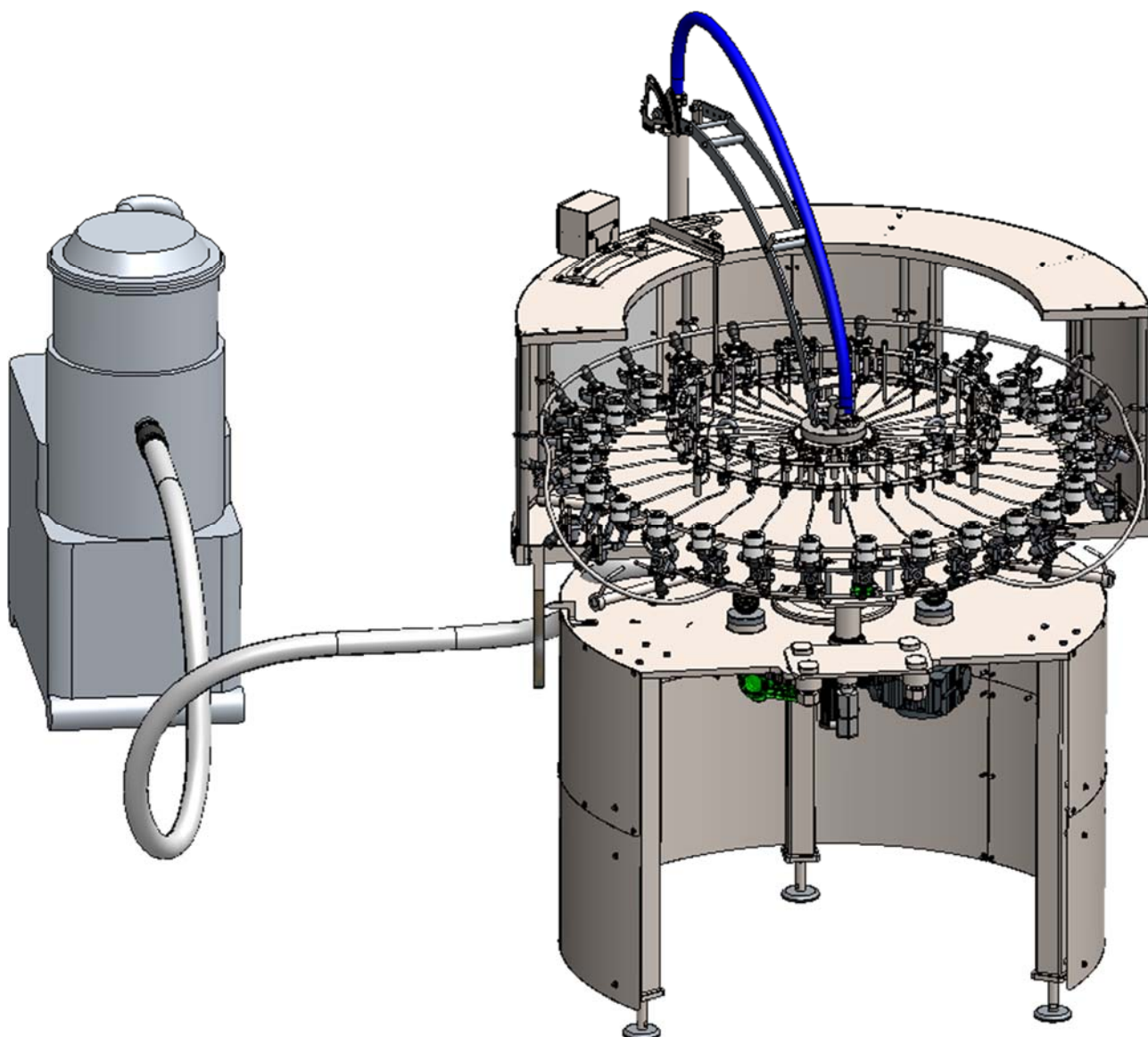


Treatment cycle

1R	A rinse phase followed by a draining phase, compatible with the quantity of residual fluid in the bottle, and also with the partly completed machinery's angle of working.
1S	A blow phase, required for emptying bottles of any residues or harmful gasses.
1R + 1S	A rinse phase followed by a blow phase, in order to empty the inside of the bottle of any injected liquids.

Information about the partly completed machinery

2R	<i>Two rinse phases. The first with a sterilising solution that will either go to waste or will be re-used, followed by a second rinsing phase with water that will go to waste. This is followed by the draining phase.</i>
2S	<i>Two blow phases, one with sterile air in order to eliminate residues or harmful gasses, the other with a sterilising gas or steam in order to sterilise the actual container.</i>

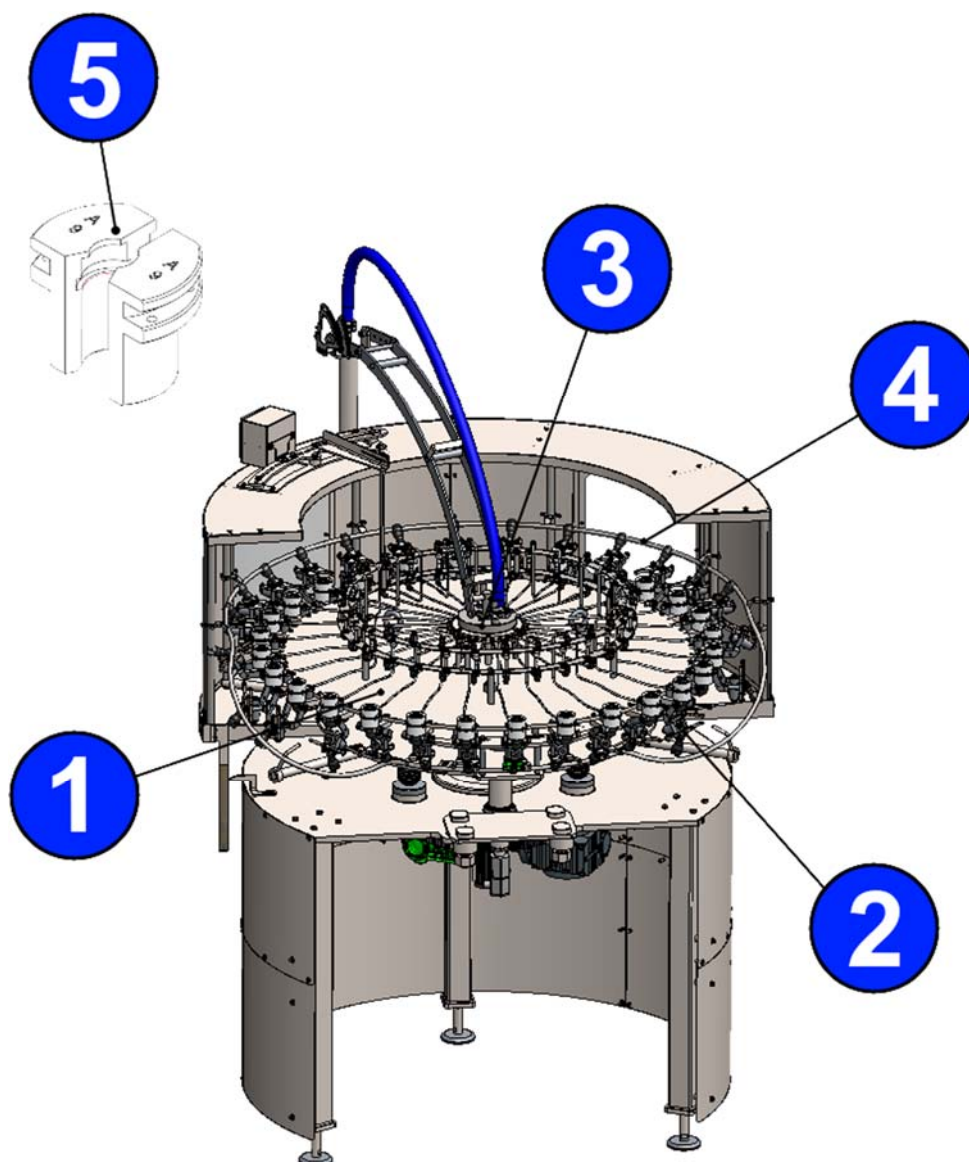


Turret serial ADVANCE

2.3 Different parts of the partly completed machinery

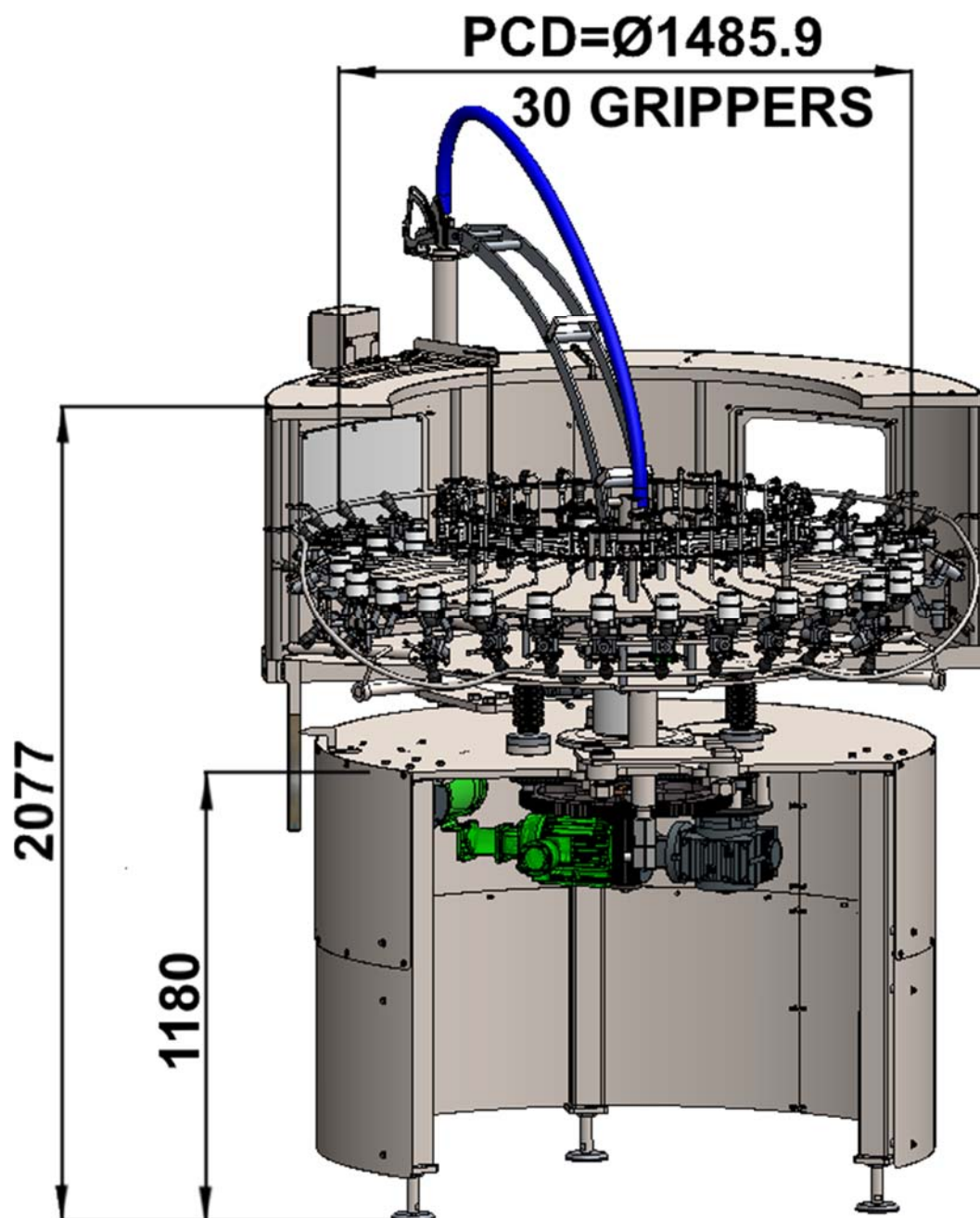
The partly completed machinery in the constructive form, is composed from the followings parts:

-1-	CARROUSEL
-2-	GRIPPER
-3-	MANIFOLD
-4-	TWIST SUPPORT
-5-	PAD



Part of partly completed machinery

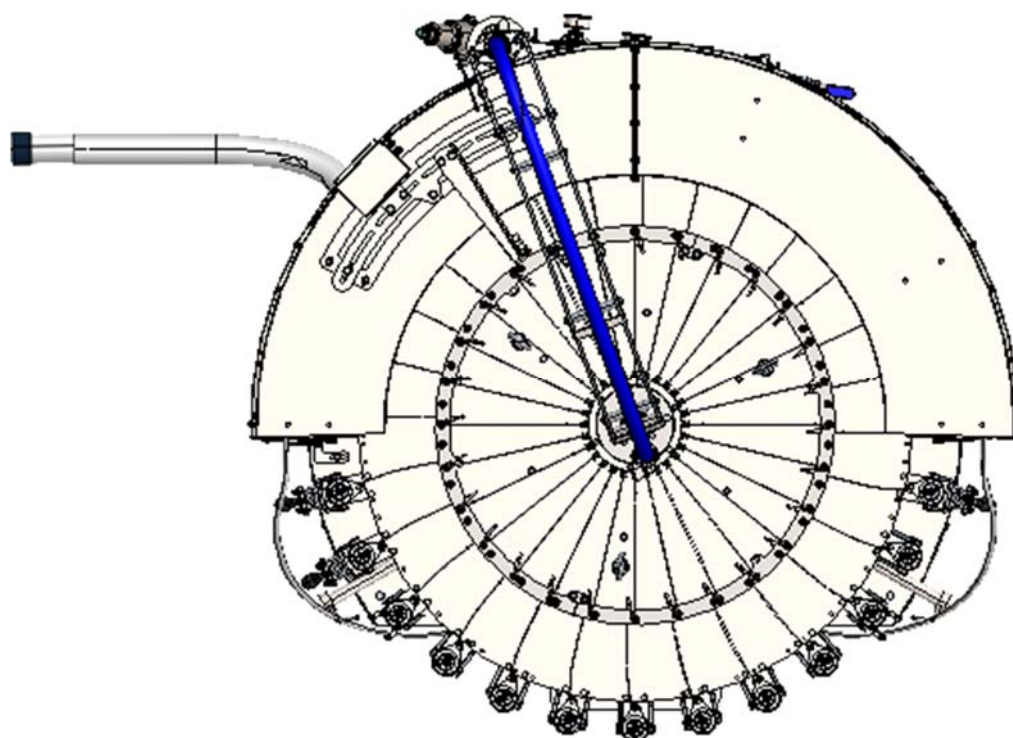
2.4 *Partly completed machinery dimension*



Partly completed machinery dimension

2.5 Lay-out

PCD = Ø1485.9
30 GRIPPERS



Partly completed machinery Lay-out

2.6 Partly completed machinery configuration

The partly completed machinery has the following configuration:

Model:	ADVANCE R00 1A+1S 30/155 EX BH
Rotation:	CLOCKWISE
Original diameter:	Øp 1485.9 mm
Spacing:	155 mm
Number of bottle grippers:	30
Product:	FILTERED COMPRESSED AIR
Types treated:	READ THE CHANGE OVER PARTS DRAWING

Partly completed machinery configuration

2.6.1 Ambient temperature

So as not to undermine the partly completed machinery's safety and optimum operation, the following values must be observed:

Storage temperature: from -10°C a 60°C.

Operating ambient temperature: from 10°C a 45°C.

Temperature electric power cabinet: t.MAX <45°C achieved with a ventilated cabinet

2.6.2 Voltages, pressures, consumption, weights and connections.

VOLTAGES	
Main voltage:	400 V 50 Hz 3F+T+N
Auxiliary voltage:	24 V DC

Voltages

WORKING PRESSURES	
Compressed air (treatment):	min.1 ÷ max.3 bar

UTILITY PRESSURES	
Compressed air (pilot):	Temperature: 15÷50°C-Pressure: min 4 max 7bar-ISO 8573.1:2010 Class 7.4.4
Compressed air (process):	Temperature: 15÷50°C-Pressure: min 4 max 7bar-ISO 8573.1:2010 Class 3.2.2
Range vacuum value :	-5mbar ÷ -20mbar

Pressures

CONSUMPTIONS	
1st Treatment (blowing), flow rate:	Approx. 40 Nm3/h at 2 bar (to be confirmed)

Consumptions

Information about the partly completed machinery

CONNECTION	
Air inlet :	Ø 1"

CONNECTION

2.6.3 Products used for the treatments

PRODUCTS	CHARACTERISTICS
-COMPRESSED AIR PILOT -	Max temperature = 50°C-Pressure: min 4 max 7bar-ISO 8573.1:2010 Class 7.4.4
-TREATMENT AIR -	Max temperature = 50°C-Pressure: min 4 max 7bar-ISO 8573.1:2010 Class 3.2.2



Where the hardness levels of the water exceed those shown, a water softener should be used. If this is not done then there is a risk of moving parts becoming worn or deteriorating excessively quickly because of lime scale deposits.



Where a sugar based product or one that contains any sort of abrasive substances is used, it is essential to carry out a detailed clean of all the parts as a preventative measure.

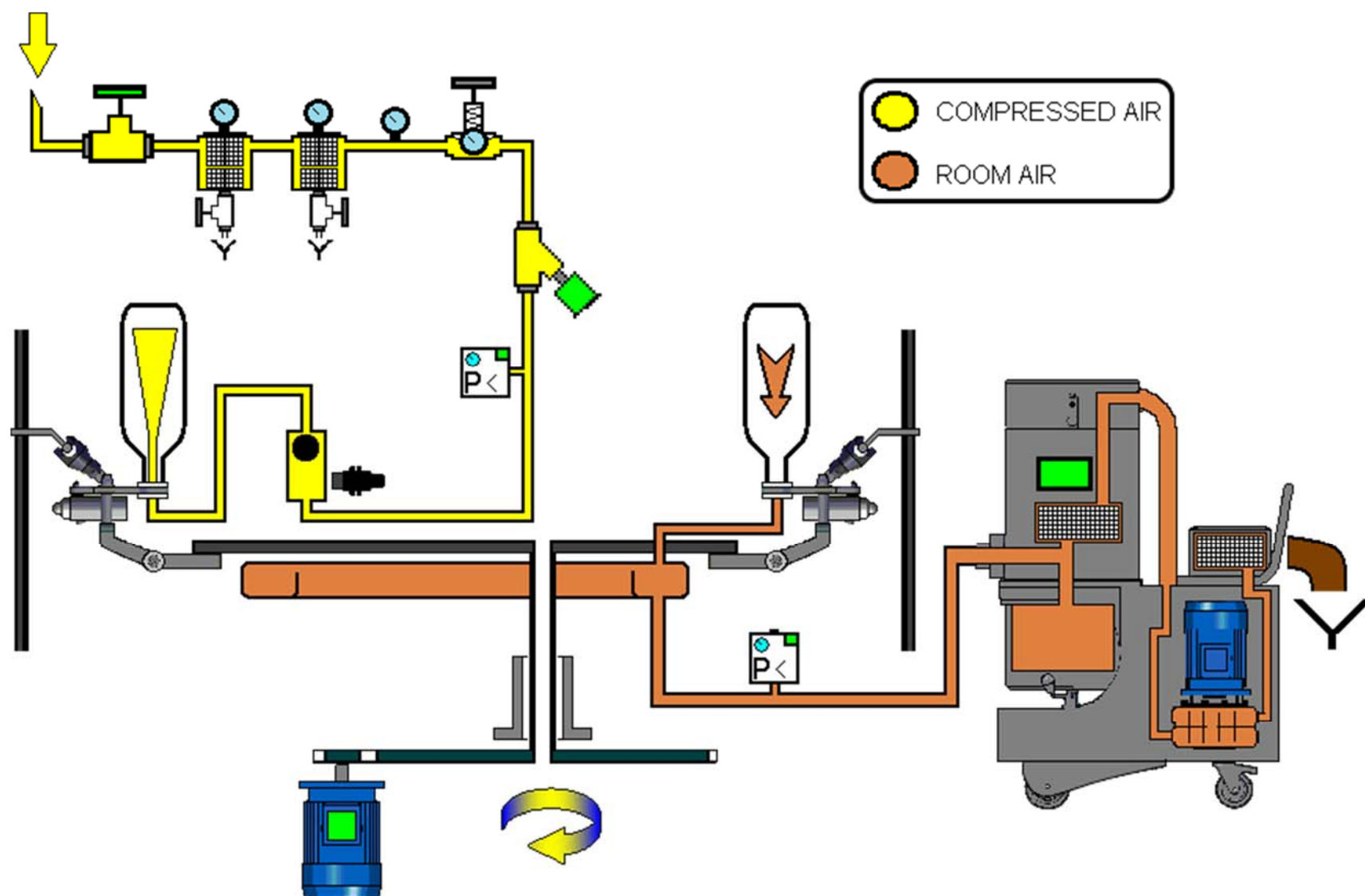
-AIR AND NEUTRAL GASSES Filtered at 0.2 µm.

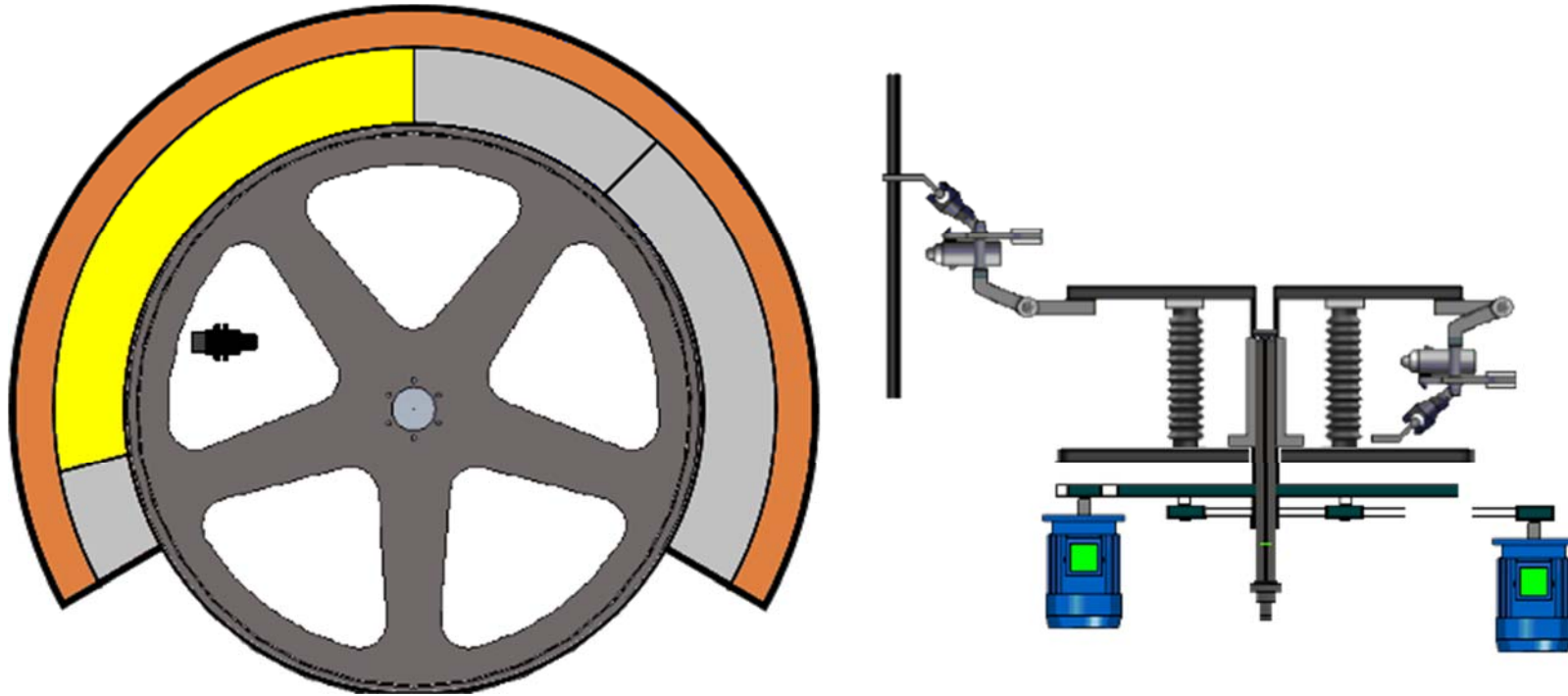
2.6.4 Noise

The partly completed machinery, is realized in such way by to reduce the level of sonorous power to the source.
Level of sonorous power normalized equivalent to empty in the place of employment = 68 dB(As.)
Level of sonorous power normalized equivalent in job in the operative place = 72 dB(As.)

Information about the partly completed machinery

P & ID





3 *Installation*



The activities described in this paragraph must be performed by the customer qualified personnel.

3.1 Transporting the partly completed machinery

Depending on the type of product to be shipped, the constructor uses packaging that is designed to ensure its soundness and safe keeping during transportation.

Depending also on the type of transport to be used and the length of time it will take to travel from the constructor to its intended destination and/or the specific needs of a client, the type of packaging conditions can be one of the following:

3.1.1 Covered externally with a wooden crate

Inside the crate the partly completed machinery is wrapped in heat-shrinking material whilst the base is fixed securely to the wooden platform with the use of appropriate clamps.

3.1.2 Protected externally with a wooden cage

Inside the cage the partly completed machinery is wrapped in heat-shrinking material whilst the base is securely fixed to the wooden platform with the use of appropriate clamps.



The surface of the wooden crate is stamped with a number of stamps giving instructions and warnings to be observed. Amongst these are the CE Mark, the total overall weight and the correct positioning for lifting in order to prevent the possibility of damage or tipping over of the crate and its contents.

3.1.3 Wrapped externally with thermo-shrinking material on a wooden platform.

The partly completed machinery is wrapped in heat-shrinking material. This is usually used for short journeys, and the partly completed machinery is secured to a wooden platform by means of metallic wire.

3.1.4 Transport by road

Transport via road takes place both on flat back lorries and non.

Once the partly completed machinery has been placed onto the back of the lorry it must be secured with ropes and straps, in order to avoid it moving during transport.

3.1.5 Transport by sea

For transporting by sea, protective packing material is absolutely essential.

The partly completed machinery is usually placed inside a heat sealed sack, into which has also been placed dehydrating material in accordance with the controlling standards. This is in order to avoid the salinity from eating into the partly completed machinery parts.

3.1.6 Transport by air

Adequate and appropriate protection against atmospheric agents, such as polypropylene coverings and casings in coupled with a heat-sealed shield, must be used when transporting by air. This must be in accordance with specification MIL B. 131-H-TYPE1 CLASS1.

Whatever the means of transport used, the following items will also be sent to the client:

- ✓ Any other equipment as stipulated in the order
- ✓ Other bottle gripper buffers as stipulated in the order
- ✓ Parts carrying case and/or spare parts as supplied
- ✓ Operation and maintenance manual in an attached package.

Packing materials are all produced in accordance with standards UNI 9151 and UNI ISO 20780

Installation

The disposal of packing materials used should take place in accordance with the laws in force in that country.



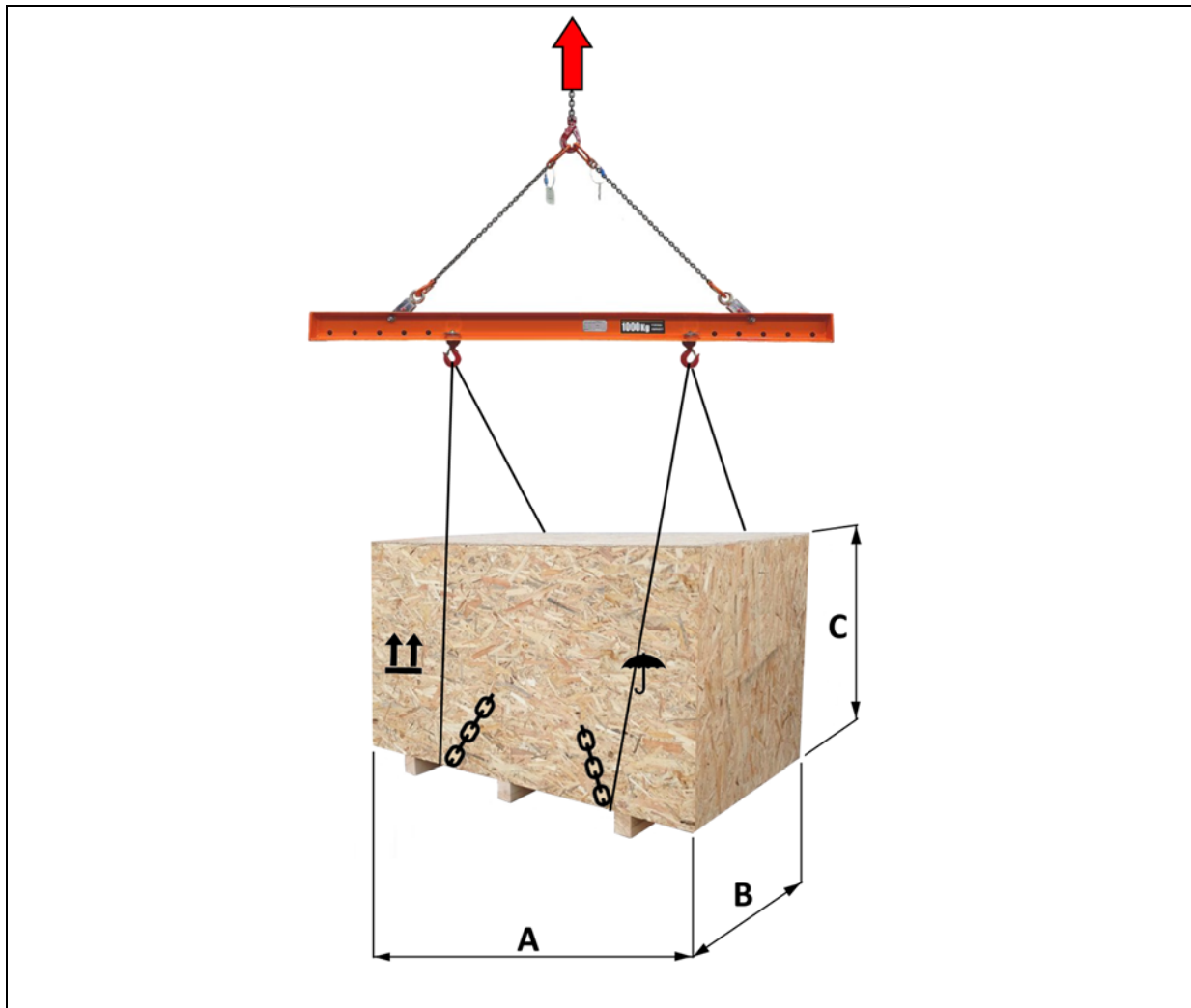
Check extremely carefully that the delivery corresponds to what is specified in the order, that the packing has not been damaged during transit, and that no parts have been deliberately removed.

Where it becomes apparent that there are discrepancies, damage or theft, an immediate written claim must be made out within five days of taking delivery, to both costumer and the shipping company. The costumer is always willing to help resolve problems of any nature as long as they are brought to their attention without delay.

The figures below show some ways in which the partly completed machinery should be handled before and after unpacking.



The handling of the partly completed machinery must only take place with the use of steel cables that secure the crate in a sling.



Movimentation through crane



The handling of the turret through a fork lift truck can only by qualified personnel.



Handling with FORK LIFT

3.2 Operations of positioning



It is forbidden to install the ADVANCE Air Cleaning in environments where there is a high risk of explosion



The Partly completed machinery must be installed on a floor surface capable of supporting the weights as stated by the manufacture and shown in chapter 2 paragraph 2.6.2.

3.3 Connections and cabling



The activities described in this paragraph must be performed by the customer qualified personnel.

The piping for the electrical, hydraulic and pneumatic systems must be capable of withstanding the partly completed machinery's maximum consumption levels, as shown on the Technical Data Drawing (Chapter 2).

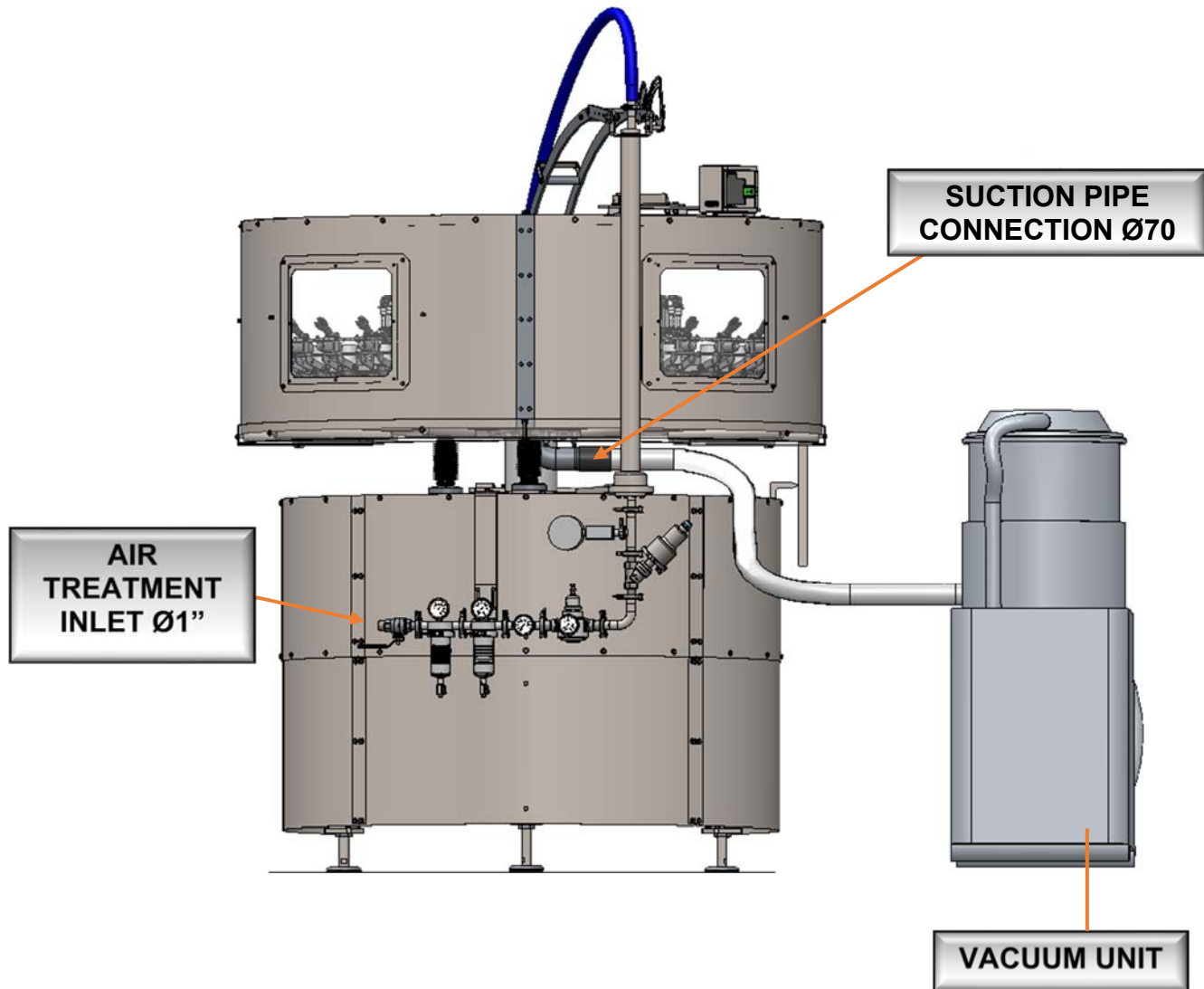
3.3.1 Electrical connection

It will be necessary to abide by the general installation rules governing the preparation and setting up of electrical systems.

3.3.2 Grounding system

The groundings of the partly completed machinery's metallic structures are assured by means of isolated conductors connected to the panel's grounding rod.

Regulations require that in every user system, the protective grounding for all of the system's parts and the operating groundings for the circuits and user appliances must be achieved by connecting all the parts concerned to one single grounding system.



3.4 Description of the set-up and first start-up operations.



The activities described in the following paragraph must only be performed by qualified personnel.



It will be necessary to check that the connecting parts (joints, solenoid valves, pumps and piping) are correctly tightened. It is also important to remember to run a full work cycle with water in order to ensure that none of the joints are leaking.

In addition to check for leaks, it will be necessary to carry out first start-up checks. These are intended to identify any possible damage that may have occurred during shipment, handling and positioning.



Confirm that all of the safety devices have been correctly fitted and that they are in perfect working order.

3.5 Re-installation



The activities described in the following paragraph must only be performed by qualified personnel.

The methods for requesting the assistance of a constructor technician are described in the first chapter.



After the dismantling, all of the remaining packing and handling procedures must be performed by qualified personnel.

3.6 Demolition and disposal

3.6.1 Toxic, harmful and special waste products

“Toxic harmful wastes” are considered to be those waste products that are contaminated with or contains substances specified in force in the country of use of the turret.

“Special waste” can be defined as those waste products consisting of deteriorated or obsolete materials and equipment.

3.6.2 Storage of waste products

The temporary storage of toxic and harmful waste is only allowed while it awaits disposal though treatment or permanent storage. However, those laws governing environmental protection in force in the country in which the partly completed machinery is being used must always be observed.

3.6.3 Obligations regarding the registration and disposal of waste

In accordance with Directive 2008/98/CE relating to the elimination of used oils all firms whose production generates special or toxic hazardous waste are obliged to keep registers of filling and discharge.

The removal of special and/or toxic hazardous waste must be entrusted to expressly authorized firms. Anyone transporting these substances must be in possession of the required authorization and be entered into the register of transporters.

3.6.4 Procedure concerning the partly completed machinery's macro dismantling operations.

In those countries where different laws may exist, then it is the laws and regulations of the country in which the demolition is to take place that must be observed.

Follow the procedure laid out below:

Disconnect the partly completed machinery from the electrical and hydraulic supplies.

Refer to the laws in force in the user's country that relate in particular to environmental protection.

Activate, as envisaged by law, the procedure for an approved body to carry out its inspection and complete a report on the demolition.

Proceed with the emptying and storage of the tanks containing lubricating fluids.

Proceed with the emptying and storing of any acids or harmful substances to be found in the partly completed machinery.

Disassemble the partly completed machinery, grouping its various component parts according to their chemical nature.

Proceed with the scrapping in accordance with laws in force in the country of the user.

During all of the dismantling phases, always observe rigorously the rules and regulations governing the safety of workers.



Dismantling operations must always be undertaken qualified personnel.

4 *Operation*

4.1 Applications, destinations of use

The ADVANCE blowing partly completed machinery has been designed and manufactured for the cleaning of bottles.

4.2 Intended and non intended use and permitted uses

Any use other than that for which the partly completed machinery has been designed and that is described in this manual is not considered to be in conformity and the manufacturer declines any responsibility.

4.3 Possible danger zones

In accordance with the **Machinery Directive 2006/42/CE** the following definitions, **Danger Zone, Operator and Qualified technician** are brought to the attention of the reader - see Chapter 1, Paragraph 2).



In the installation, it must separate the working area of the Air Cleaning turret, from the working area of the operator by means of special protective casings, or safety devices.

Regarding individual protection devices, refer to the machinery directive 2006/42/CE



Always wear protective footwear



Wear suitable protective gloves



Wear overalls that are in good condition and not damaged in any way



No objects should protrude from pockets.



Do not wear jewellery of any kind

4.4 Risks, dangers and non eliminable risks

4.4.1 Premise

The ADVANCE partly completed machinery has been designed and manufactured with all the necessary devices required to guarantee the safety and well being of the user.
Particularly because the partly completed machinery is intended for use in the field of food production, the materials used and the components employed are non-toxic in nature.

4.5 Description of operation

The operation of the Air Cleaning turret is split into four separate phases:

Upturning of bottles into a vertical position onto the spray nozzles, by a twist.

Treatment phase for a determined period of time, via a central feeding collector.

The bottle returns to its original position.

4.6 The formalities of job

The Air Cleaning turret has been designed to be installed above a container treatment partly completed machinery.

The motion is transmitted from the main partly completed machinery using gearmotors or transmission gears.

Treatment fluids must be handled by the logic of operation of main partly completed machinery.

4.7 The starting and the production

Before undertaking any phase of lighting or turning off, to check that any operator coop effecting further operations of maintenance or cleaning.

It is absolutely forbidden to try to violate the protections or to complete operations of maintenance or cleaning when the partly completed machinery is in operation.



WARNING:

Before beginning the mass in march of the partly completed machinery the operator it owes verify himself that:

All the operations of maintenance and cleaning have correctly been concluded and the partly completed machinery is found under the fit hygienic conditions to develop the in demand function;

All the devices of protection have correctly fixed; There is no people in dangerous positions in comparison to the partly completed machinery;

Extraneous bodies are not present (utensils, pieces of exchange, cables, packings) inside the partly completed machinery;

The pipelines and the containers of containment of the product have been clean from possible impurities or residual, due to jobs on the plant.

All the electric uses are laced, correctly pneumatic and of trial.

4.8 The preliminary controls

Before putting in march the partly completed machinery, to the beginning of every turn, to verify that:

The parameters of the select format-bottle are correct, that is:

The tampons of taking are those expectations;

The height of the carousel is the correct one.

The parameters operation of the in operation partly completed machinery are correct, that is:

The pressure of the product of treatment, suitable on the special manometer both that suitable in the manual;

The temperature of the product both that anticipated;

The concentration of any chemical agents is the correct one.

The control and safety devices are working.

The partly completed machinerys of the line immediately downstream and awry is found under the conditions foreseen by the logic of operation of the line:

Filler;

Conveyors;

Ozone generator.

4.9 The vigilance during the operation



CAUTION:

The operator, during the march of the partly completed machinery, it will have to effect the followings controls:

Observation of the flow of the bottles in entry and in gone out of the partly completed machinery;

Observation of the bottles during their treatment;

In case of malfunctions of the partly completed machinery, the special section of the manual will help the operator in the search of the breakdowns and in the solution of the problem.

5 *Replacing the gripping buffers*

Replacing the gripping buffers

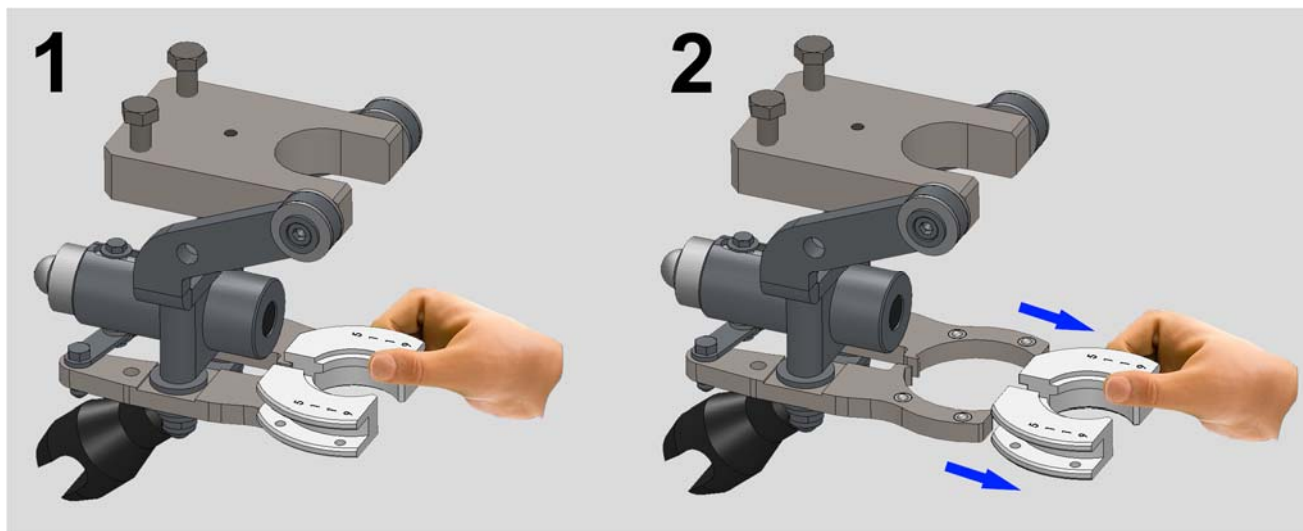
5.1 Replacing the gripping buffers



The procedures described in this chapter, must always be performed whilst wearing protective gloves

5.1.1 Correct insertion of the gripping buffer

The gripping buffers are produced in such a way as to render the insertion into the gripper both visible and easy.



Gripping buffer

5.2 Warnings about the format change



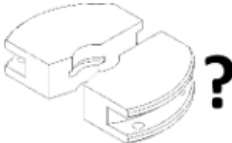
The format change activities described in this chapter, must only be performed by qualified personnel.

During the format change operation ensure that the area surrounding the partly completed machinery is isolated.

Do not allow anyone who is not associated with the work to approach the partly completed machinery.

Ensure that a warning card is placed over the control panel.

Replacing the gripping buffers

C1410A/30ADV - AIR CLEANING TURRET MODEL ADV R00 1A+1S 30/155 EX BH					
 BOTTLE	BOTTLE NUMBER	 	 	 	
700ml Nocturne – Rebel	3	92.7	220	A1	5188
750ml Daviess County (Piramal)	5	87.30	281	A2	5187
750mL Old Ezra (Liquor Bottle)	7	91.90	254	A3	5189
750mL Kentucky Best (Piramal)	8A	92.74	220.47	A1	5188
750mL Nordic - Rebel (6-IN) (Liquor Bottle)	8B	92.7	220.5	A1	5188
750mL Nordic - Rebel (12-IN) (Liquor Bottle)	8C	111.7	321.6	A1	5188
1.0L Rebel (Berlin)	10	93.3	278	A1	5188
1.75L Rebel (Berlin)	11	111.7	321.6	A4	5054
750mL David Nicholson (Berlin)	12	102	213.5	A1	5188
700mL David Nicholson (Berlin)	13	99.5	213.5	A1	5188
750mL Yellowstone (Piramal)	14	76.45	296.10	A5	5190
750mL Rossville Union (Liquor Bottle)	15	116	216.5	A6	5055
750mL George Remus (Liquor Bottle)	16	94	231.4	A1	5188
750mL Remus Repeal Reserve (Liquor Bottle)	17	99.6x60.4	261.4	A7	5056
750mL Blood Oath (Liquor Bottle)	18	97.2x75	212.3	A6	5055
750mL Green Hat (TBD)	19	102.49x59.64	257.16	A7	5056
750mL Decanter (Berlin)	27	95.5	230	A1	5188
1.75 Old Ezra (Liquor Bottle)	28	117.5	324.6	A8	5192
750mL Pearl (Berlin)	20	73.3	321.8	A9	5193

Replacing the gripping buffers

750mL Round (Anchor)	21A	78.98	283.77	A10	5194
750mL Round (BSB) (Anchor) - 103 proof	21B	78.98	283.77	A10	5194
1.0L Round (Anchor)	22	85.55	300.9	A10	5194
1.0L Pearl (Taiwan Glass)	23	84.5	325.5	A9	5193
1.75 Glass (Anchor)	24	125.81	305.54	A11	5194
1.75L PET Clear (Silgan)	25	113.7	308.50	A12	5196
1.75L PET Custom (Silgan)	26	107.95	311.20	A12	5196
1.75L PET Custom (Silgan) - Tinted Bottle	26B	107.95	311.20	A12	5196

Change format

6 *Scheduled maintenance*



This chapter contains information destined to personal qualified

6.1 Maintenance safety standards

Regarding the individual devices of protection the European Community Economic has emanated the directives machine 2006/42/CE.

Behaviors you don't conform to the safety instructions in the use of this equipment you can cause the death or serious damages to the people or to the things.

It needs therefore to respect the instructions for the use and the maintenance of this equipment contained in this publication and the present notices on the same product.



Before effecting interventions of maintenance on the mobile organs, to remove pressure from the pneumatic plant.

Before effecting interventions of maintenance to remove tension from the power supplies.

To submit only him to personal specialized and competent.

Before proceeding to any type of intervention to attentively read the contained instructions in the present publication.

To respect the suitable periodicities with alternates him of maintenance.

To guarantee of a perfect operation of the partly completed machinery, it is necessary that possible substitutions is exclusively effected with original exchanges of the builder.

*Performed the jobs of maintenance, before putting again on call the partly completed machinery, to check that:
The pieces eventually replaced e/o the utensils employed for the intervention of maintenance have been removed by the partly completed machinery;*

All the safety devices are efficient.

To the safety on the partly completed machinery they have been anticipated suitable safety devices.



*The tampering and the removal of the safety devices you is absolutely forbidden.
In case of tampering or removal of the safety devices, the builder declines every responsibility on the safety of the partly completed machinery.*

6.2 Cleaning the partly completed machinery and washing area

Introduction

This section outlines the procedures to be followed when rinsing, washing and sanitising the Air Cleaning turret is interior and exterior.

The following are the basic operations:

6.3 External rinse and wash

6.3.1 Initial external rinse

Use a hosepipe to remove all traces of product residue and debris.

Pay particular attention to the drive units. Avoid spraying the gearing boxes directly.

Never spray directly onto any of the following areas:

Electrical components such as the electric cabinet, the push-button panel, the junction box, the drive units, the sensors, the switches and the air blades.

6.3.2 External wash

For best results, use a cleaning agent of commerce for cleaning the outside of the blowers.

Never spray directly onto any of the following areas:

Electrical components such as the electric cabinet, the push-button panel, the junction box, the drive units, the sensors, the switches and the air blades.

6.3.3 Final external rinse

Use a hosepipe to remove all traces of product residue and debris.

Pay particular attention to the drive units. Avoid spraying the gearing boxes directly.

Never spray directly onto any of the following areas:

Electrical components such as the electric cabinet, the push-button panel, the junction box, the drive units, the sensors, the switches and the air blades.

6.4 Washing of electrical components positioned in the upper part of the carousel (If Installed)



WARNING ! Do not wash the electric components with jets of water direct and / or indirect.
The electrical components if present on the turret, must be treated according to the procedure below.

Function	Action
Cleaning	Blow with sterile air dehumidified
Cleaning with chemical products (ONLY OUTSIDE PARTIES)	Washing / sterilization with non-aggressive products for stainless steel and plastic, suitable for the washing partly completed machinery in the food industry. They must be applied with a pump nebulizing manually operated, so as to create only a thin layer of the product.
Rinse	Rinse manual: remove chemicals products with damp sponge with (sterile water).

You can wash the gripper but you must pay attention to avoid to put water on nozzle

Scheduled maintenance

6.5 Programmed checks to be undertaken:

Programmed maintenance Drawing

Maintenance intervals	Location	Activity
Every 8 hours (per shift)	<i>A1 Base and carousel</i>	<i>a. External cleaning</i>
		<i>b. Operating pressure</i>
Every 24 hours (daily)	<i>B1 Air Cleaning turret</i>	<i>a. Grippers</i>
Every 40 hours	<i>C1 Lubricating system</i>	<i>a. Circuit</i>
Every 120 hours	<i>D1 Air Cleaning turret</i>	<i>a. Distribution manifold</i>
	<i>D2 Air Cleaning turret</i>	<i>a. Distribution manifold</i>
Every 400 hours	<i>E1 Motorization</i>	<i>a. Visual noise check</i>
	<i>E2 Pneumatic system</i>	<i>a. Circuit</i>
Every 900 hours	<i>F1 Motorization</i>	<i>a. Greasing</i>
	<i>F2 Air Cleaning turret</i>	<i>a. Grippers</i>
Every 2000 hours	<i>G1 Air Cleaning turret</i>	<i>a. Grippers</i>
	<i>G2 Air Cleaning turret</i>	<i>a. Timing ring</i>
	<i>G3 Motorization</i>	<i>a. Belt wear</i>
	<i>G4 Electrical system</i>	<i>a. Electrical connections</i>
Every 4000 hours	<i>H1 Air Cleaning turret</i>	<i>a. Grippers</i>
	<i>H2 Air Cleaning turret</i>	<i>a. Grippers feeding pipes</i>
	<i>H3 Electrical system</i>	<i>a. AC Motor</i>
		<i>b. Electric motor bearings</i>
Every 5000 hours	<i>I1 Pneumatic system</i>	<i>a. Pressure reducers</i>
Every 9000 hours	<i>L1 Motorization</i>	<i>a. Overhaul of the Air Cleaning turret is reducers, the base and the angular transmissions</i>
		<i>b. Lifting of the Air Cleaning turret</i>

Scheduled maintenance

A1 BASE AND CAROUSEL

a. External cleaning

FREQUENCY:

8 hours (per shift)

Carefully clean away any traces of product. Wash thoroughly with water / sanitising product, and then rinse with cold water.

A1 BASE AND CAROUSEL

b. Operating pressure

FREQUENCY:

8 hours (per shift)

Check the following values:

Auxiliary air inlet pressure max 4-5 bar.

B1 AIR CLEANING TURRET

a. Grippers

FREQUENCY:

Maintenance every 24 hours (daily)

Check that the grippers are operating correctly.

In particular check the state of the buffers and of the opening and closing springs

C1 LUBRICATING SYSTEM

a. Circuit

FREQUENCY:

Maintenance every 40 hours

By using the greasing nipples located of the partly completed machinery, grease all of the centralised lubricating units with a pump

D1 AIR CLEANING TURRET

a. Distribution manifold

FREQUENCY:

Maintenance every 120 hour

Carry out a visual check for any product leaks

Scheduled maintenance

D2 AIR CLEANER

a. Distribution manifold

FREQUENCY:

Maintenance every 120 hours



Carry out a visual check for any product leaks.



D2 AIR CLEANER

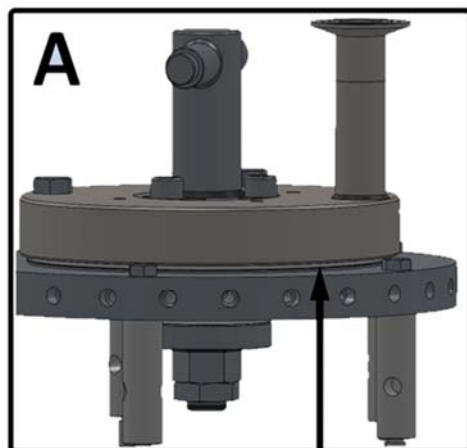
a. Distribution manifold

FREQUENCY:

Maintenance every 120 hours

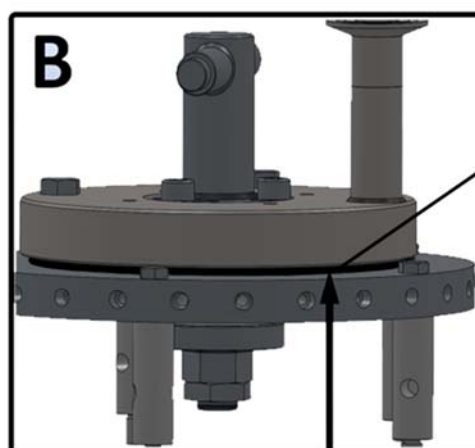


Replace the Timing ring, gaskets (Bearings if Installed) when you see the black gasket (Oring) as Fig. B.

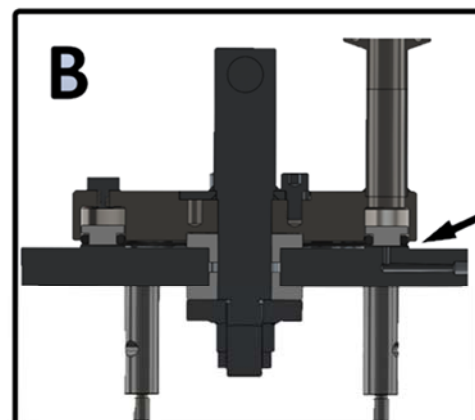
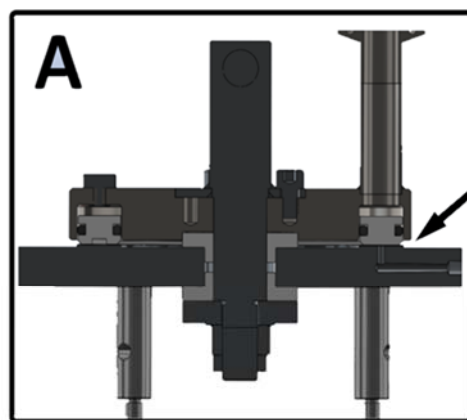


OK

Le guarnizione non si vede.
The gasket is not visible



Attenzione CAMBIARE!
Attention CHANGE!



Scheduled maintenance

E1 MOTORIZATION

a. Visual noise check

FREQUENCY:

Maintenance every 400 hours

Start and stop the partly completed machinery repeatedly to check for any unusual noises, play or vibration that may be appear to be present in the drive units (joints, crosses, reducers, gearing or bearings).

Any play or dovetailing is to be eliminated by replacing the parts.

Cleaning and greasing where necessary are a constant requirement.

E2 PNEUMATIC SYSTEM

a. Circuit

FREQUENCY:

Maintenance every 400 hours

Check for possible leaks and that it is operating correctly.

This operation consists of checking that the pipe work and unions are not leaking, a visual check of the component and a correct set up of the system.

Every fault that is discovered must be eliminated.

F1 GREASING

a. Motorization

FREQUENCY:

Maintenance every 900 hours

Use a brush to lubricate all of the gearings in the base and the chains inside the Air Cleaning turret that are required for lifting

F2 AIR CLEANING TURRET

a. Grippers

FREQUENCY:

Maintenance every 900 hours

Check to see if any parts on the gripper need replacing and if there is any evidence of premature wear and/or anomalies.

G1 AIR CLEANER

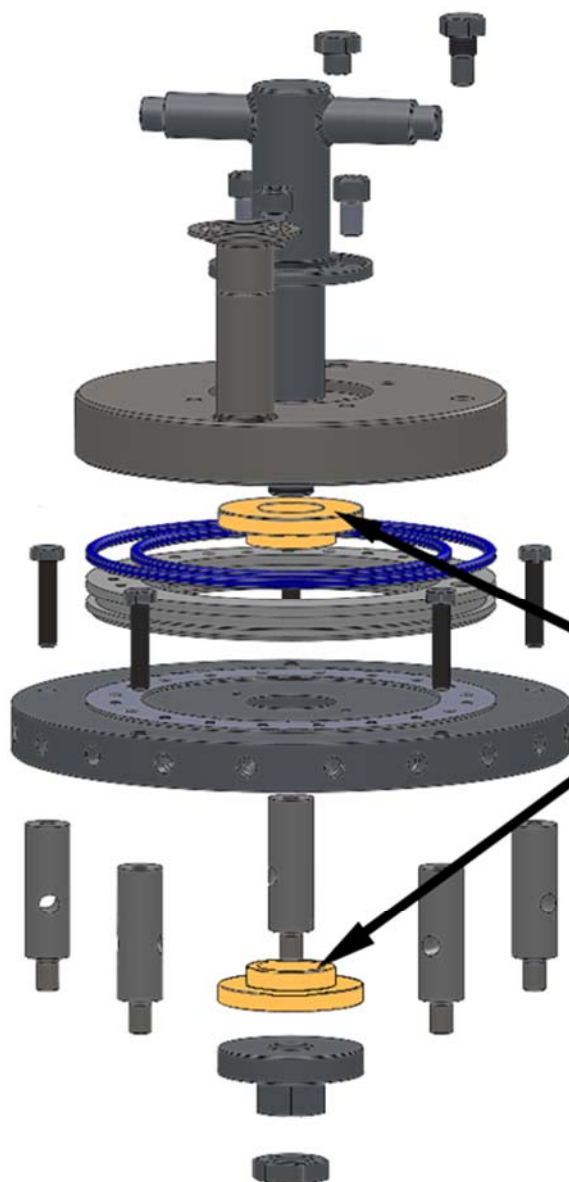
a. Distribution manifold

FREQUENCY:

Maintenance every 2000 hours



*Gaskets replace is recommended every 2000 work hours,
or if product leaks are detected.*



**RECOMMENDED
MAINTENANCE
REPLACE EVERY
2000 WORK HOURS**

**MANUTENZIONE
CONSIGLIATA
CAMBIARE OGNI
2000 ORE LAVORO**

G1 AIR CLEANING TURRET

a. Grippers

FREQUENCY:

Maintenance every 2000 hours

This is an operation that must be carried out by qualified personnel.

Replacement of the following parts is advisable Drawing G010013000191.

Slider code P01013001422

Bushing hinging code P01013001354

Bushing hinging code P01013001351

Bushing hinging code P01013001308

Bushing P01013001140

G2 AIR CLEANING TURRET

a. Timing ring

FREQUENCY:

Maintenance every 2000 hours

This is an operation that must be carried out by qualified personnel.

Check to see if any parts on the timing ring need replacing and if there is any evidence of premature wear and/or anomalies.

G3 MOTORIZATION

a. Belt wear

FREQUENCY:

Maintenance every 2000 hours

Belts must not show any sign of fraying, deformity, stretching or have any sections that appear worn. Replace where necessary.

G4 ELECTRICAL SYSTEM

a. Electrical connections

FREQUENCY:

Maintenance every 2000 hours

Check all the electrical connections.

If there is even the slightest sign of a product infiltration of any kind, establish the cause and eliminate it.

H1 AIR CLEANING TURRET

a. Grippers

FREQUENCY:

Maintenance every 4000 hours

This is an operation that must be carried out by qualified personnel.

Replacement of the following parts is advisable Drawing G01013000191

Grippers opening spring cod. MO100010

Front centring device cod. P01013001067

Scheduled maintenance

H2 AIR CLEANING TURRET

a. Grippers feeding pipes

FREQUENCY:

Maintenance every 4000 hours

Check for any product leak and the integrity of the pipes between the manifold and the spray nozzles.

H3 ELECTRICAL SYSTEM

a. AC Motor

FREQUENCY:

Maintenance every 4000 hours

Clean the air intake and the cooling fan.

H3 ELECTRICAL SYSTEM

b. Electric motor bearings

FREQUENCY:

Maintenance every 4000 hours

In the hottest and under the most severe operating conditions check that the temperature of the bearings does not exceed 90°C and that they have not become noisy.

I1 PNEUMATIC SYSTEM

a. Pressure reducers

FREQUENCY:

Maintenance every 5000 hours

This is an operation that must be carried out by qualified personnel.

Overhaul.

This operation consists in disassembling and cleaning every individual component and where necessary replacing those parts that are showing signs of wear.

Reassemble the components lubricating the seals with silicon grease and checking their operation.

L1 MOTORIZATION

a. Overhaul of the Air Cleaning turret is reducers, the base and the angular transmissions.

FREQUENCY:

Maintenance every 9000 hours

This is an operation that must be carried out by qualified personnel.

Check the state of wear of the worm screw, the helicoidally shaped wheels as well as the reducers in between.

Clean, wash and grease.

L1 MOTORIZATION

b. Lifting of the Air Cleaning turret

FREQUENCY:

Maintenance every 9000 hours

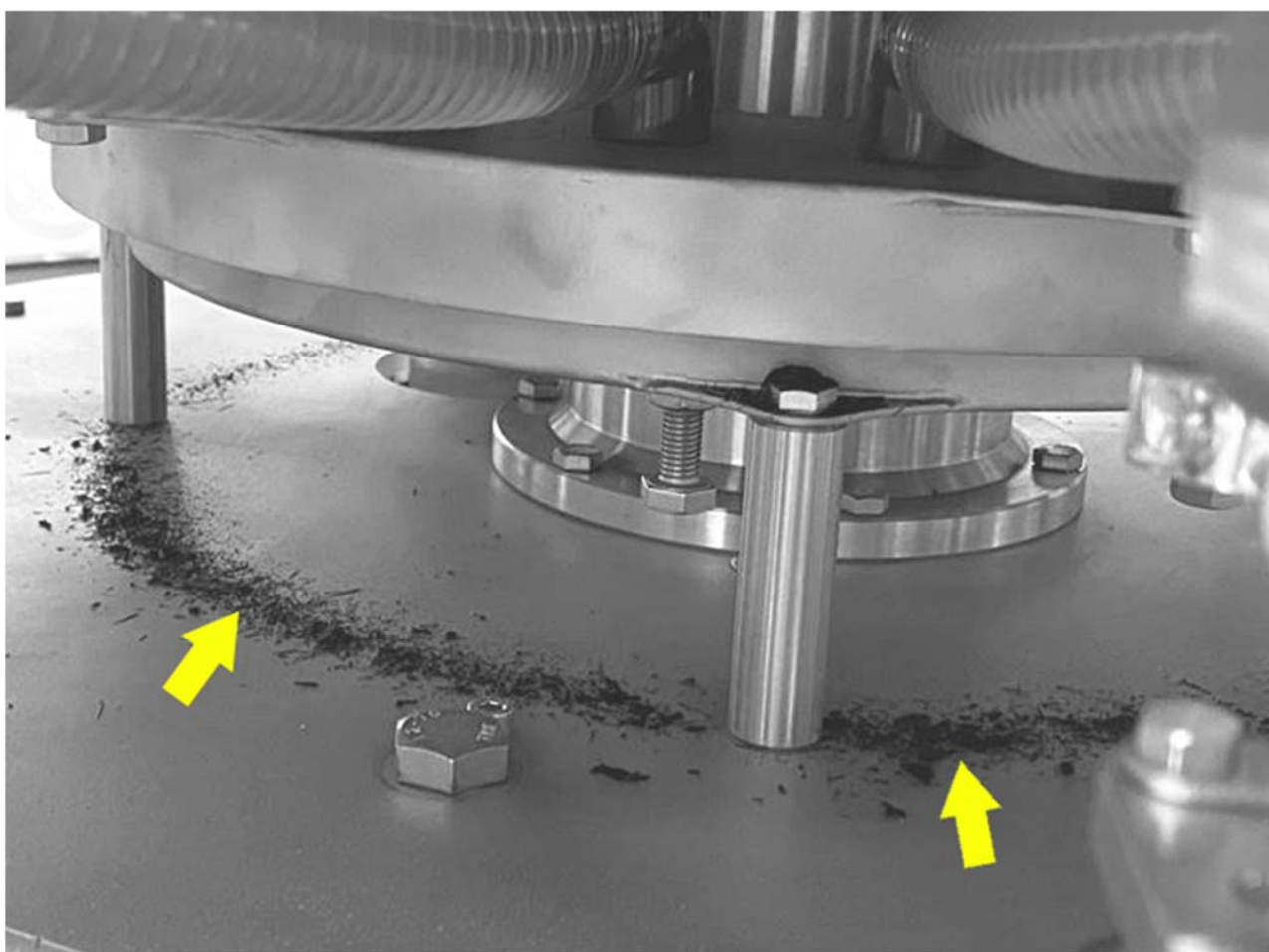
Check its operation, the tightness of the chains and the condition of the reducers and shafts.

Carry out a general cleaning, replacing the bellows, and adjusting and greasing where necessary

Scheduled maintenance



During the first months after installation, debris may be found under the vacuum manifold (see photo). These are the result of a normal wear and adaptation of the seals, which are needed to ensure the vacuum manifold is correctly sealed.



6.6 Lubrication symbols



THE UNIT DOES NOT REQUIRE LUBRICATION



LUBRICATING INTERVALS (H=N° OF HOURS)

LUBRICANT CODE	SYMBOL	DESCRIPTION
A		REPLACEMENT OR TOPPING UP OF SYNTHETIC OIL
B		REPLACEMENT OR TOPPING UP OF MINERAL OIL
C		LUBRICATION WITH HAND OIL CAN
D		LUBRICATION WITH HAND GREASE PUMP
E		GREASE LUBRICATION WITH A BRUSH

Scheduled maintenance

6.7 Suggested lubricants

Rif.	Different moving parts lubrication	Lubricant	Code	Note
1	Gearmotors.	MOBIL GLYGOYLE HE320	19507014	SYNTHETIC OIL
2	MANIFOLD – SLIDING BLOCK AND STAR WHEELS BEARINGS GEARWHEELS – BEARINGS TRANSMISSION UNIT.	JET LUBE	19550372	GREASE
3	Gaskets.	OKS 1110	19811050	GREASE
4	WORMSCREW CONTROL.	MOBIL MOBILUX EP004 – NLGI00	19507031	GREASE

6.8 Lubrication

Grease used:

Equivalent product to JET LUBE grease:

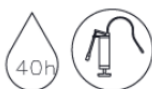
WAB CODE-19550323

Food machinery grease KLUBER KLUBERSYNTH - HOMOLOGATED UH1 64-1302 0960490591

6.9 Lubrication intervals

The item listed below should be lubricated every 40 hours:

Greasing Unit – Drawing G01048-2



6.10 List of AC Motors used

COD.18104203 - MOTOR SEIPEE JM 71b4 B14 0,37kW 4P

COD.17040060 - ASPIRATOR NILFISK VHW420 4Kw

JET-LUBE[®] FMG[™]

FOOD MACHINERY GREASE

DESCRIPTION

FMG[™] is an aluminum complex grease lubricant of the USDA Authorized H-1 type. It meets or exceeds the requirements of CFR Title 21, Section 178.3570 of FDA Regulations and is specifically designed for use in the food processing industry where it may have incidental food contact. FMG has been formulated to perform in a wide variety of operating conditions. It is extremely water resistant and will remain in place even after frequent wash downs. Polymer additives provide adhesive/cohesive strength to protect against pound-off when shock loads are encountered.

FMG can be used in a wide range of temperatures from 0°F (-18°C) to over 400°F (204°C). It is recommended for the lubrication of roller, needle, ball, journal, and sliding bearings in the food processing and handling industry.

FEATURES

- ☐ Aluminum Complex Grease
- ☐ Polymer Additives
- ☐ Non-Pound Out Formula
- ☐ Bacteriostatic Agent
- ☐ Anti-Wear Additives

BENEFITS

- ☐ Extremely Water Resistant
- ☐ Adhesive/Cohesive Strength
- ☐ Reduced Lube Consumption
- ☐ Retards Bacteria/Fungus Growth
- ☐ Available in Other Grades

NSF (H-1) Registered No. D48226. Conforms to FDA Regulations CFR 21 Section 178.3570 for Incidental Food Contact.

PRODUCT CHARACTERISTICS

Thickener	Aluminum Complex
Fluid Type	White Oils & Synthetic
Color/Appearance	White Grease
Specific Gravity	0.94
Density (lb/gal) Typical	7.80
Additive Type	Zinc Sulfide & Organic R&O
Dropping Point (ASTM D-566)	>500°F (260°C)
Flash Point °F (°C) (ASTM D-92)	>430 (221)
Autoignition Point (CALCULATED)	>500°F (260°C)
NLGI Grade	2
Penetration @ 77°F (ASTM D-217) mm x 10 ¹	265 – 295
Copper Strip Corrosion (ASTM D-4048)	1A
4-Ball (ASTM D-2500)	
Weld Point, kgf	400-500
Load Wear Index	50
Wear Scar Diameter	0.7
Oxidation Resistance (ASTM D-942) PSI Drop, 100 hrs.	<5.0
Base Oil Viscosity (ASTM D-445) cSt @ 40°C	90 – 110

For package types and part numbers contact sales@jetlube.com.

LIMITED WARRANTY

For warranty information please visit
http://www.jetlube.com/pdf/Jet-Lube_Warranty.pdf

You can also email us at sales@jetlube.com or write to the Sales Department at the address below.

7 *Troubleshooting*



The activities described in this paragraph must be performed by the customer qualified personnel.

7.1 Fault finding

When a fault occurs, and in order to restore the partly completed machinery to its full operating condition, it is essential for a detailed search procedure with which to find a fault be performed.

Approaching the diagnostic process of fault finding in a methodical manner will increase noticeably the chances of tracking down the causes.

The list below is designed to help in establishing the reason for a fault occurring, and in solving the problem.

Understanding the fault

It is a good idea to gather together as much information as possible before even beginning to attempt to solve the problem that has arisen.

The problem should be carefully monitored, and an update on the partly completed machinery's performance level should be obtained from the operator.

A note should be made of the type of fault and the frequency at which it occurs.

Symptomatic cures will not lead to the solving any problems.

The primary objective must always be that of finding and eliminating the causes.

Locating the problem

Any problems that may occur in the Air Cleaning turret usually do so in one or two of the partly completed machinery's five sections:

Motorization

Height adjustment

Manifold and timing ring

Bottle grip

Follow an investigative procedure

Carry out any corrections or adjustments according to a sequential logic, going from the most probable to the least likely cause.

Doing this in a haphazard way without any sense of purpose or direction risks the operation turning into a total waste of time, and may also result in the problem becoming even more serious.

Step by step process

Perform only one correction at a time and then monitor the results before attempting alternative solutions.

After the work has been completed

When it appears that the fault has been rectified, the partly completed machinery should be monitored in order to ensure that there is a positive outcome to the work carried out. If production needs dictate that it is only possible to carry out temporary repairs, then a note must be made of the problem, so that when it is time to perform the next scheduled maintenance work the problem can be rectified permanently.

Troubleshooting

7.1.1 Bottle transport and bottle grip

This section presupposes that the bottles being used are good quality bottles, that they conform to the type of bottle allowed for use on this partly completed machinery.

PROBLEM	CAUSE	SOLUTION
<i>The gripper does not grip the bottle correctly.</i>	<i>The gripping buffer is not suitable for the type of bottle in use.</i>	<i>Check the code number on the buffer and if necessary replace with the correct one. Furthermore check that it is has been installed correctly.</i>
	<i>The height of the gripper carrier carousel is not correctly adjusted.</i>	<i>Check and if necessary adjust the height in accordance with the format change Drawing.</i>
	<i>Twist forks are worn.</i>	<i>Check the state of wear and replace if necessary.</i>
PROBLEM	CAUSE	SOLUTION
<i>The gripper does not grip the bottle securely.</i>	<i>The gripping buffers are worn.</i>	<i>Replace the gripping buffers.</i>
	<i>The gripper's activation slider has become hard.</i>	<i>Check the condition of the internal slider running bush, and replace if necessary.</i>
	<i>The opening connecting rods have become hardened or worn.</i>	<i>Check that the screws are not acting as pins, that they have not been over tightened. Re-adjust if necessary.</i>
	<i>The internal slider return spring is broken or damaged.</i>	<i>Replace the spring.</i>

Troubleshooting

7.1.2 Bottle treatment

PROBLEM	CAUSE	SOLUTION
Rotating collector. Treatment fluid is seeping out from between the static and the rotating part of the collector.	The treatment fluid's timing disk is worn or damaged.	Replace the disk.
PROBLEM	CAUSE	SOLUTION
Rotating collector. Treatment fluid is seeping out from between the static and the rotating part of the collector.	The gaskets on the timing disk are damaged.	Replace the gaskets.
PROBLEM	CAUSE	SOLUTION
Rotating collector. The injection of treatment fluid takes place outside of the predefined area.	Probable bad timing on the collector's static side.	Check the tightening of the static side's locking screws. Return the collector to its true position and re-tighten the screws.
PROBLEM	CAUSE	SOLUTION
Rotating collector. The injection of treatment fluid takes place in an area that is wider than that predefined or across the partly completed machinery's entire circumference.	The treatment fluid's timing disk has been damaged by a hard object or by some sort of abrasive substance.	Replace the disk.
PROBLEM	CAUSE	SOLUTION
The spray nozzle does not produce any treatment fluid or the fluid does appear but in insufficient quantities.	The spray nozzle is blocked by a foreign body or by lime scale.	Remove the nozzle from the gripper and eliminate any foreign body. If the blockage is caused by lime scale then a washing with the use of anti lime scale products is recommended. It is advisable to contact our technical support office in order to confirm the material's compatibility to the chemical product to be used.
PROBLEM	CAUSE	SOLUTION
Sanitization process, not Sufficiently effective.	Insufficient treatment fluid pressure.	Check that there are no leaks in the pneumatic circuit.
	Pressure gauge incorrectly calibrated or damaged.	Check the calibration or replace the pressure gauge.
	Filter cartridge (where envisaged) clogged.	Replace the cartridge.
	Rinsing fluid cut off solenoid valve damaged.	Check that the coil is not burnt out. Replace where necessary, or if necessary replace the valve in its entirety.
	Manual cut off valve closed.	Open the valve

Bottle treatment diagnosis

8 *Spare parts*

Spare parts

The following chapter lists all of the different elements that go to make up the partly completed machinery. Each shows the internal ordering code, a description of the article, the quantities used, the units of measurement and the commercial description.

To order these parts, turn to Chapter 1 Paragraph 10.

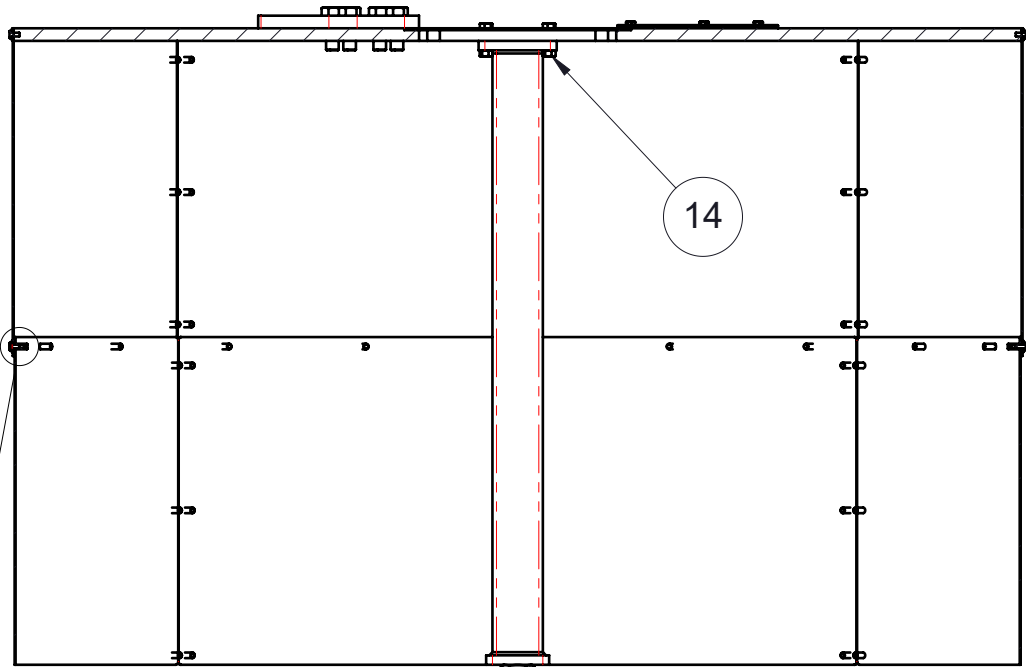
8.1 Index of partly completed machinery units

DRAWING	DESCRIPTION
G01001-2	BASEMENT
G01002-2	COLUMN
G01003-2	CAROUSEL
G01004-2	MOTORIZATION
G01012-2	HEIGHT ADJUSTMENT
G01013-2	GRIPPER
G01017-2	MANIFOLD
G01018-2	FEEDING
G01019-2	GRIPPER OPENING CAM
G01020-2	TWIST SUPPORT
G01026-2	AIR FILTER
G01032-2	DUST SUCTION
G01045-2	PHASING RING
G01058-2	NOZZLE
G01066-2	PIPES
G01071-2	HEIGHT SENSOR
G01072-2	DUST SUCTION
G01073-2	FDS
G01075-2	PADS

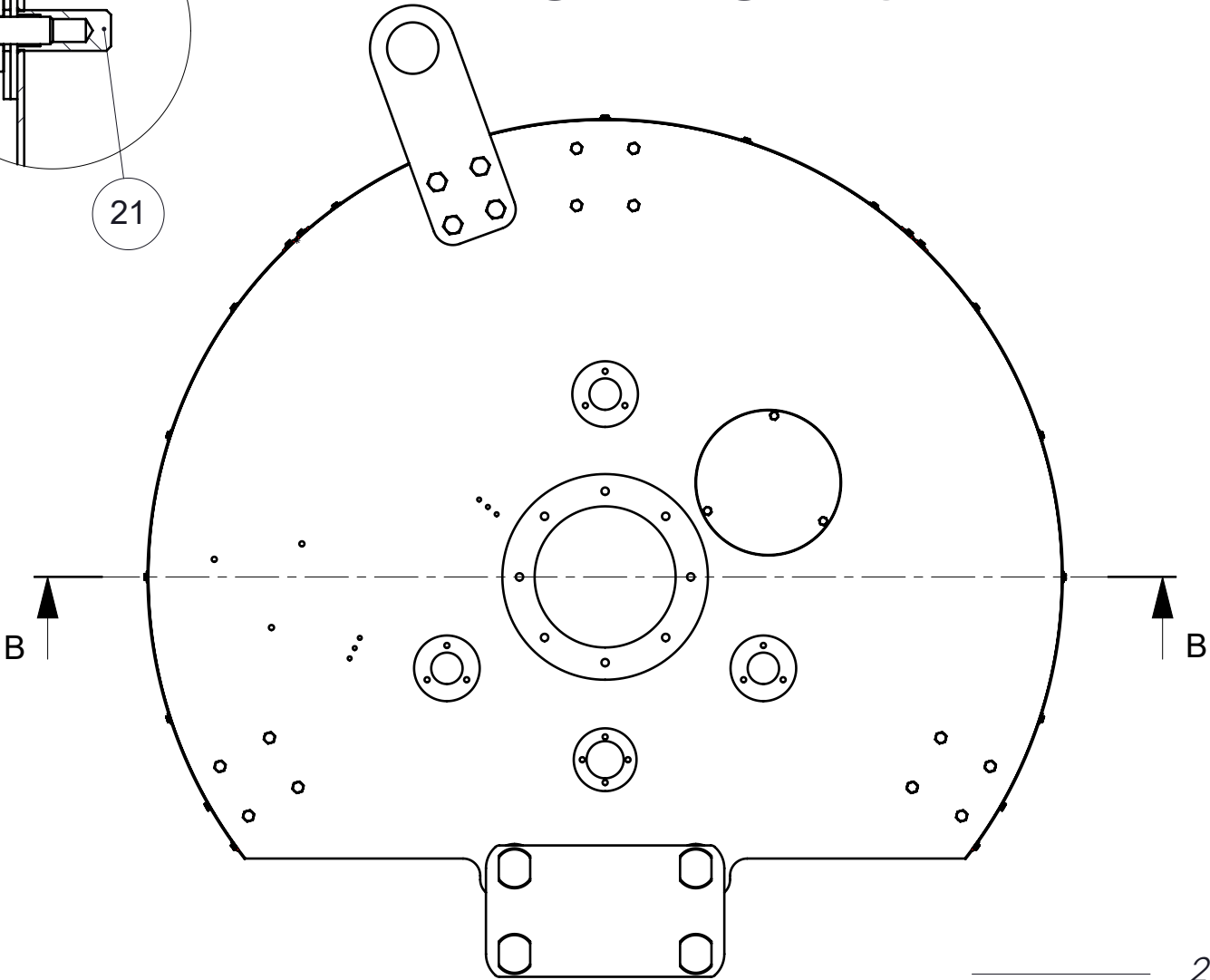
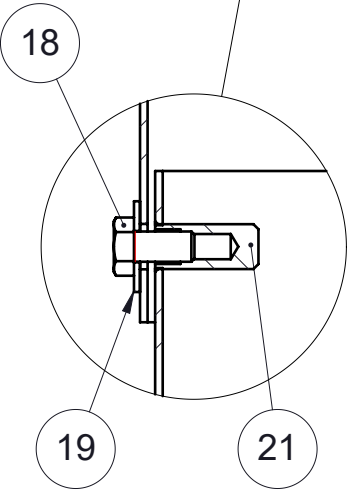
BASAMENTO / DRIVE BASE / BATI / UNTERGESTELL / BASE

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01001007155	PIASTRA / PLATE / PLAQUE / PLATTE / PLACA	NR	1
2	P01001007157	PIEDE / FOOT / PIED / FUSS / PIE	NR	3
3	P01003003130	SPINA / PEG / GOUPILLE / STIFT / ENCHUFE	NR	4
4	P01001007156	PIASTRA / PLATE / PLAQUE / PLATTE / PLACA	NR	1
5	P01003001174	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	4
6	P01001007160	PIASTRA / PLATE / PLAQUE / PLATTE / PLACA	NR	1
7	P01001007161	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	6
8	P01001007162	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	3
9	P01001007163	COPERCHIO / COVER / COUVERCLE / DECKEL / COBERTURA	NR	1
10	13650058	BASE / BASE / EMBASE / UNTERLAGE / BASE	NR	3
11	13650080	PERNO / PIN / PIVOT / ZAPFEN / PERNO	NR	3
12	12712017	DADO / NUT / ECROU / MUTTER / TUERCA	NR	3
13	12700289	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	12
14	12711009	DADO / NUT / ECROU / MUTTER / TUERCA	NR	12
15	12711019	DADO / NUT / ECROU / MUTTER / TUERCA	NR	4
16	12700356	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
17	12700240	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	3
18	12700217	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	54
19	12722017	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	54
20	12700238	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	9
21	P01001007159	CARTER / GUARD / CARTER / CARTER / CARTER	NR	1
22	P01001007167	CARTER / GUARD / CARTER / CARTER / CARTER	NR	1
23	P01020007719	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	2
24	P01020007720	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	2

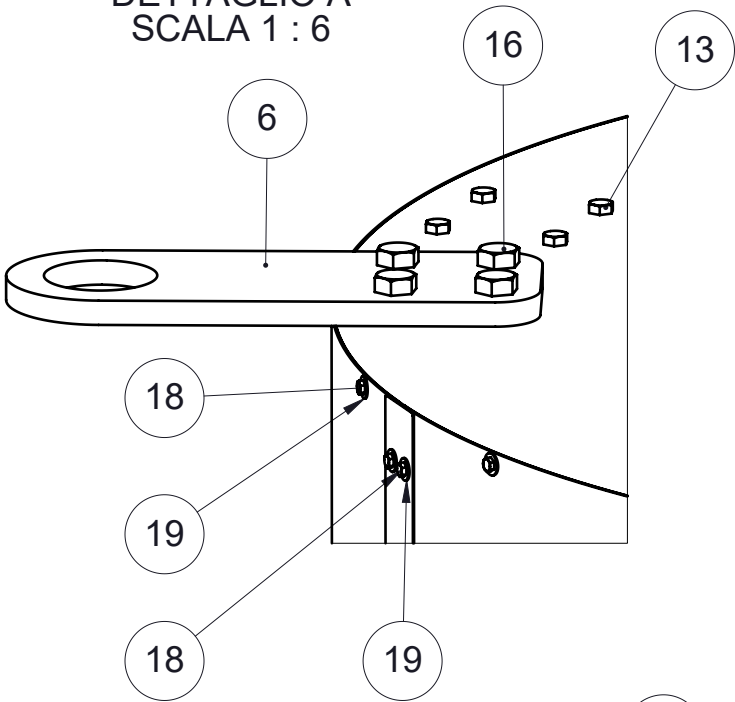
SEZIONE B-B



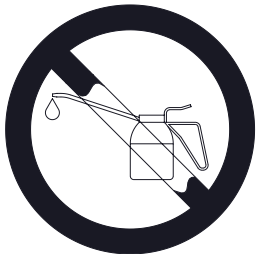
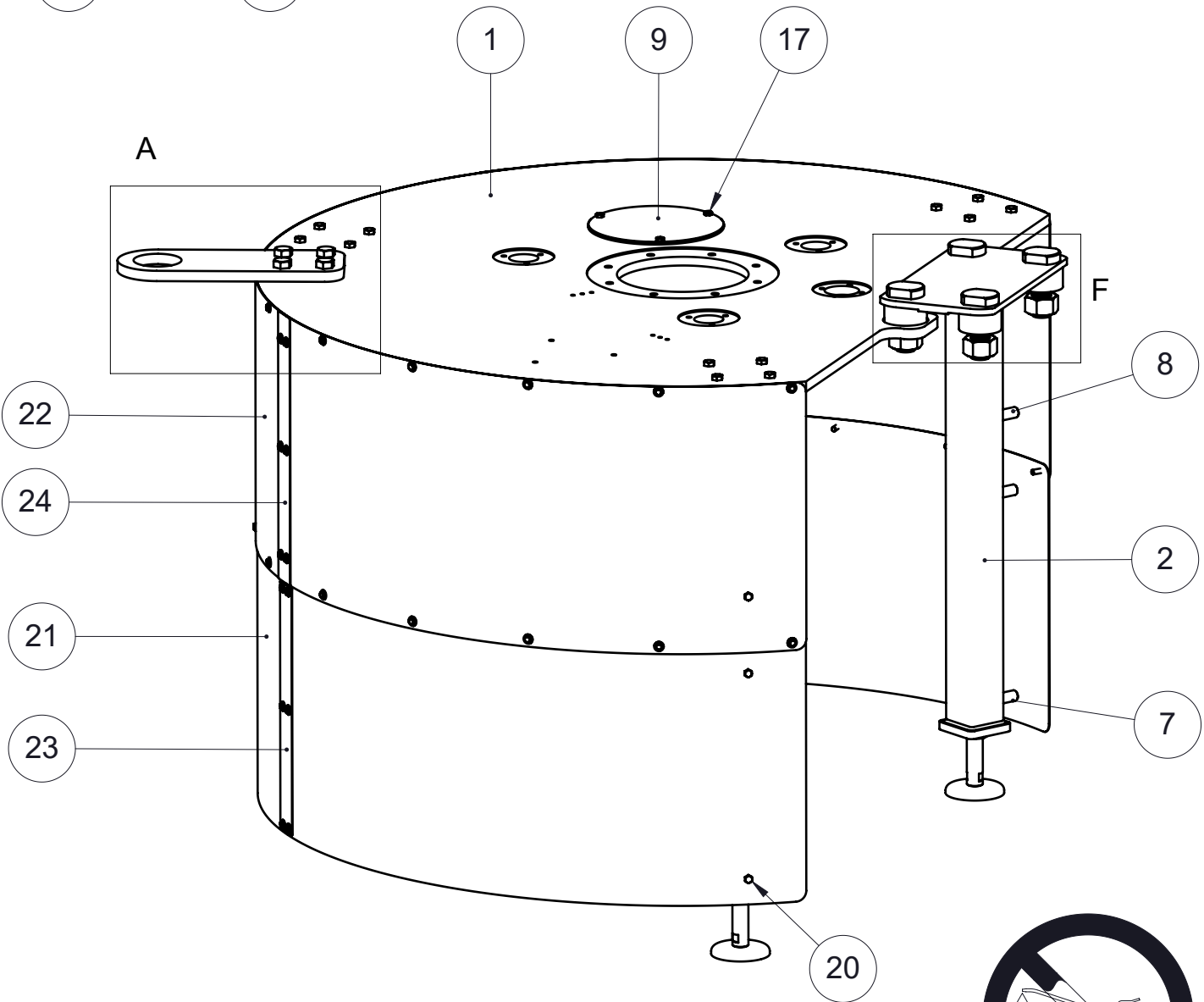
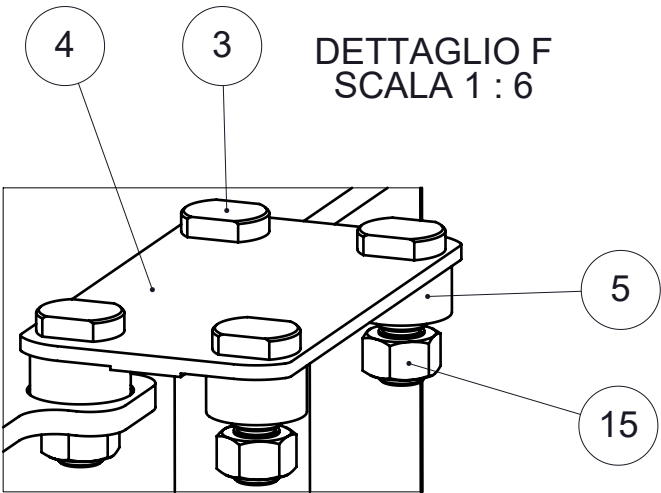
DETTAGLIO C
SCALA 1 : 1.5



DETTAGLIO A
SCALA 1 : 6

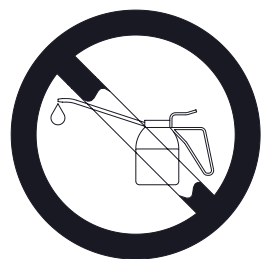
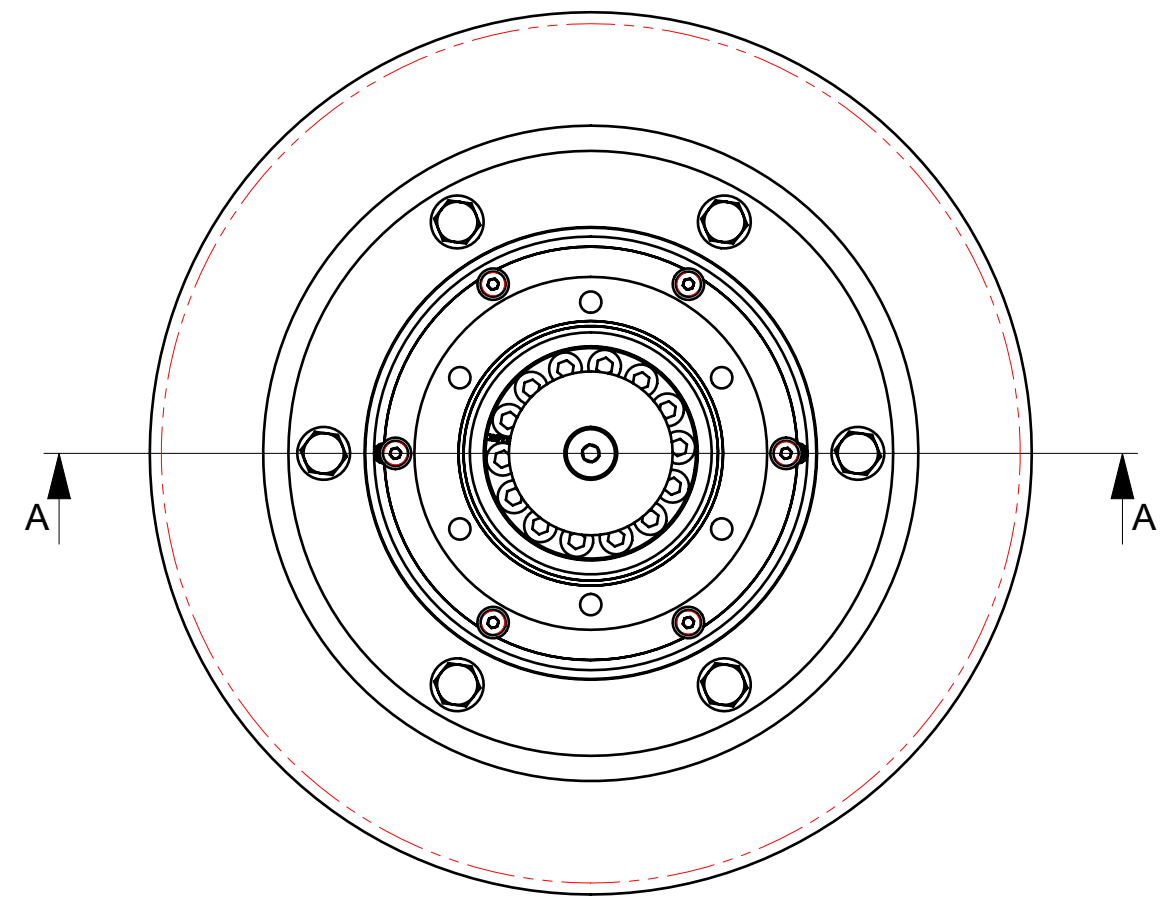
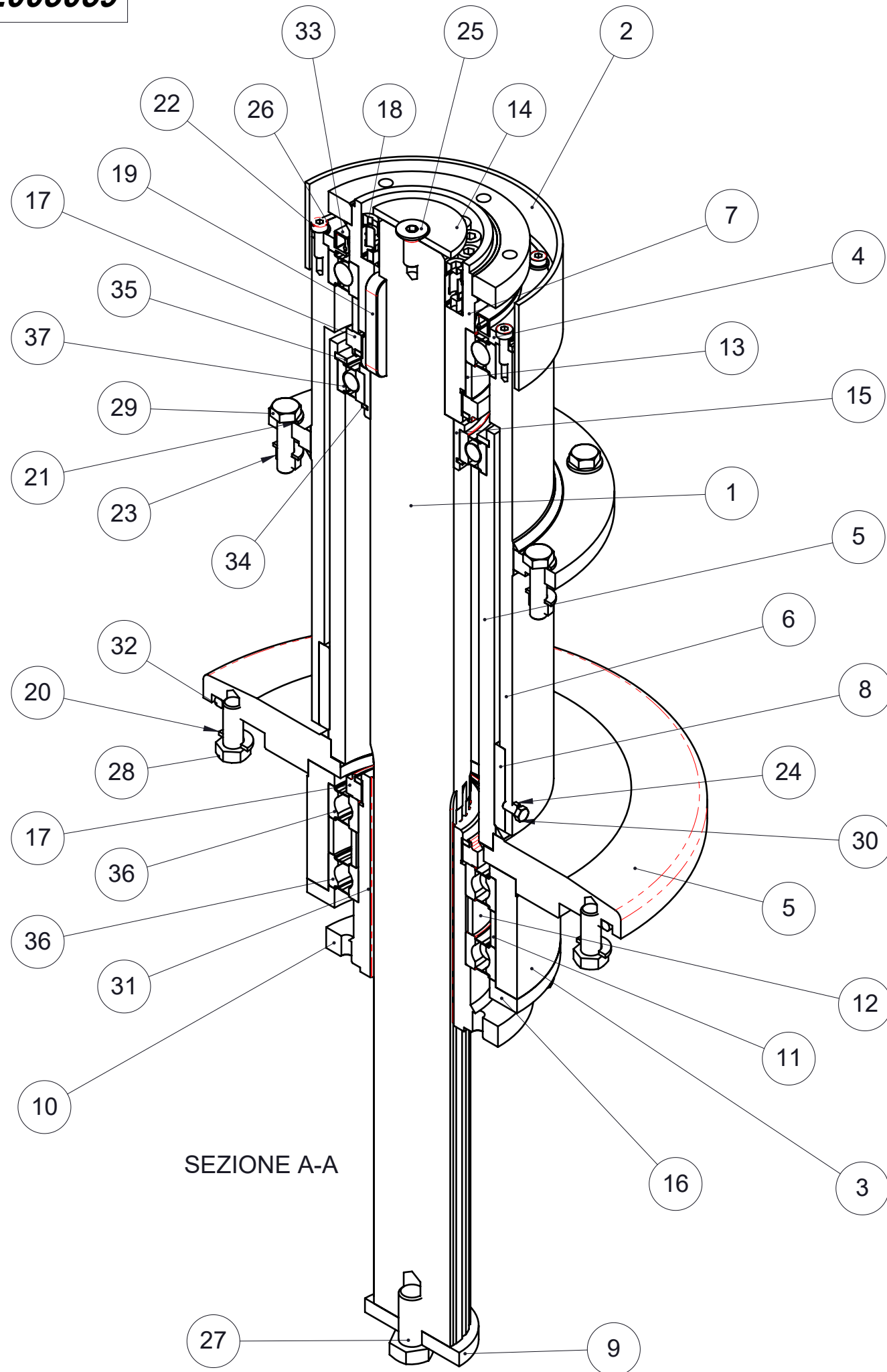


DETTAGLIO F
SCALA 1 : 6



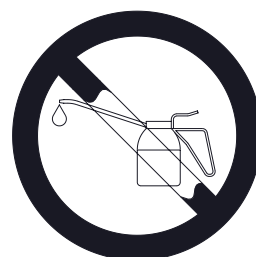
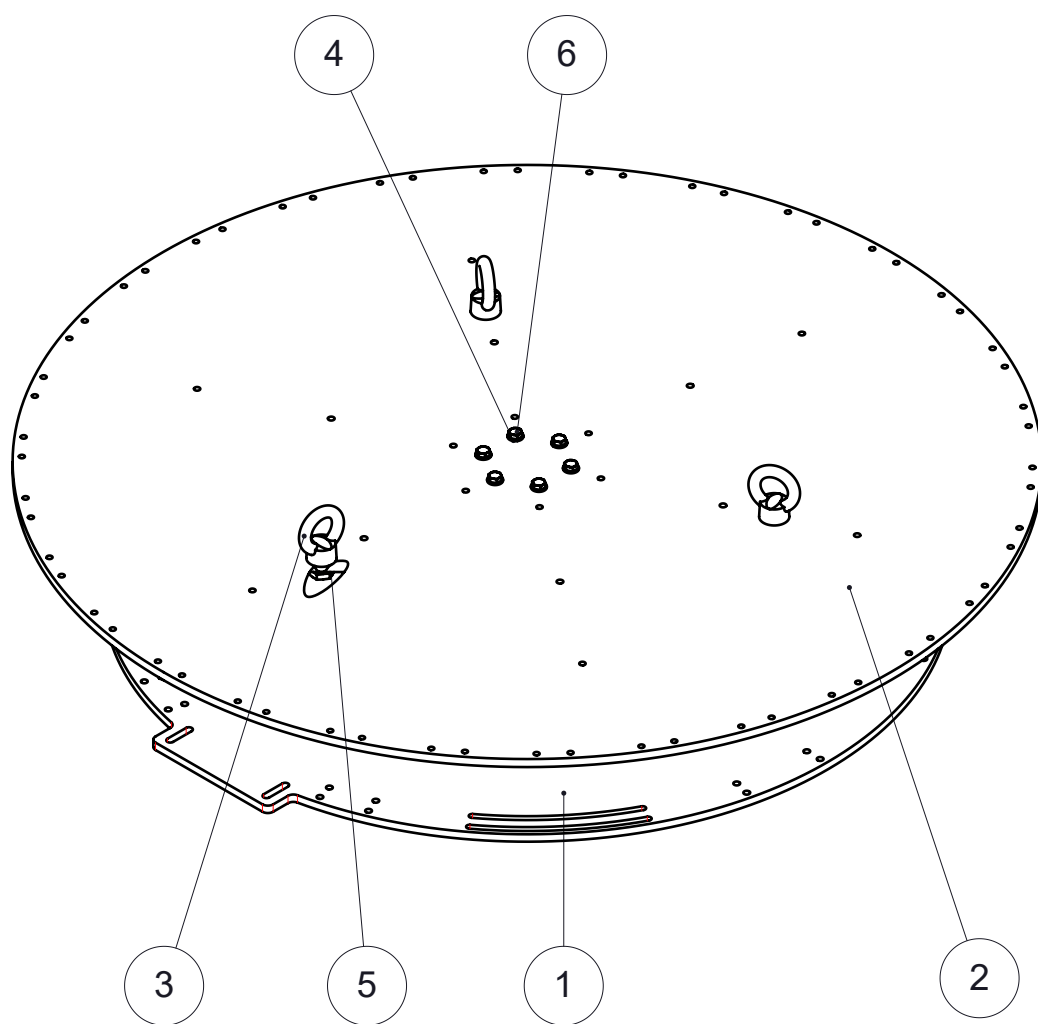
COLONNA / COLUMN / COLONNE / SAEULE / COLUMNA

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01002005308	ALBERO / SHAFT / ARBRE / WELLE / EJE	NR	1
2	P01002005307	CARTER / GUARD / CARTER / CARTER / CARTER	NR	1
3	P01002005306	MOZZO / HUB / MOYEU / NABE / CUBO	NR	1
4	P01002005303	FLANGIA / FLANGE / BRIDE / FLANSCH / BRIDA	NR	1
5	P01002005299	COLONNA / COLUMN / COLONNE / SAEULE / COLUMNA	NR	1
6	P01002005298	CANNOTTO / CENTERING G. / CENTRAGE G. / HUELSE / BOTE	NR	1
7	P01002005297	MOZZO / HUB / MOYEU / NABE / CUBO	NR	1
8	P01002005132	BOCCOLA / BUSHING / DOUILLE / BUCHSE / CASQUILLO	NR	1
9	P01002001748	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	1
10	P01002001746	MOZZO / HUB / MOYEU / NABE / CUBO	NR	1
11	P01002001742	DISTANZIARE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	1
12	P01002001741	DISTANZIARE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	1
13	P01002001729	DISTANZIARE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	1
14	P01002001439	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	1
15	P01002001082	BOCCOLA / BUSHING / DOUILLE / BUCHSE / CASQUILLO	NR	1
16	P01002001079	FLANGIA / FLANGE / BRIDE / FLANSCH / BRIDA	NR	1
17	13232117	GHIERA / LOCK RING / COLLIER DE SER. / NUTMUT. / ABRAZAD.	NR	2
18	13225016	CALETTATORE / TAPER BUSH / BAGUE CONIQ. / SPANN. / ENSAMB.	NR	1
19	13200145	LINGUETTA / TAB / LANGUETTE / KEIL / LENGUILLA	NR	1
20	12720007	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	8
21	12720006	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	12
22	12720004	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	6
23	12711008	DADO / NUT / ECROU / MUTTER / TUERCA	NR	6
24	12711005	DADO / NUT / ECROU / MUTTER / TUERCA	NR	1
25	12703101	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
26	12701054	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6
27	12700322	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
28	12700286	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	8
29	12700268	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6
30	12700201	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
31	12700063	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6
32	12601460	ANELLO / RING / BAGUE / RING / ANILLO	NR	1
33	12515391	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1
34	11604080	SEEGER / RETAIN.RING / ANEAU RETENUE / HALTERING / SEEGER	NR	1
35	11601125	SEEGER / RETAIN.RING / ANEAU RETENUE / HALTERING / SEEGER	NR	1
36	11108118	CUSCINETTO / BEARING / PALIER / LAGER / COJINETE	NR	3
37	11108116	CUSCINETTO / BEARING / PALIER / LAGER / COJINETE	NR	1



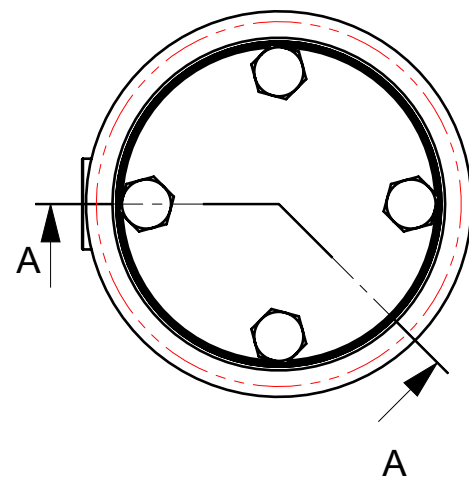
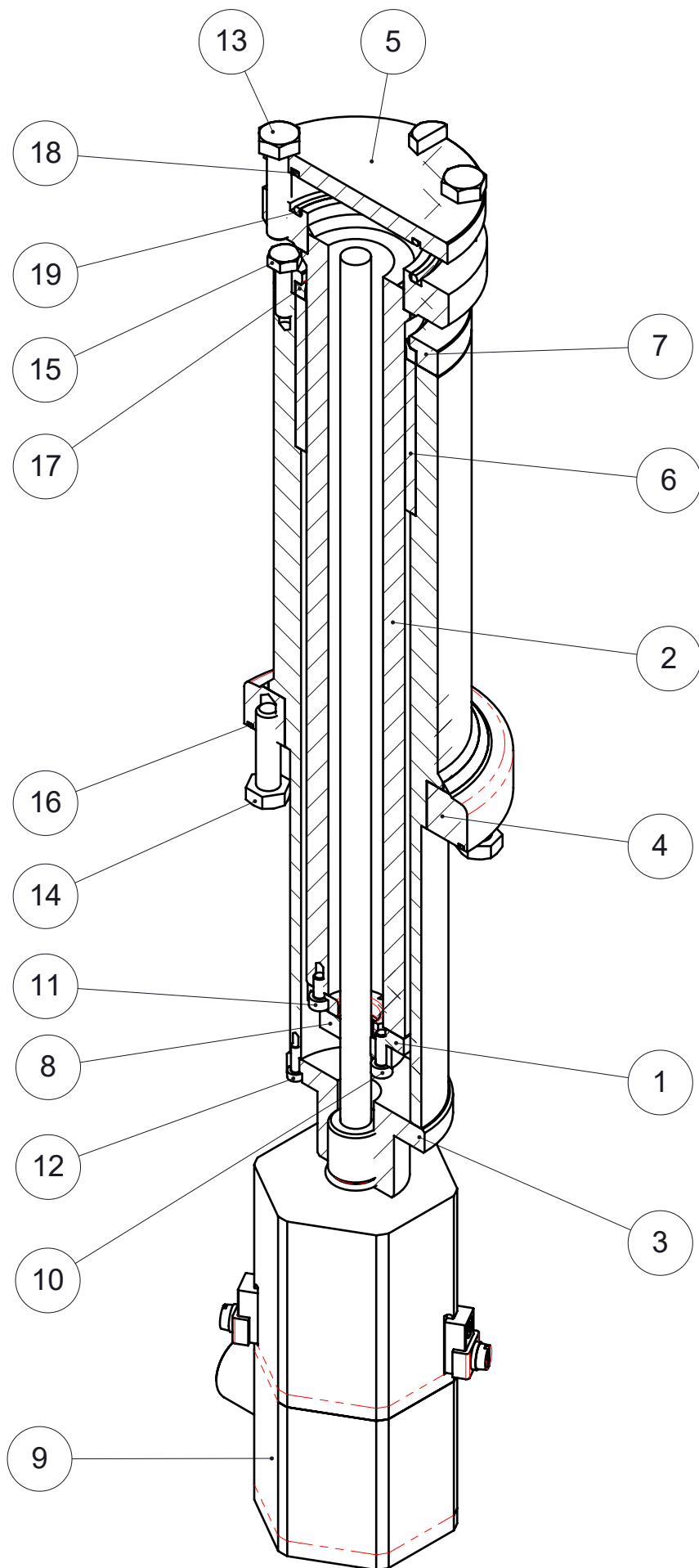
GIOSTRA / CAROUSEL / CARROUSEL / KARUSSEL / CARRUSEL

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01003007599	DISCO / DISK / DISQUE / SCHEIBE / DISCO	NR	1
2	P01003007598	GIOSTRA / CAROUSEL / CARROUSEL / KARUSSEL / CARRUSEL	NR	1
3	12951005	GOLFARE / LIFTING HOOK / CROCHET SOUL. / HUBHAK. / ARGOLLA	NR	3
4	12720006	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	6
5	12712013	DADO / NUT / ECROU / MUTTER / TUERCA	NR	3
6	12700266	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6

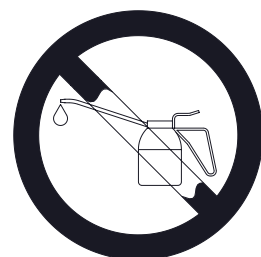


GIOSTRA / CAROUSEL / CARROUSEL / KARUSSEL / CARRUSEL

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01003007607	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	1
2	P01003007606	CANNOTTO / CENTERING G. / CENTRAGE G. / HUELSE / BOTE	NR	1
3	P01003007601	SEDE / SEAT / SIEGE / SITZ / SEDE	NR	1
4	P01003007600	CANNOTTO / CENTERING G. / CENTRAGE G. / HUELSE / BOTE	NR	1
5	P01003007365	COPERCHIO / COVER / COUVERCLE / DECKEL / COBERTURA	NR	1
6	P01003007299	BOCCOLA / BUSHING / DOUILLE / BUCHSE / CASQUILLO	NR	1
7	P01003007048	FLANGIA / FLANGE / BRIDE / FLANSCH / BRIDA	NR	1
8	18318150	CURSORE / SLIDER / CURSEUR / LAEUFER / CURSOR	NR	1
9	18318100	CURSORE / SLIDER / CURSEUR / LAEUFER / CURSOR	NR	1
10	12701017	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
11	12701015	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
12	12701003	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
13	12700246	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
14	12700245	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
15	12700221	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
16	12601018	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1
17	12516011	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1
18	12501302	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1
19	12501078	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1

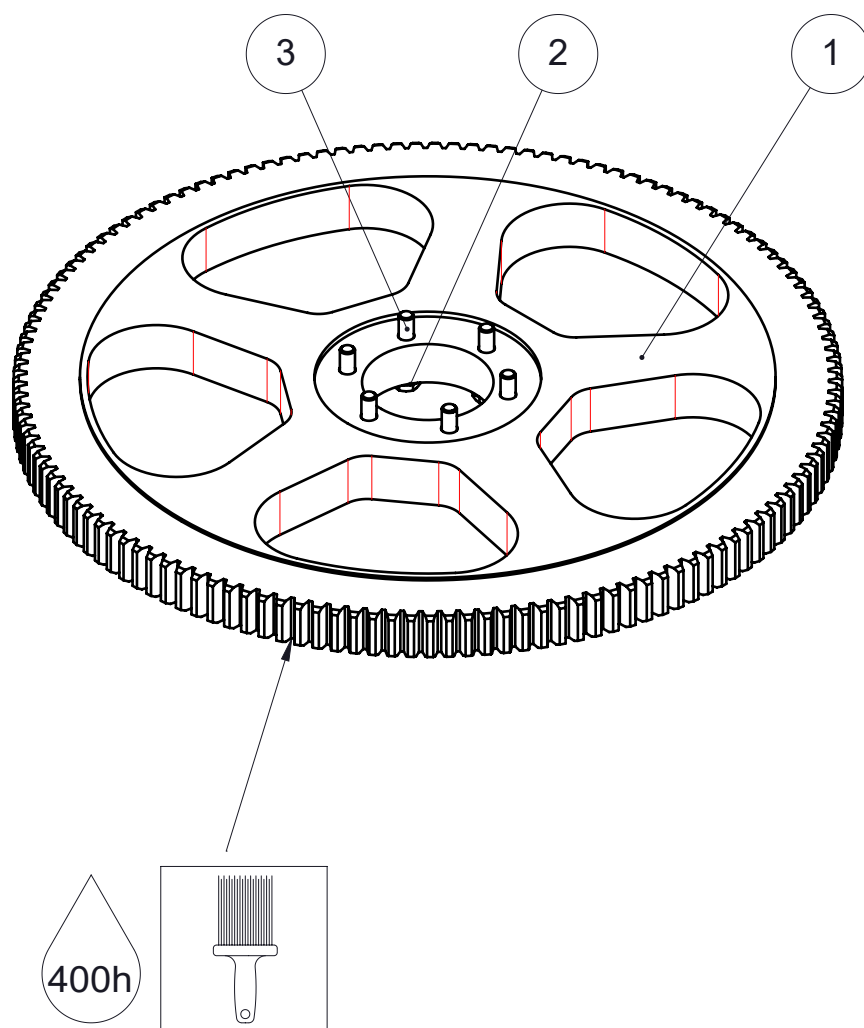


SEZIONE A-A



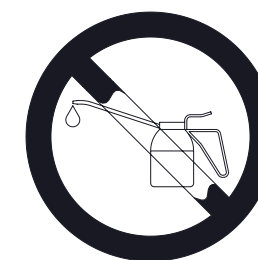
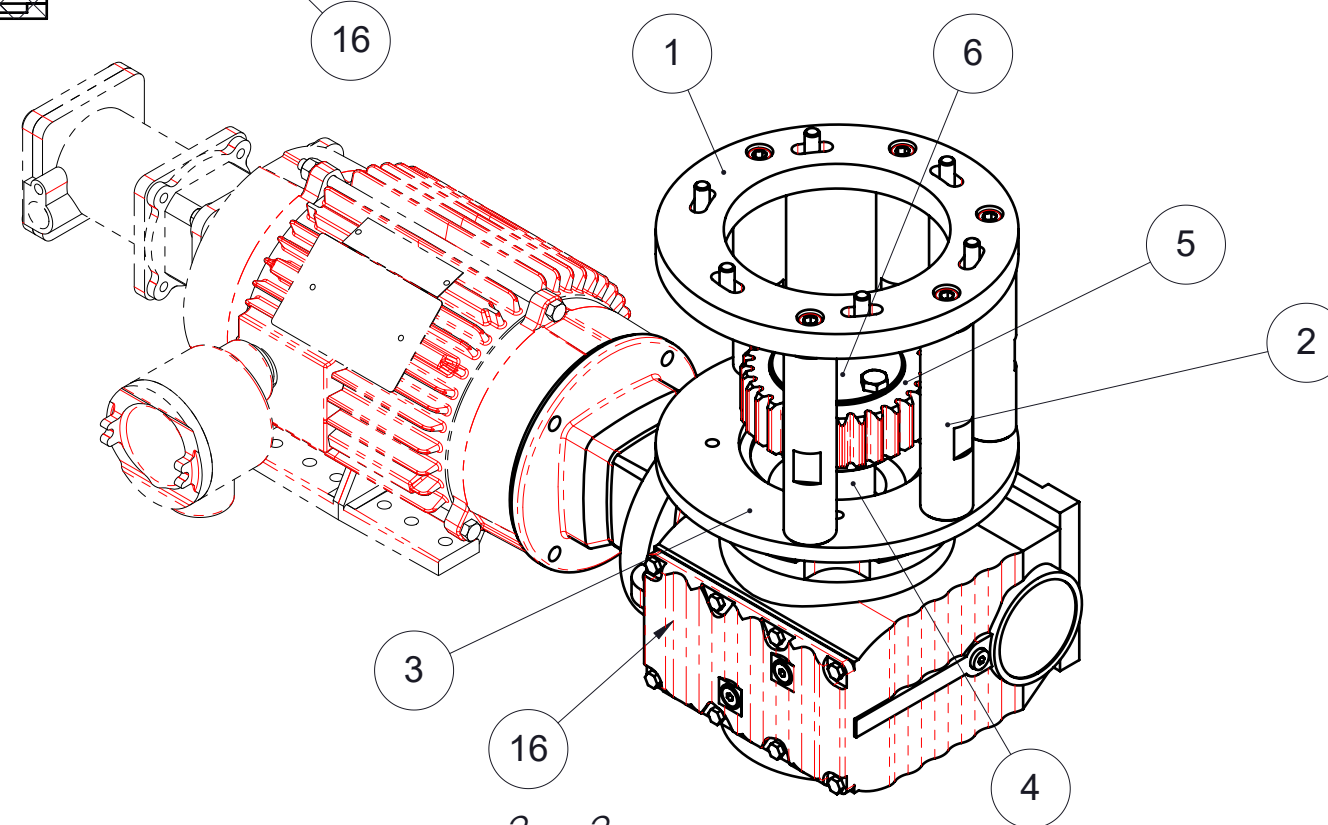
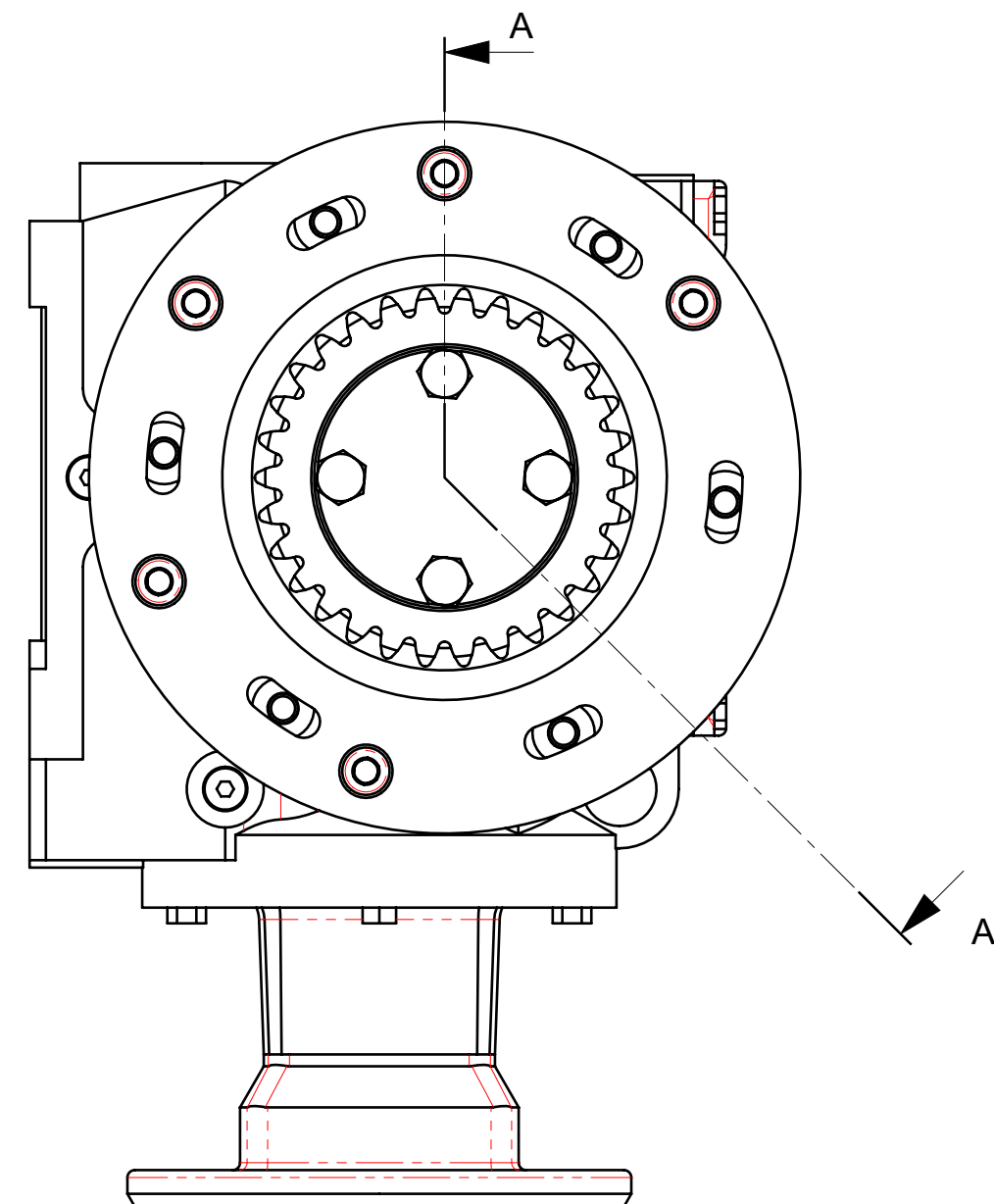
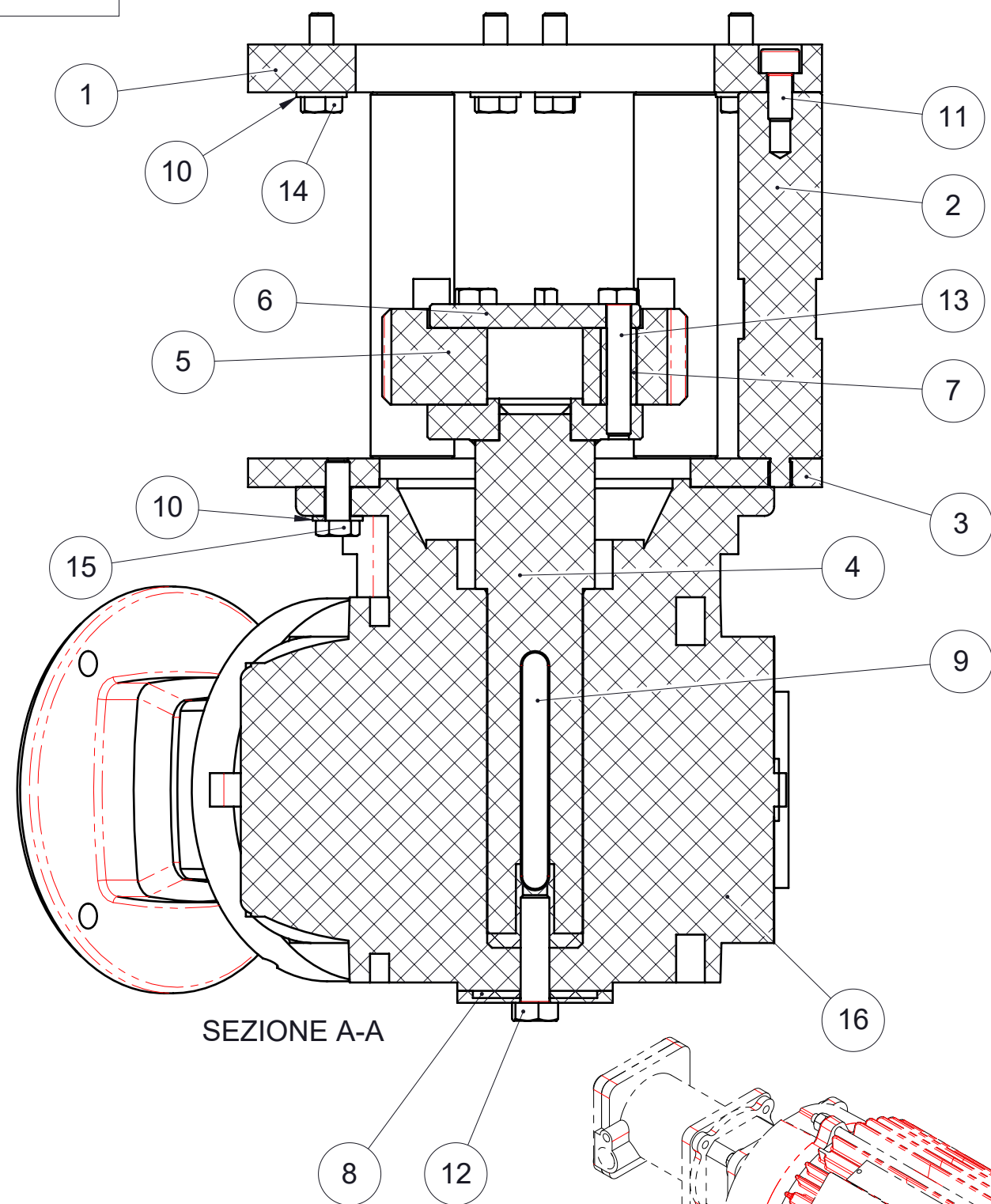
INGRANAGGIO / GEAR / ENGRENAGE / ZAHNRAD / ENGRANAJE

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01003007608	RUOTA D. / TOOTHED WHEEL / ROUE DENT. / ZAHNROL. / R.DENT.	NR	1
2	12720006	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	6
3	12700270	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6



MOTORIZZAZ. / MOTORIZ. / MOTORISAT. / MOTORIS. / MOTORIZ.

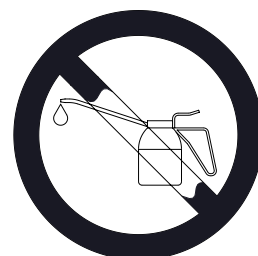
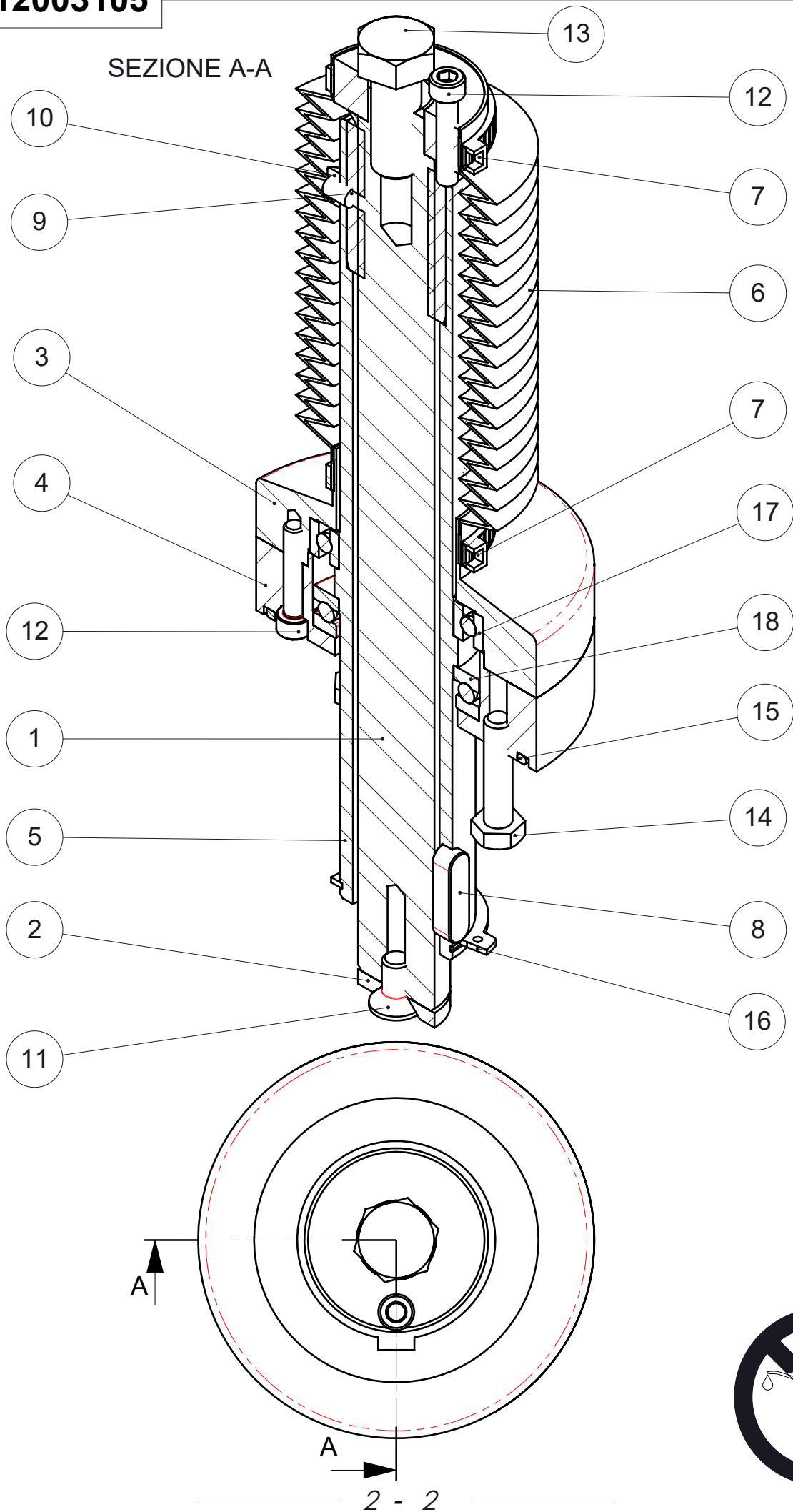
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1	P01004007182	FLANGIA / FLANGE / BRIDE / FLANSCH / BRIDA	NR	1
2	P01004007181	COLONNETTA / STUD / GOIJON / STIFTBOLZEN / COLUMNILLA	NR	5
3	P01004007180	FLANGIA / FLANGE / BRIDE / FLANSCH / BRIDA	NR	1
4	P01004007179	ALBERO / SHAFT / ARBRE / WELLE / EJE	NR	1
5	P01004007178	RUOTA D. / TOOTHED WHEEL / ROUE DENT. / ZAHNROL. / R.DENT.	NR	1
6	P01004007006	FLANGIA / FLANGE / BRIDE / FLANSCH / BRIDA	NR	1
7	P01004001004	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	4
8	P01002001490	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	1
9	13200109	LINGUETTA / TAB / LANGUETTE / KEIL / LENGUILLA	NR	1
10	12720006	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	10
11	12701099	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	5
12	12700289	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
13	12700271	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
14	12700267	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6
15	12700265	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
16	10350201	RIDUTTORE / REDUCER / REDUCT.R / UNTERSETZUNGSG. / REDUCT.	NR	1



REGISTRO / ADJUSTEMENT / REGULATEUR / REGLER / REGULADOR

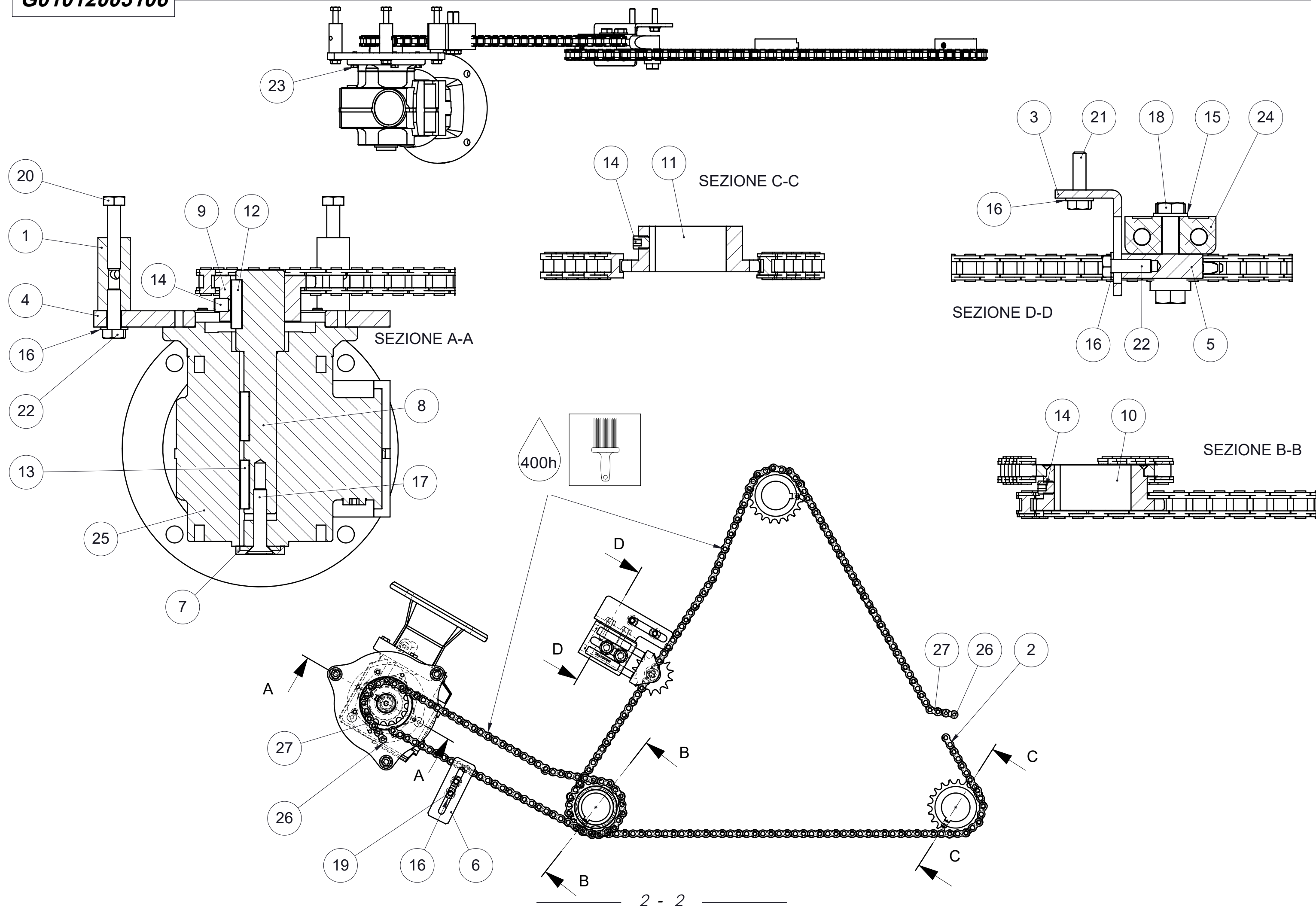
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1	P01012007119	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
2	P01012007118	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	1
3	P01012007082	COPERCHIO / COVER / COUVERCLE / DECKEL / COBERTURA	NR	1
4	P01012007028	MOZZO / HUB / MOYEU / NABE / CUBO	NR	1
5	P01012001716	ALBERO / SHAFT / ARBRE / WELLE / EJE	NR	1
6	19700001	SOFFIETTO / BELLOWS / PROTECTION / BALG / CAPOTA	NR	1
7	13217015	FASCETTA / CLIP / ATTACHE / SCHELLE / FAJA	NR	2
8	13200062	LINGUETTA / TAB / LANGUETTE / KEIL / LENGUILLA	NR	1
9	12731040	GRANO / GRUB SCREW / VIS S.TETE / DUEBEL / TORNIL.S.CABEZA	NR	2
10	12711006	DADO / NUT / ECROU / MUTTER / TUERCA	NR	2
11	12703076	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
12	12701057	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
13	12700305	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
14	12700246	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	3
15	12501345	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1
16	11600045	SEEGER / RETAIN.RING / ANEAU RETENUE / HALTERING / SEEGER	NR	1
17	11143109	CUSCINETTO / BEARING / PALIER / LAGER / COJINETE	NR	1
18	11130009	CUSCINETTO / BEARING / PALIER / LAGER / COJINETE	NR	1

SEZIONE A-A



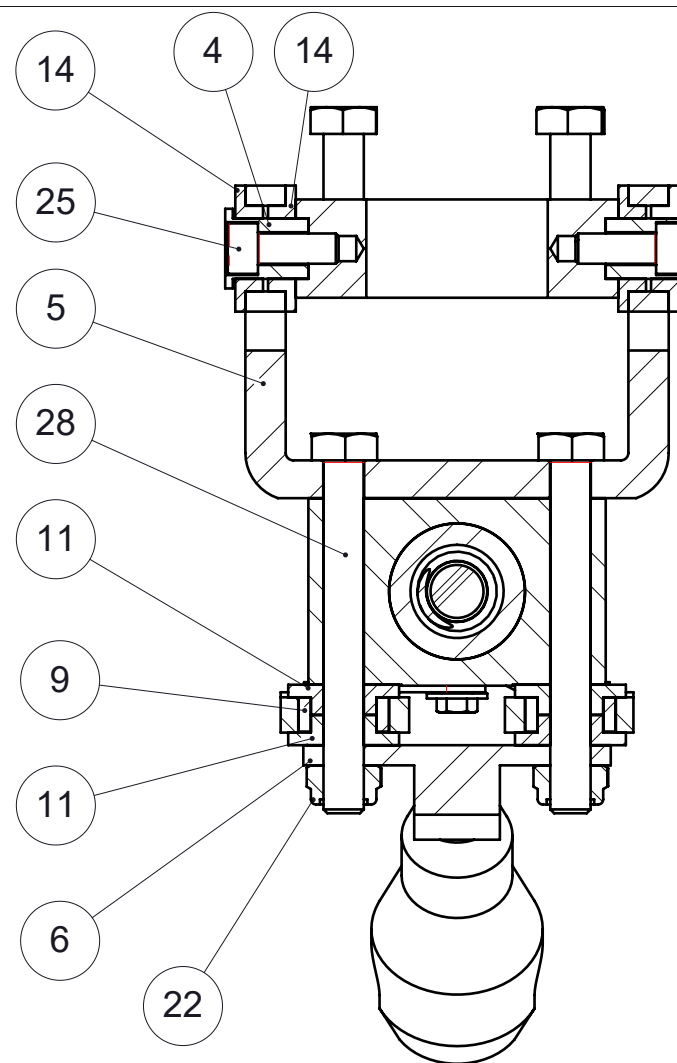
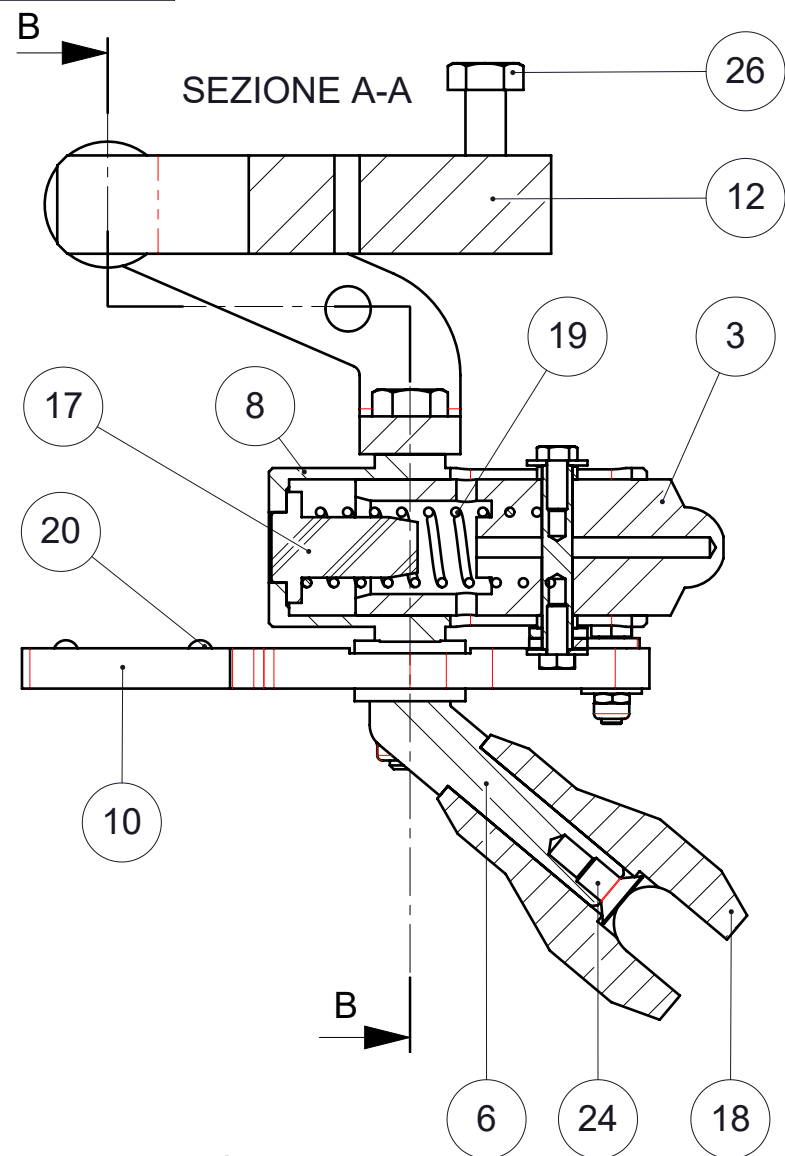
REGISTRO / ADJUSTEMENT / REGULATEUR / REGLER / REGULADOR

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01012007396	COLONNETTA / STUD / GOIJON / STIFTBOLZEN / COLUMNILLA	NR	3
2	P01012007244	CATENA / CHAIN / CHAINE / KETTE / CADENA	m	1
3	P01012007224	ATTACCO / CONNECTION / BRANCHEMENT / ANSCHLUSS / CONEXION	NR	1
4	P01012007223	FLANGIA / FLANGE / BRIDE / FLANSCH / BRIDA	NR	1
5	P01012007168	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	1
6	P01012007146	TENDITORE / TIGHTENER / TENDEUR / SPANNER / TENSOR	NR	1
7	P01012007118	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	1
8	P01012007065	ALBERO / SHAFT / ARBRE / WELLE / EJE	NR	1
9	P01012001038	PIGNONE / PINION GEAR / PIGNON / ZAHNRAD / PINON	NR	1
10	P01012001024	PIGNONE / PINION GEAR / PIGNON / ZAHNRAD / PINON	NR	1
11	P01012001023	PIGNONE / PINION GEAR / PIGNON / ZAHNRAD / PINON	NR	2
12	13200062	LINGUETTA / TAB / LANGUETTE / KEIL / LENGUILLA	NR	1
13	13200046	LINGUETTA / TAB / LANGUETTE / KEIL / LENGUILLA	NR	2
14	12731047	GRANO / GRUB SCREW / VIS S.TETE / DUEBEL / TORNIL.S.CABEZA	NR	4
15	12720006	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	2
16	12720005	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	9
17	12703083	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
18	12700266	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
19	12700251	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
20	12700247	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	3
21	12700245	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
22	12700244	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	5
23	12700221	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
24	10799030	TENDITORE / TIGHTENER / TENDEUR / SPANNER / TENSOR	NR	1
25	10350118	RIDUTTORE / REDUCER / REDUCT.R / UNTERSETZUNGSG. / REDUCT.	NR	1
26	10099040	CATENA / CHAIN / CHAINE / KETTE / CADENA	NR	2
27	10099010	CATENA / CHAIN / CHAINE / KETTE / CADENA	NR	2

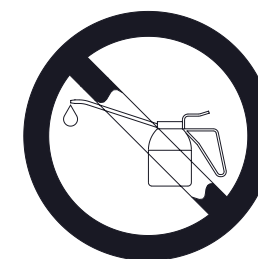
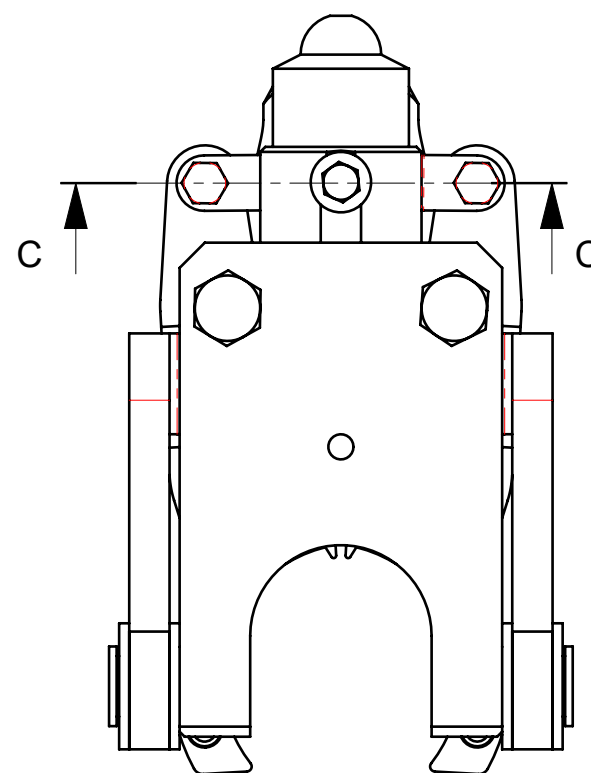
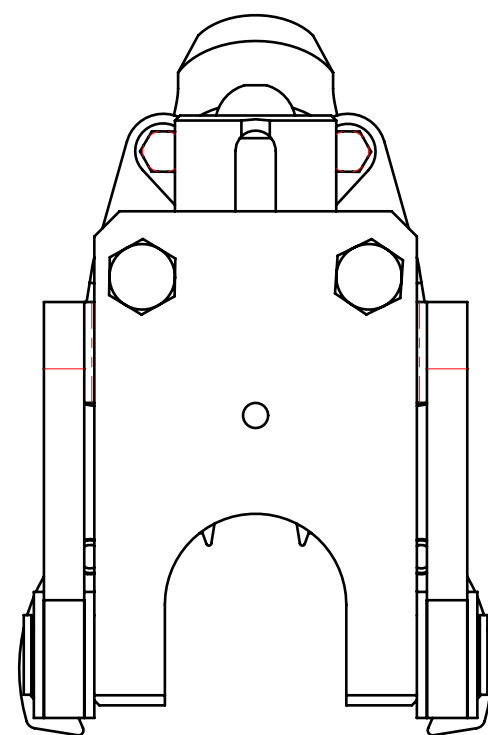
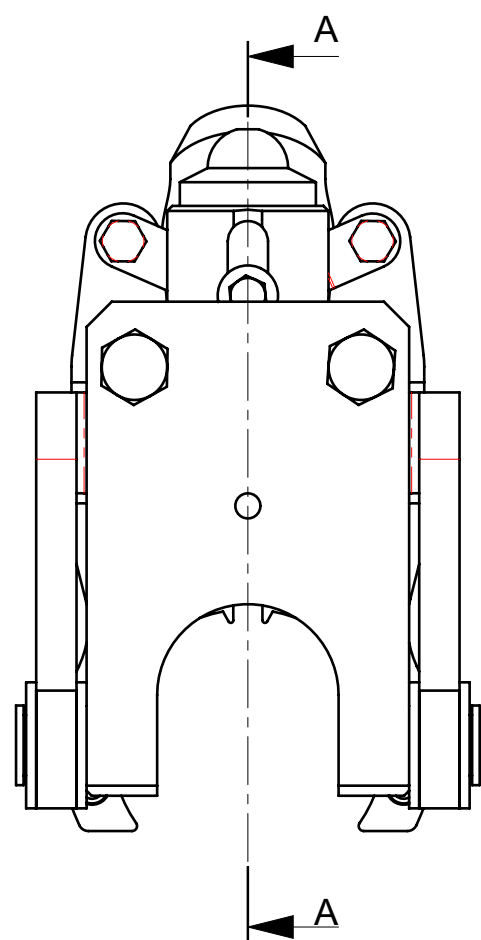
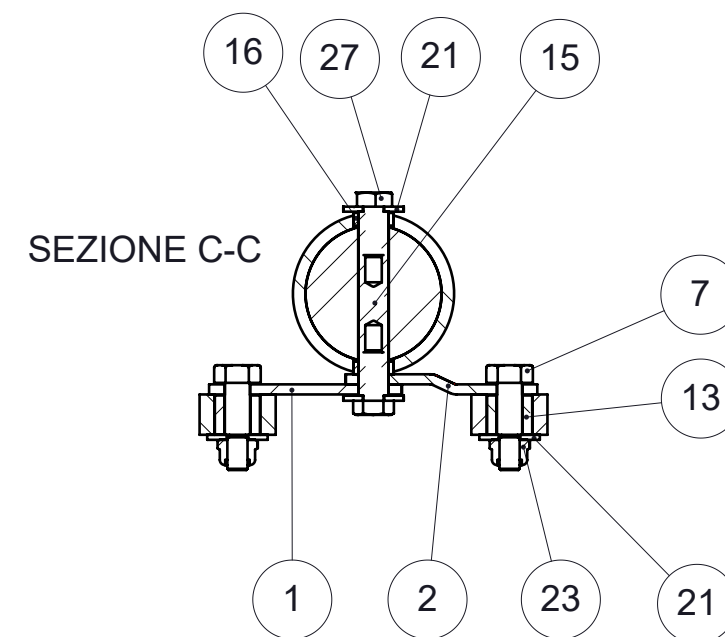
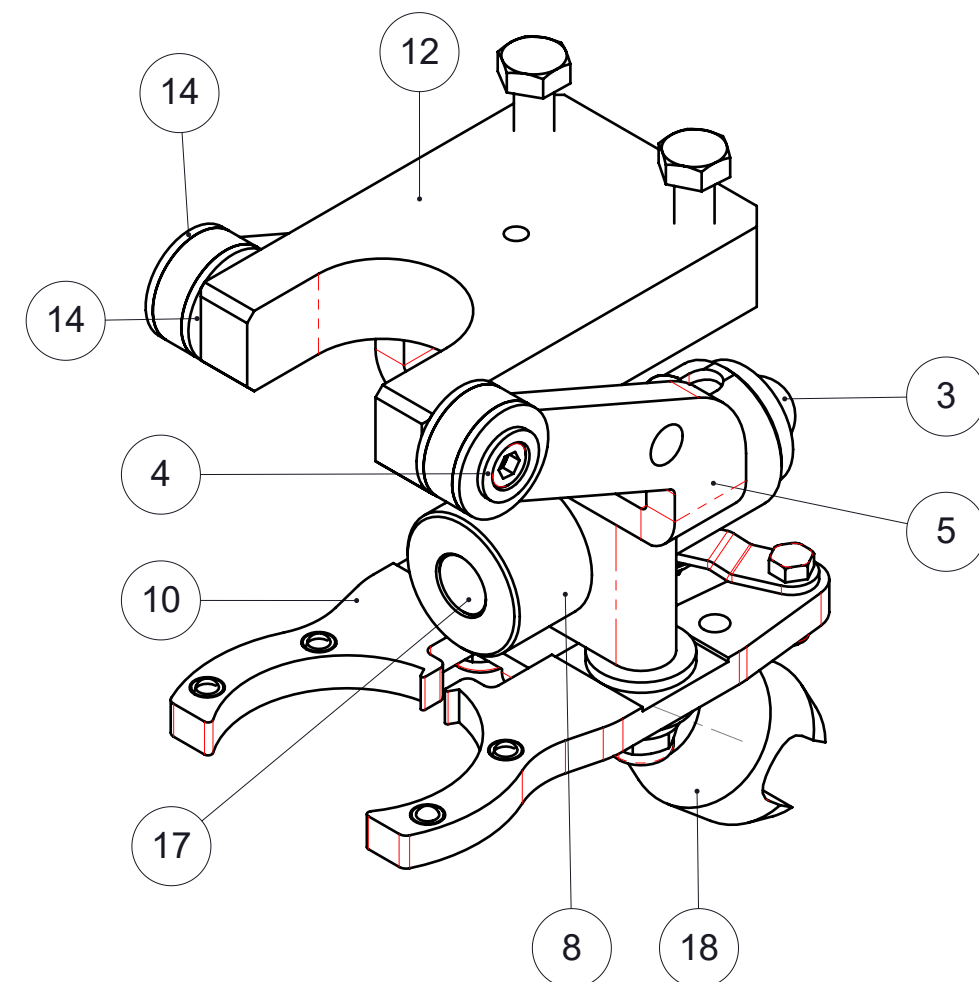


PINZA / GRIPPER / PINCE / ZANGE / PINZA

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01013001425	BIELLA / CONNECTING ROD / BIELLE / PLEUEL / BIELA	NR	1
2	P01013001423	BIELLA / CONNECTING ROD / BIELLE / PLEUEL / BIELA	NR	1
3	P01013001422	CURSORE / SLIDER / CURSEUR / LAEUFER / CURSOR	NR	1
4	P01013001397	PERNO / PIN / PIVOT / ZAPFEN / PERNO	NR	2
5	P01013001373	FORCELLA / FORK / FOURCHE / GABEL / HORQUILLA	NR	1
6	P01013001367	SUPPORTO / SUPPORT / SUPPORT / HALTERUNG / SOPORTE	NR	1
7	P01013001365	PERNO / PIN / PIVOT / ZAPFEN / PERNO	NR	2
8	P01013001356	CORPO / BODY / CORPS / KOERPER / CUERPO	NR	1
9	P01013001354	BOCCOLA / BUSHING / DOUILLE / BUCHSE / CASQUILLO	NR	2
10	P01013001353	SUP.TAMPONE / RUB.PAD SUP. / SUP.TAM. / HALT.PUF / SOP.TAM	NR	1
11	P01013001351	BOCCOLA / BUSHING / DOUILLE / BUCHSE / CASQUILLO	NR	4
12	P01013001347	FORCELLA / FORK / FOURCHE / GABEL / HORQUILLA	NR	1
13	P01013001308	BOCCOLA / BUSHING / DOUILLE / BUCHSE / CASQUILLO	NR	2
14	P01013001304	BOCCOLA / BUSHING / DOUILLE / BUCHSE / CASQUILLO	NR	4
15	P01013001300	PERNO / PIN / PIVOT / ZAPFEN / PERNO	NR	1
16	P01013001140	BOCCOLA / BUSHING / DOUILLE / BUCHSE / CASQUILLO	NR	2
17	P01013001067	CENTRATORE / CENTERING / CENTREUR / ZENTRIERER / CENTRADOR	NR	1
18	P01013001018	FORCELLA / FORK / FOURCHE / GABEL / HORQUILLA	NR	1
19	MO100010	MOLLA / SPRING / RESSORT / FEDER / RESORTE	NR	1
20	15450101	PRESSORE / PUSHER / RENFORT / EINSATZ / PRESOR	NR	4
21	12722006	ROSETTA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	4
22	12716036	DADO / NUT / ECROU / MUTTER / TUERCA	NR	2
23	12716032	DADO / NUT / ECROU / MUTTER / TUERCA	NR	2
24	12703049	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
25	12701052	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
26	12700245	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
27	12700184	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
28	12700038	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2



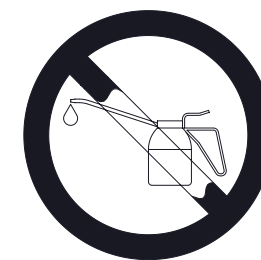
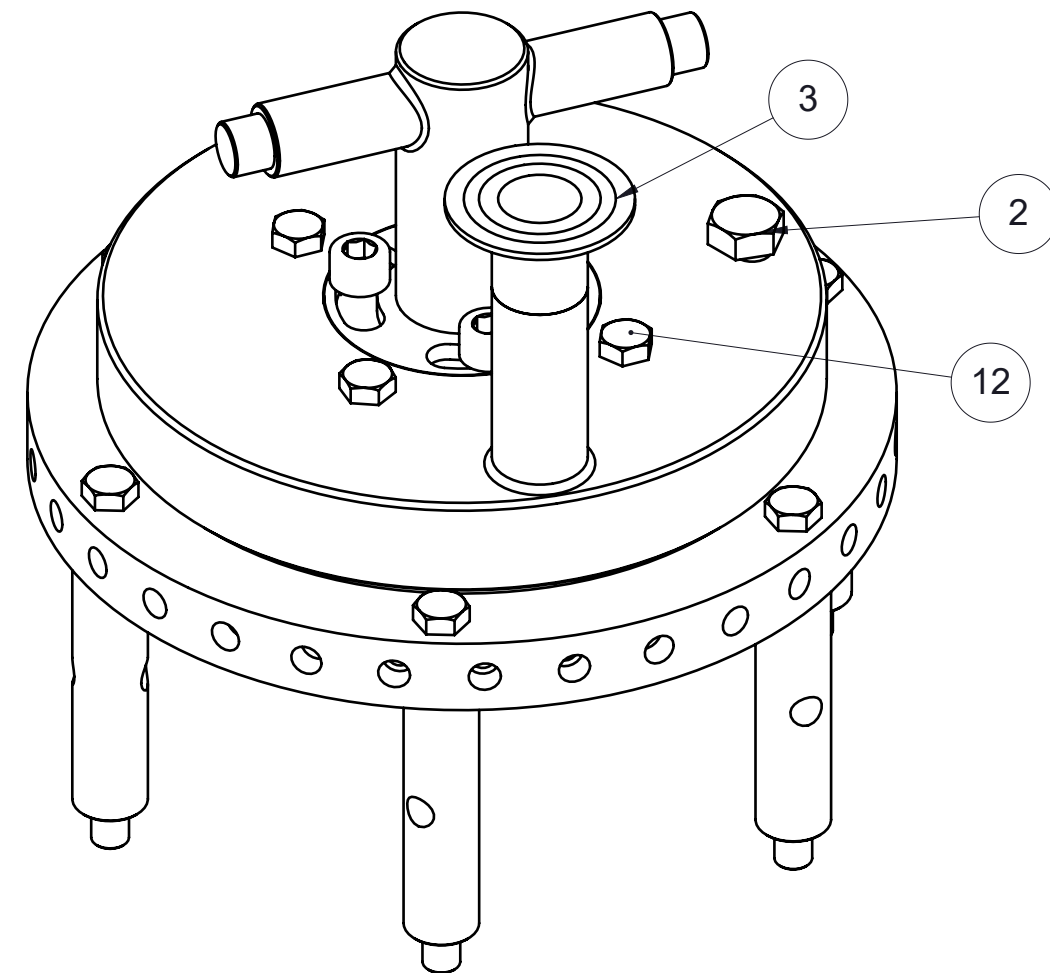
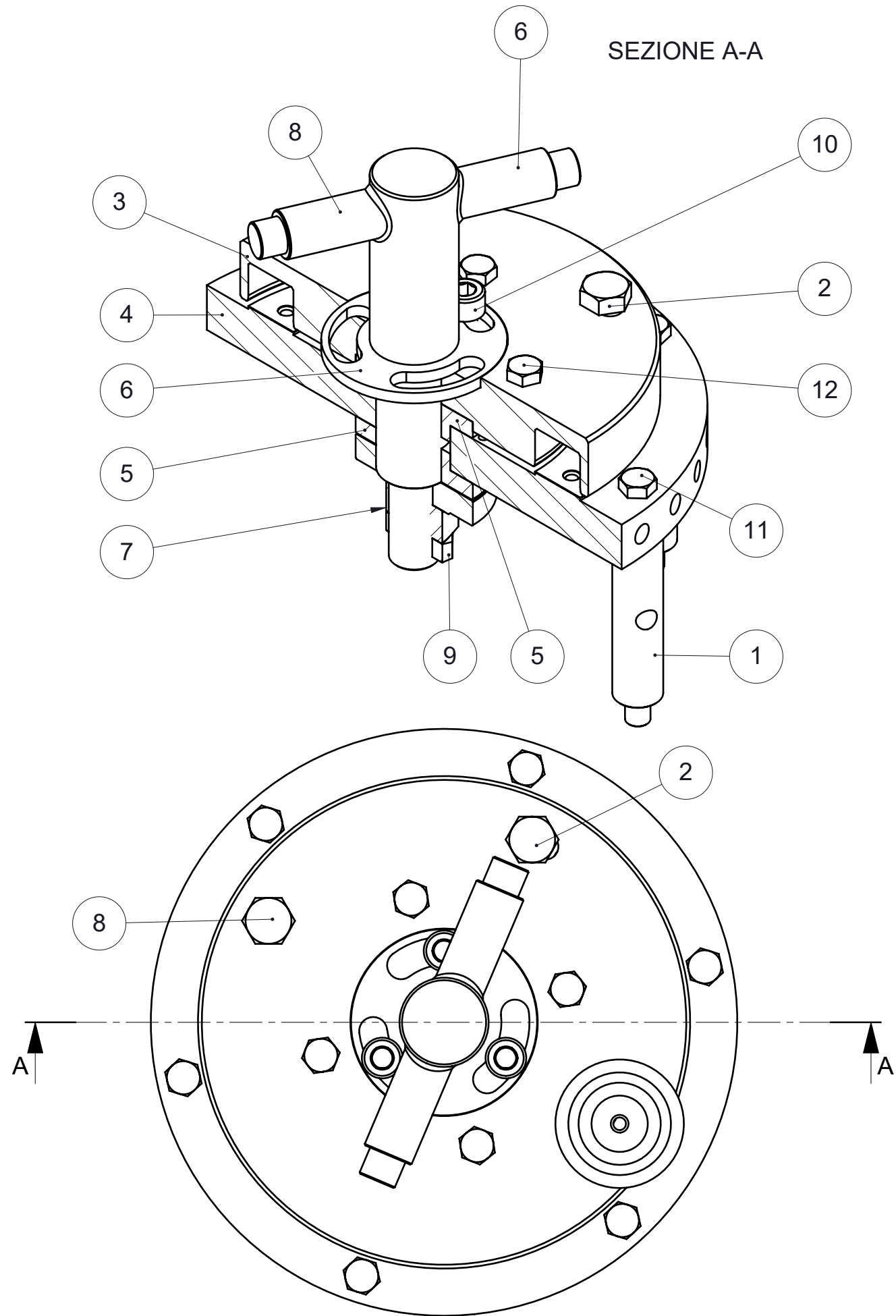
SEZIONE B-B



COLLETTORE / MANIFOLD / DISTRIBUTEUR / KOLLEKT. / COLECTOR

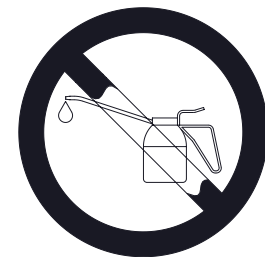
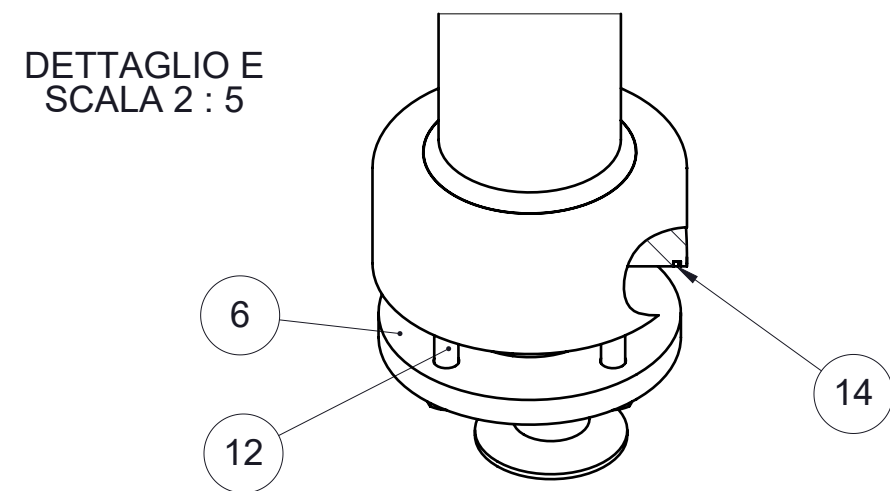
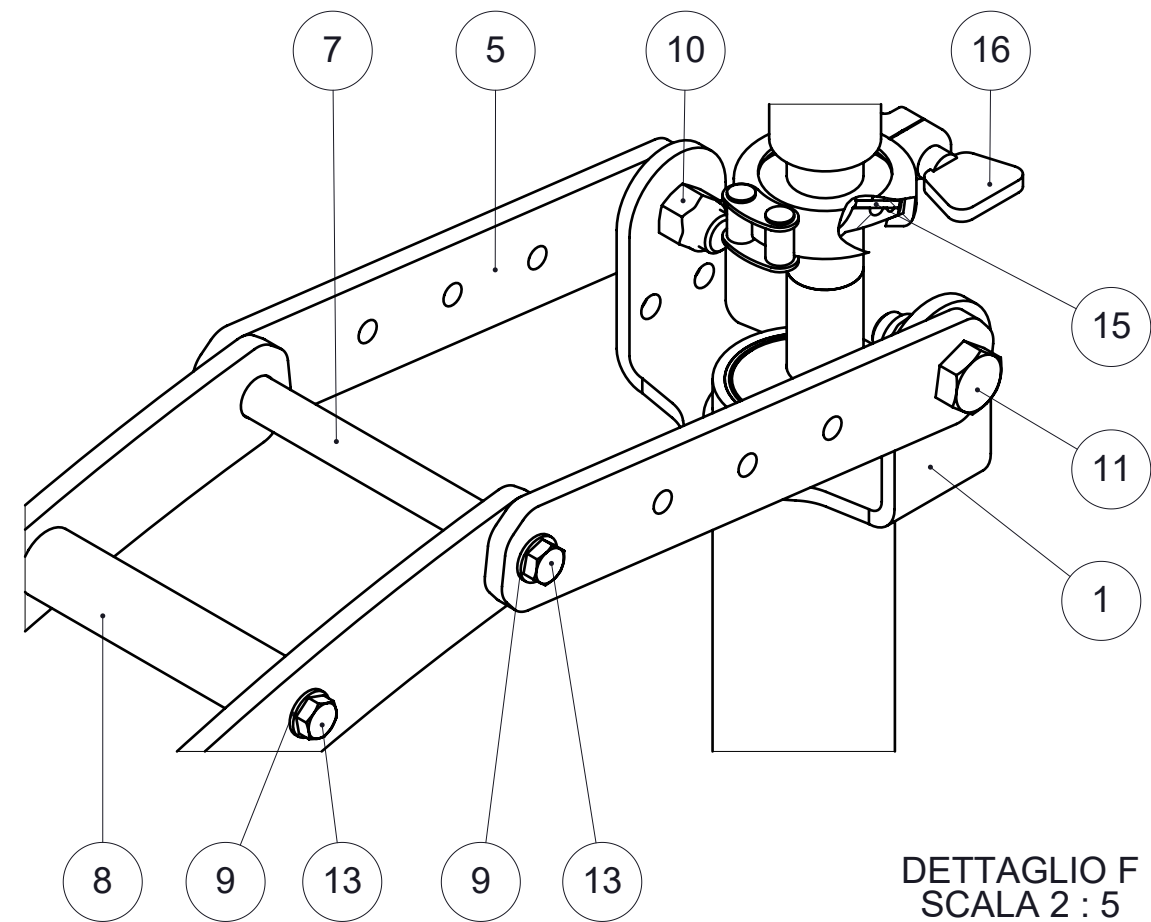
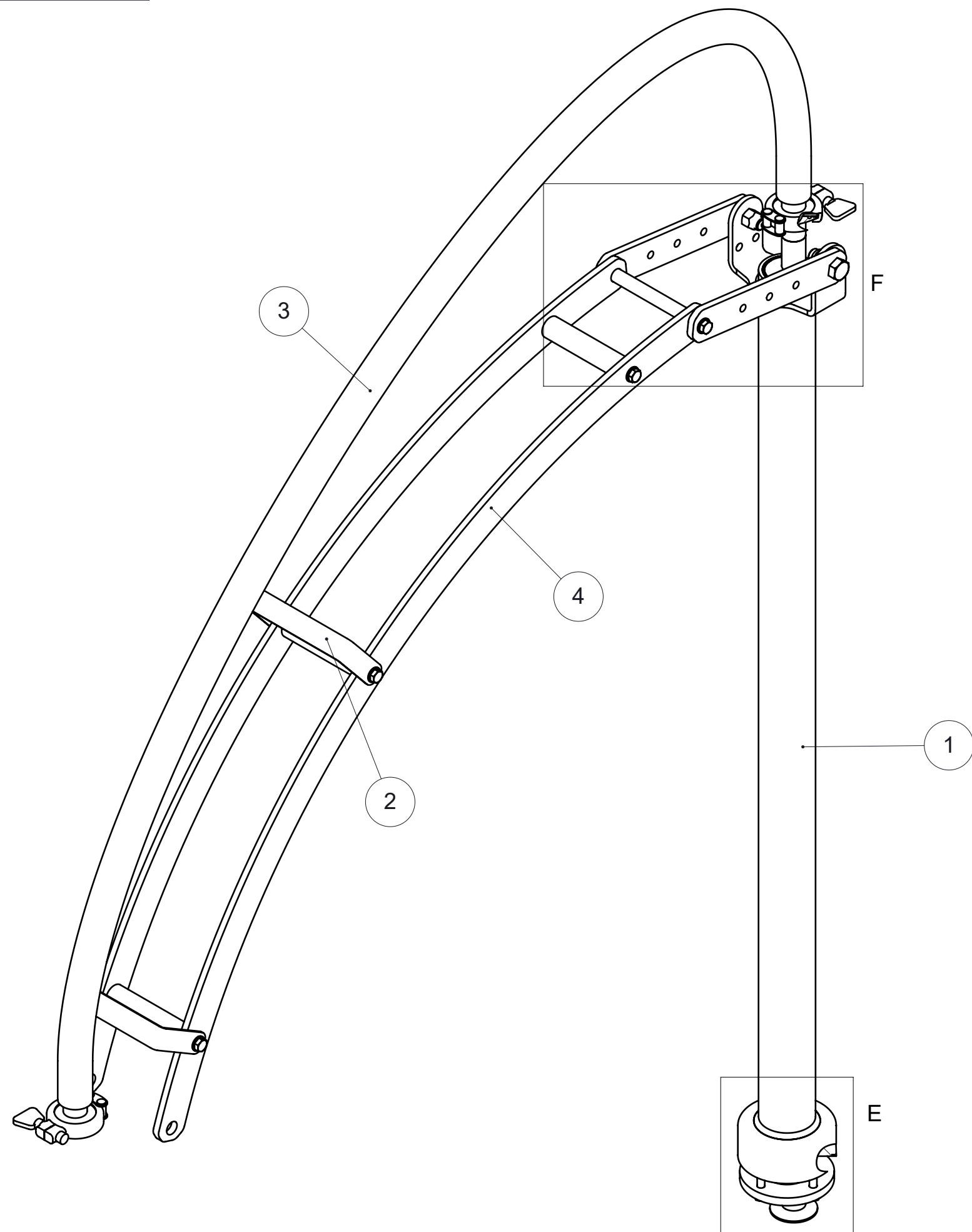
N°	ID	MULTILINGUA	UNIT	Qtà
1	P01017007409	COLONNETTA / STUD / GOIJON / STIFTBOLZEN / COLUMNILLA	NR	6
2	P01017007103	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
3	P01017002228	COLLETTORE / MANIFOLD / DISTRIBUTEUR / KOLLEKT. / COLECTOR	NR	1
4	P01017001706	DISTRIBUT. / DISTRIBUT. / DISTRIBUT. / VERTEIL. / DISTRIB.	kg	1
5	P01017001274	BOCCOLA / BUSHING / DOUILLE / BUCHSE / CASQUILLO	NR	2
6	P01017001015	PERNO / PIN / PIVOT / ZAPFEN / PERNO	NR	1
7	P01017001009	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	1
8	P01017001008	SPINA / PEG / GOUPILLE / STIFT / ENCHUFE	NR	1
9	12712013	DADO / NUT / ECROU / MUTTER / TUERCA	NR	1
10	12701097	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	3
11	12700247	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6
12	12700237	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4

SEZIONE A-A



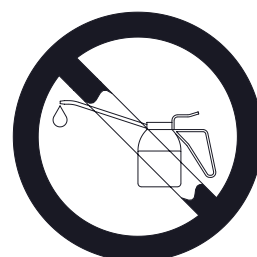
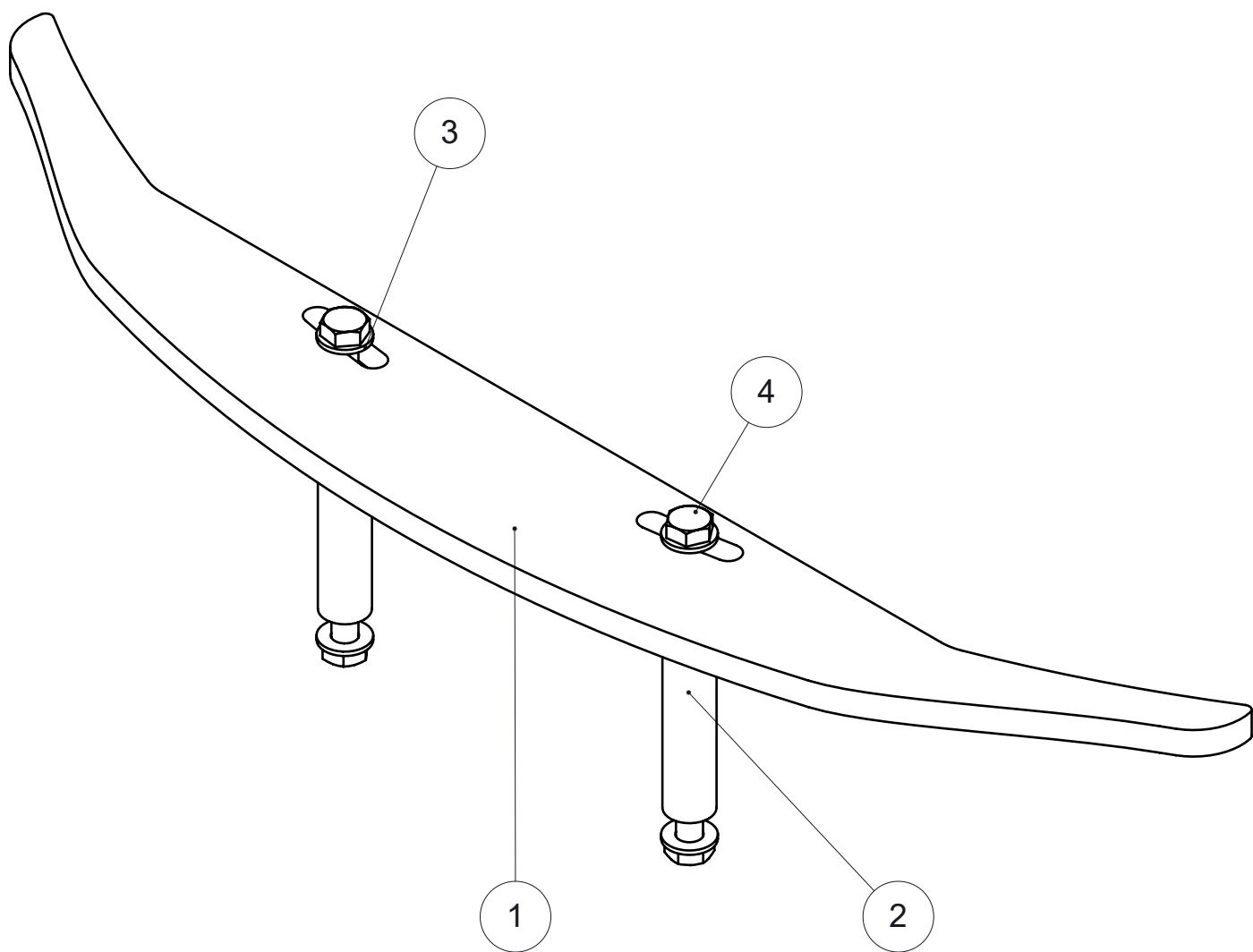
ALIMENTAZ. / FEEDING / ALIMENTATION / ZUFUHR / ALIMENTAC.

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01018005573	COLONNA / COLUMN / COLONNE / SAEULE / COLUMNA	NR	1
2	P01018005459	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	2
3	P01018005458	TUBO / PIPE / TUYAU / ROHR / TUBO	NR	1
4	P01018005182	STAFFA / BRACKET / ATTACHE / BUEGEL / SOPORTE	NR	2
5	P01018001988	BIELLA / CONNECTING ROD / BIELLE / PLEUEL / BIELA	NR	2
6	P01018001284	FLANGIA / FLANGE / BRIDE / FLANSCH / BRIDA	NR	1
7	P01018001005	COLONNETTA / STUD / GOIJON / STIFTBOLZEN / COLUMNILLA	NR	1
8	P01018001004	COLONNETTA / STUD / GOIJON / STIFTBOLZEN / COLUMNILLA	NR	3
9	12720005	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	8
10	12716009	DADO / NUT / ECROU / MUTTER / TUERCA	NR	2
11	12700305	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
12	12700248	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
13	12700244	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	8
14	12601019	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1
15	11911072	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	2
16	11911050	CHIUSURA / ENCLOSURE / FERMETURE / VERSCHLUSS / CIERRE	NR	2



CAMMA / CAM / CAME / NOCKEN / LEVA

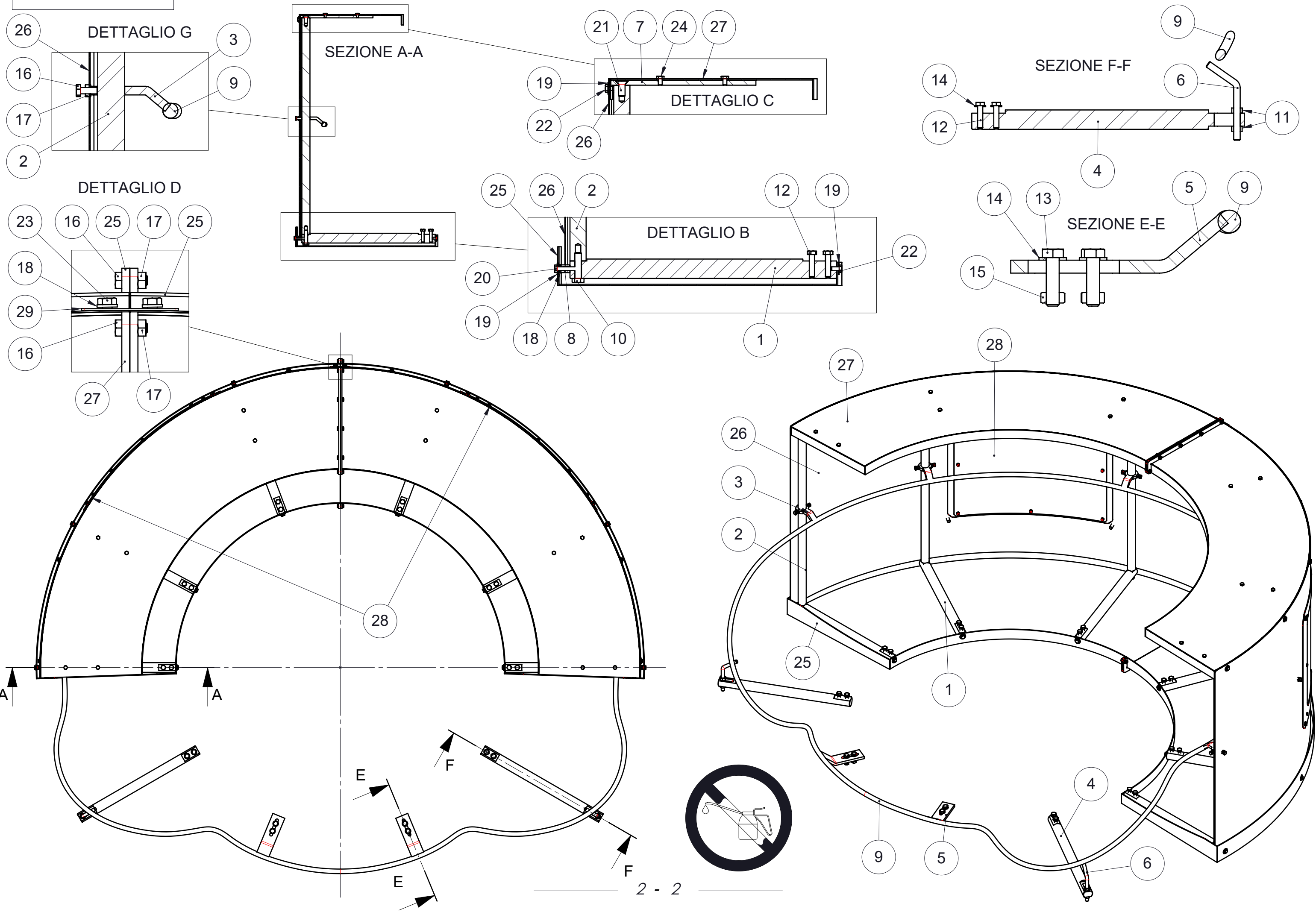
N°	ID	MULTILINGUA	UNIT	Qtà
1	P01019007152	CAMMA / CAM / CAME / NOCKEN / LEVA	NR	1
2	P01019007020	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	2
3	12720006	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	4
4	12700266	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4



SUP.TWIST / TWIST SUP. / SUP.TWIST / HALT.TWIST / S.TWIST

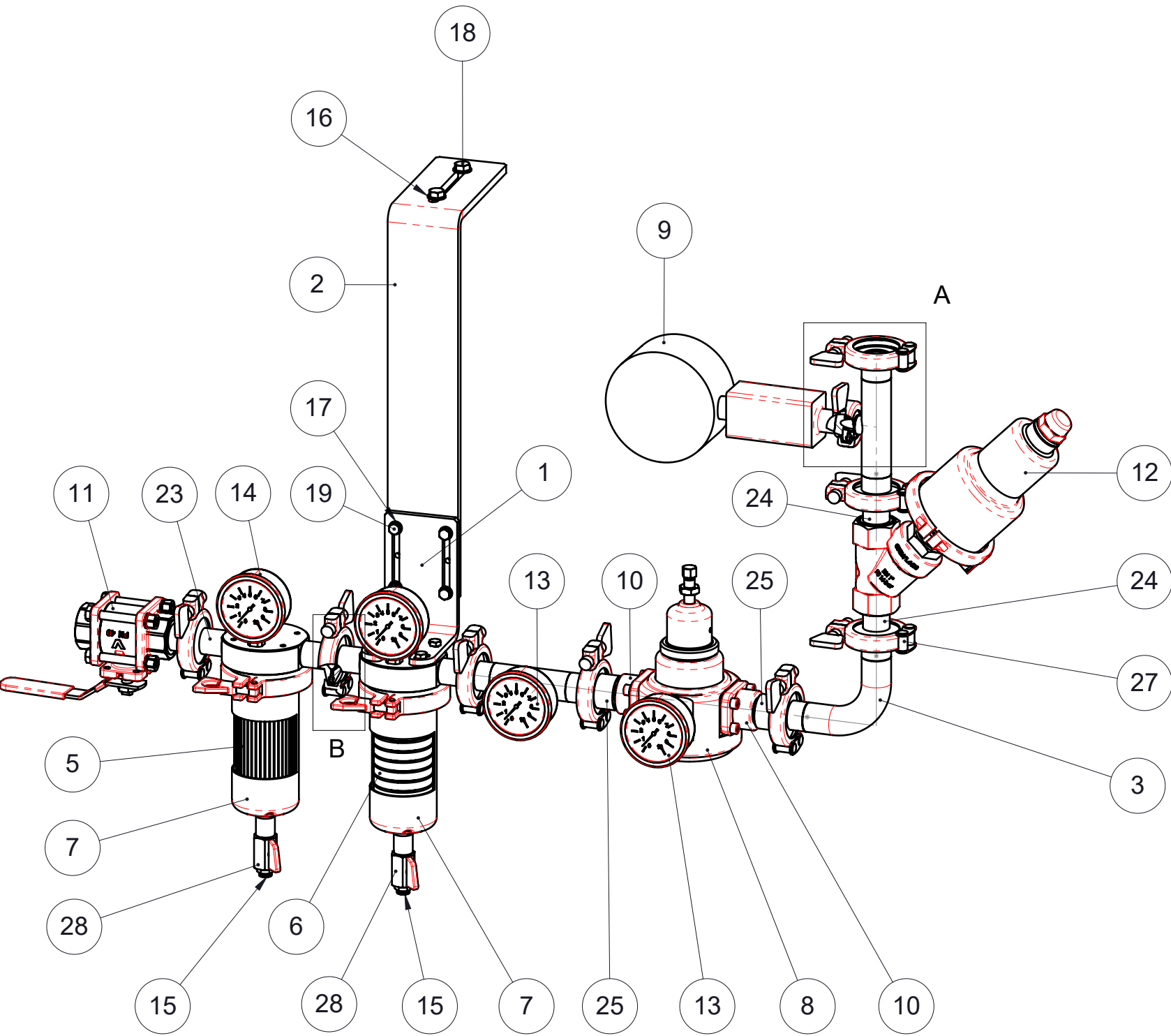
N°	ID	MULTILINGUA	UNIT	Qtà
1	P01020007711	STAFFA / BRACKET / ATTACHE / BUEGEL / SOPORTE	NR	6
2	P01020004405	MONTANTE / VERT.ROD / MONTANT VERT. / STAENDER / MONTANTE	NR	6
3	P01020004345	STAFFA / BRACKET / ATTACHE / BUEGEL / SOPORTE		6
4	P01020004572	STAFFA / BRACKET / ATTACHE / BUEGEL / SOPORTE	NR	2
5	P01020007712	STAFFA / BRACKET / ATTACHE / BUEGEL / SOPORTE	NR	2
6	P01020003065	TERMINALE / TERMINAL / BORNE / ENDSTUECK / TERMINAL	NR	2
7	P01020004065	STAFFA / BRACKET / ATTACHE / BUEGEL / SOPORTE	NR	6
8	P01020004539	DISTANZIARE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	6
9	P01020007710	TWIST / TWIST / TWIST / TWIST / TWIST	NR	1
10	12700268	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6
11	12711008	DADO / NUT / ECROU / MUTTER / TUERCA	NR	4
12	12700246	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	16
13	12700245	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
14	12720005	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	8
15	12711007	DADO / NUT / ECROU / MUTTER / TUERCA	NR	4
16	12700219	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	30
17	12711006	DADO / NUT / ECROU / MUTTER / TUERCA	NR	40
18	12720004	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	24
19	12722017	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	22
20	12700224	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6
21	12703101	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6
22	12700217	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	16
23	12700221	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	18
24	12700216	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	12
25	P01020007713	CARTER / GUARD / CARTER / CARTER / CARTER	NR	1
26	P01020007714	CARTER / GUARD / CARTER / CARTER / CARTER	NR	1
27	P01020007715	CARTER / GUARD / CARTER / CARTER / CARTER	NR	1
28	P01020007716	PANNELLO / PANEL / PANNEAU / TAFEL / PANEL	NR	2
29	P01020004700	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	1

G01020003139

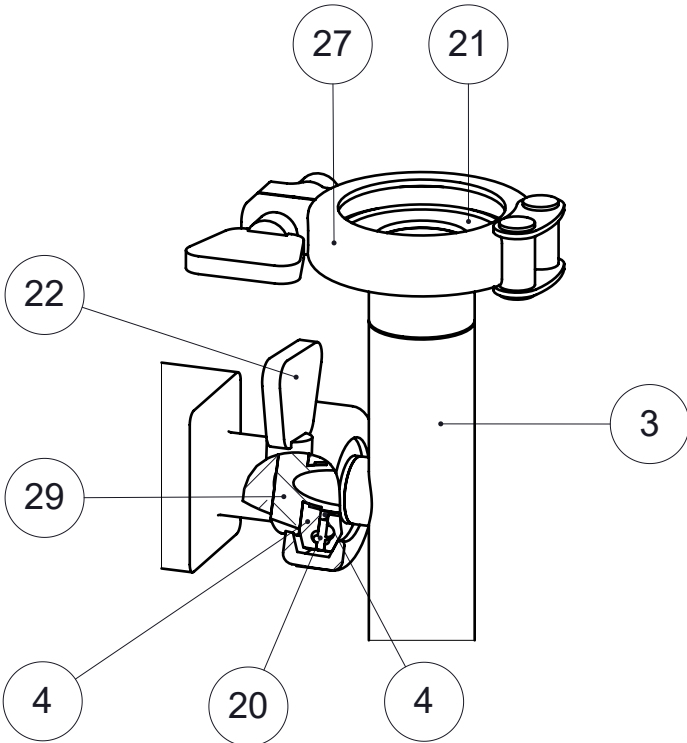


GRUPPO / GROUP / GROUPE / GRUPPE / GRUPO

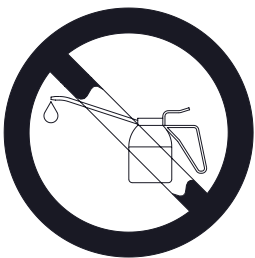
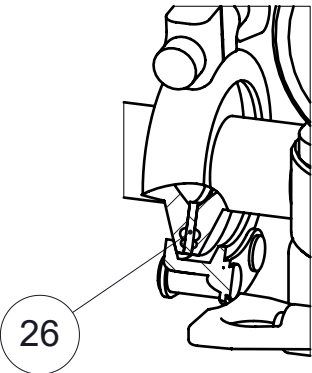
N°	ID	MULTILINGUA	UNIT	Qtà
1	P01026005028	SUPPORTO / SUPPORT / SUPPORT / HALTERUNG / SOPORTE	NR	1
2	P01026005027	STAFFA / BRACKET / ATTACHE / BUEGEL / SOPORTE	NR	1
3	P01026005026	TUBO / PIPE / TUYAU / ROHR / TUBO	NR	1
4	P01018005345	TAPPO / PLUG / BOUCHON / STOPFEN / TAPA	NR	1
5	19910500	CARTUCCIA / CARTRIDGE / CARTOUCHE / FILTEREINS. / CARTUCHO	NR	1
6	19910073	CARTUCCIA / CARTRIDGE / CARTOUCHE / FILTEREINS. / CARTUCHO	NR	1
7	19900521	CONTENITORE / HOUSING / CONTENEUR / BEHAELTER / ENVASE	NR	2
8	15144058	RIDUTTORE / REDUCER / REDUCT.R / UNTERSETZUNGSG. / REDUCT.	NR	1
9	15144057	PRESSOST. / PRE.SWITCH / PRESSOS. / DRUCKWAECH. / PRESOST.	NR	1
10	15144055	RACCORDO / UNION / RACCORD / VERBINDUNGSSTUECK / ENLACE	NR	1
11	15144032	VALVOLA / VALVE / SOUPAPE / VENTIL / VALVULA	NR	1
12	15144012	VALVOLA / VALVE / SOUPAPE / VENTIL / VALVULA	NR	1
13	15130202	MANOMETRO / PRESS.GAUGE / MANOMETRE / DRUCKMESSER / MANOM.	NR	2
14	15130003	MANOMETRO / PRESS.GAUGE / MANOMETRE / DRUCKMESSER / MANOM.	NR	2
15	15003004	RACCORDI / UNIONS / RACCORDS / VERBINDUNGSSTUECK / ENLACES	NR	2
16	12720005	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	2
17	12720004	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	4
18	12700244	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
19	12700219	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	8
20	11911902	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1
21	11911843	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	3
22	11911652	CHIUSURA / ENCLOSURE / FERMETURE / VERSCHLUSS / CIERRE	NR	1
23	11911141	RACCORDO / UNION / RACCORD / VERBINDUNGSSTUECK / ENLACE	NR	4
24	11911128	ADATTATORE / ADAPTER / ADAPTEUR / PASSTUECK / ADAPTADOR	NR	3
25	11911126	ADATTATORE / ADAPTER / ADAPTEUR / PASSTUECK / ADAPTADOR	NR	2
26	11911072	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	5
27	11911050	CHIUSURA / ENCLOSURE / FERMETURE / VERSCHLUSS / CIERRE	NR	8
28	11819010	VALVOLA / VALVE / SOUPAPE / VENTIL / VALVULA	NR	2
29	11804100	NIPPLO / NIPPLE / RACCORD / NIPPEL / RACOR	NR	1



DETTAGLIO A
SCALA 1 : 2

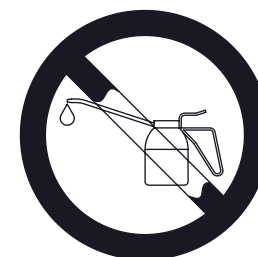
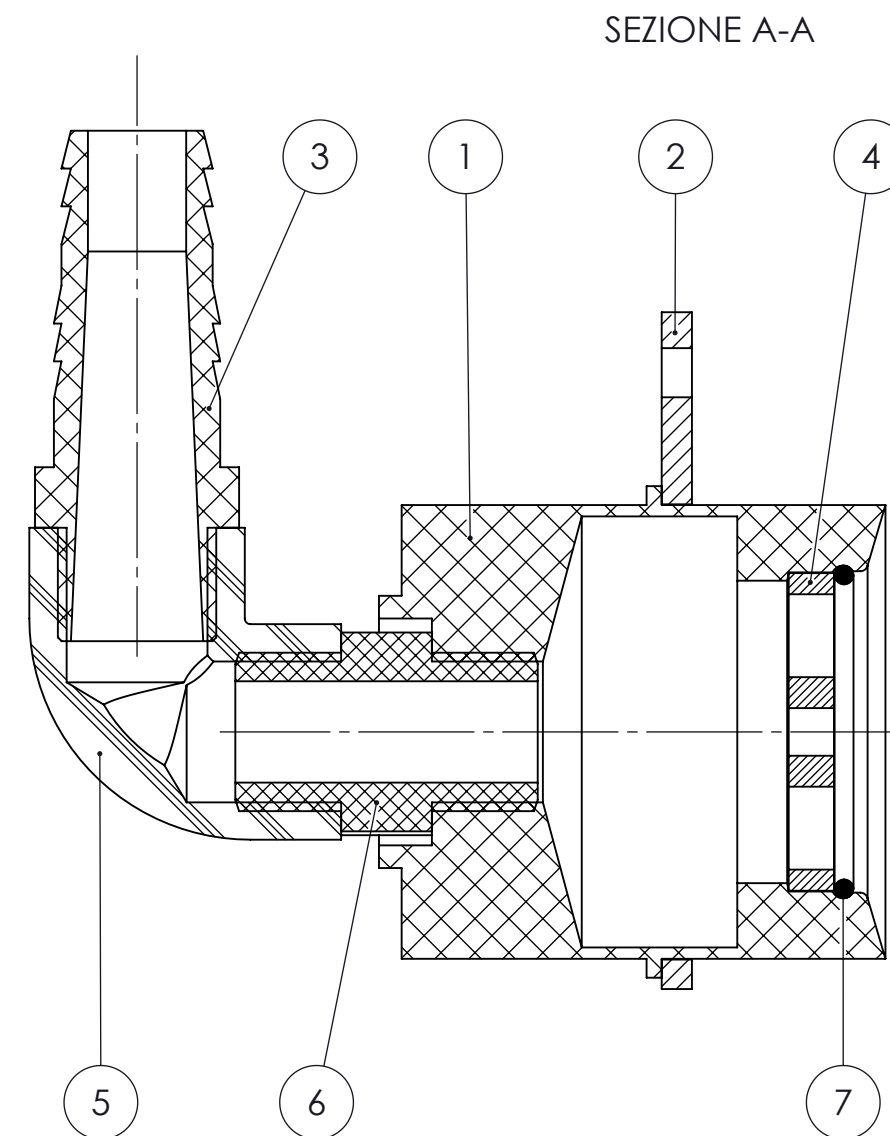
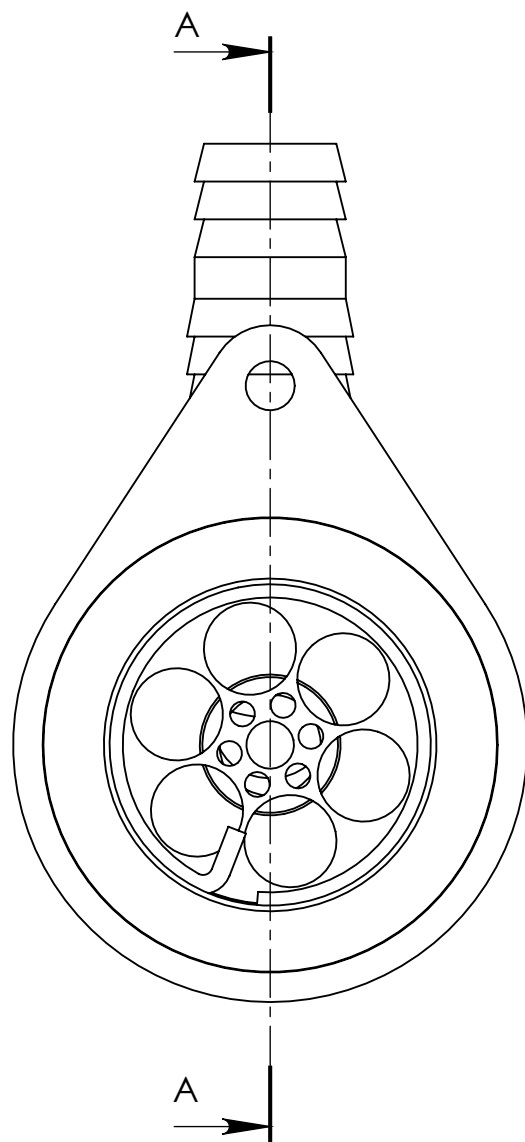
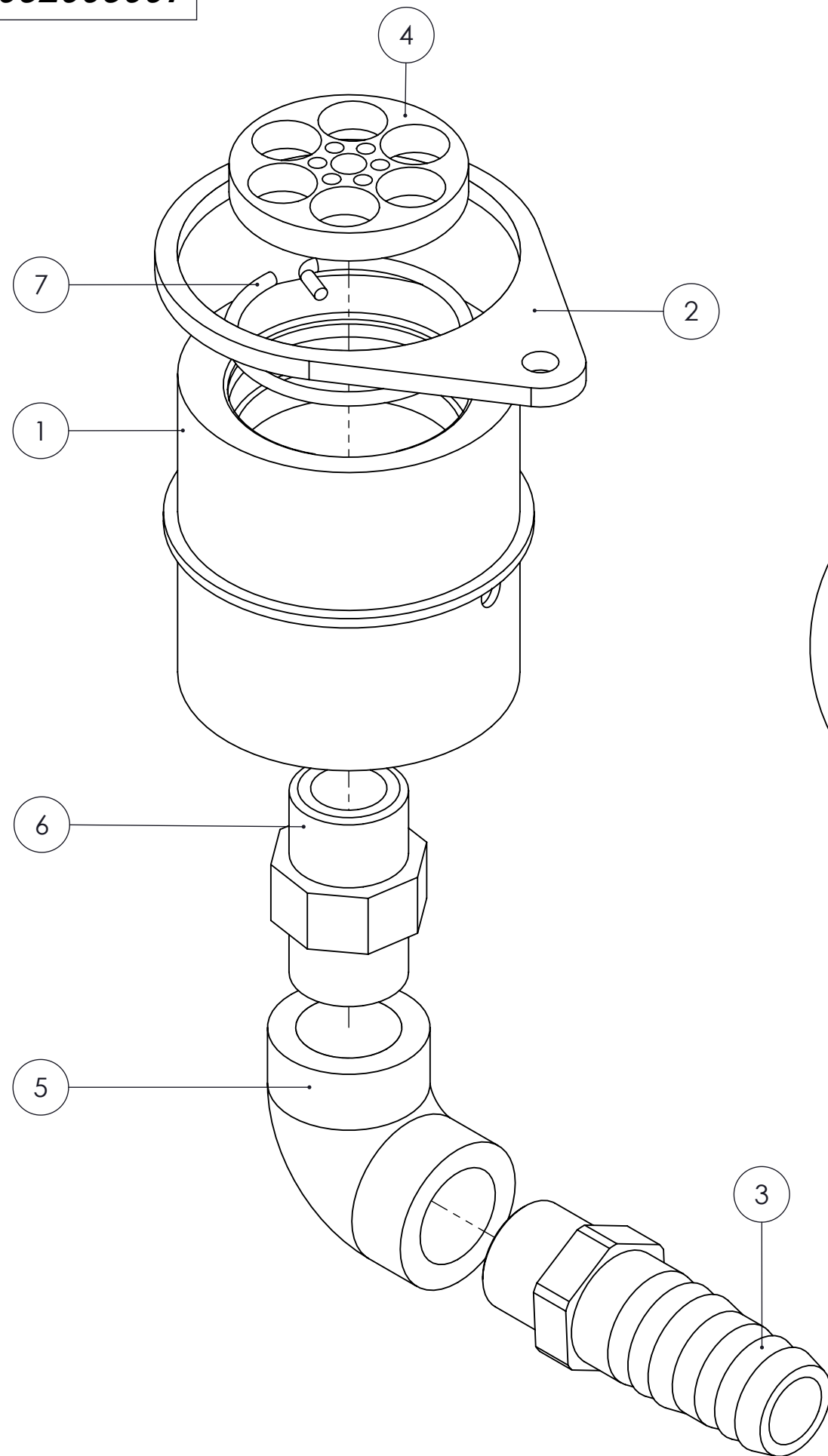


DETTAGLIO B
SCALA 1 : 2



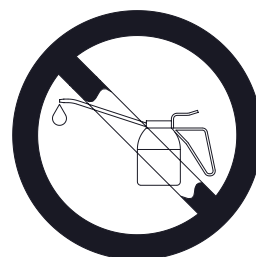
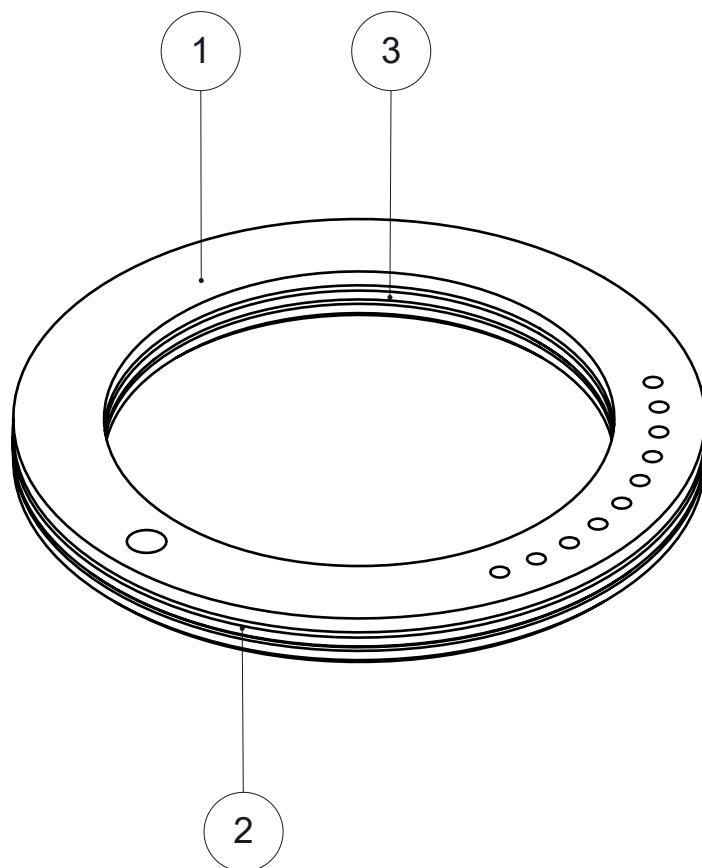
ASPIRAZIONE / SUCTION / ASPIRATION / SAUGSEITE / ASPIRAC.

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01032001145	COPPETTA / PROTECTION / PROTECTION / SCHUTZ / COPITA	NR	1
2	P01032001146	ANELLO / RING / BAGUE / RING / ANILLO	NR	1
3	P01032001150	PORTAGOMMA / CONNECT.NOZZLE / EMBOUT / SCHLAUCH. / BOQUIL.	NR	1
4	P01032001151	PIASTRINA / PLATE / PLAQUETTE / PLATTE / PLAQUITA	NR	1
5	15020002	GOMITO / ELBOW / COUDE / KURVE / CODO	NR	1
6	15020022	NIPPLO / NIPPLE / RACCORD / NIPPEL / RACOR	NR	1
7	P01032007063	ANELLO / RING / BAGUE / RING / ANILLO	NR	1



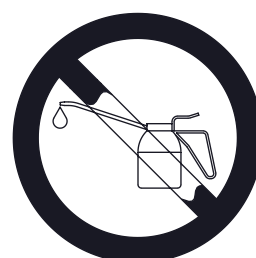
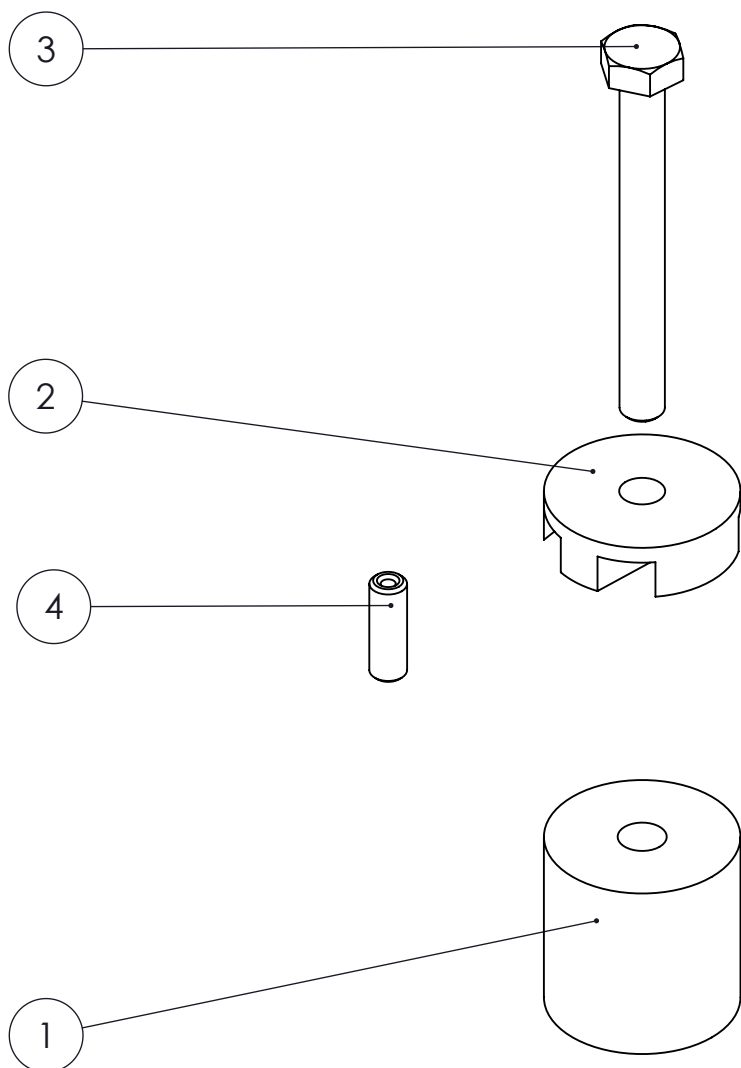
ANELLO / RING / BAGUE / RING / ANILLO

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01045007117	ANELLO / RING / BAGUE / RING / ANILLO	NR	1
2	12501230	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1
3	12501210	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1



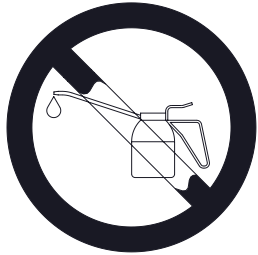
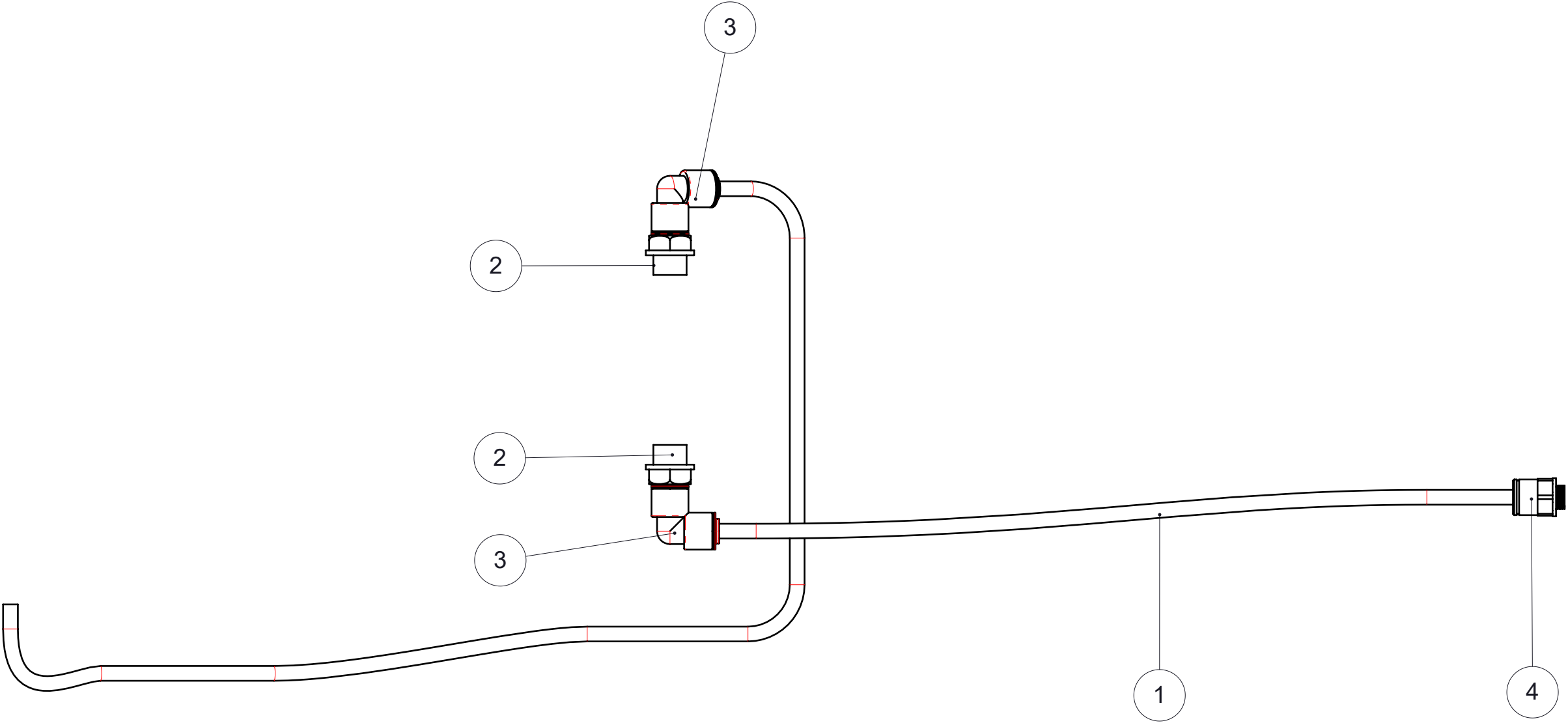
UGELLO / NOZZLE / BUSE / DUESE / BOQUILLA

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01058001134	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	1
2	P01058001109	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	1
3	12700229	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
4	P01058001011	UGELLO / NOZZLE / BUSE / DUESE / BOQUILLA	NR	1



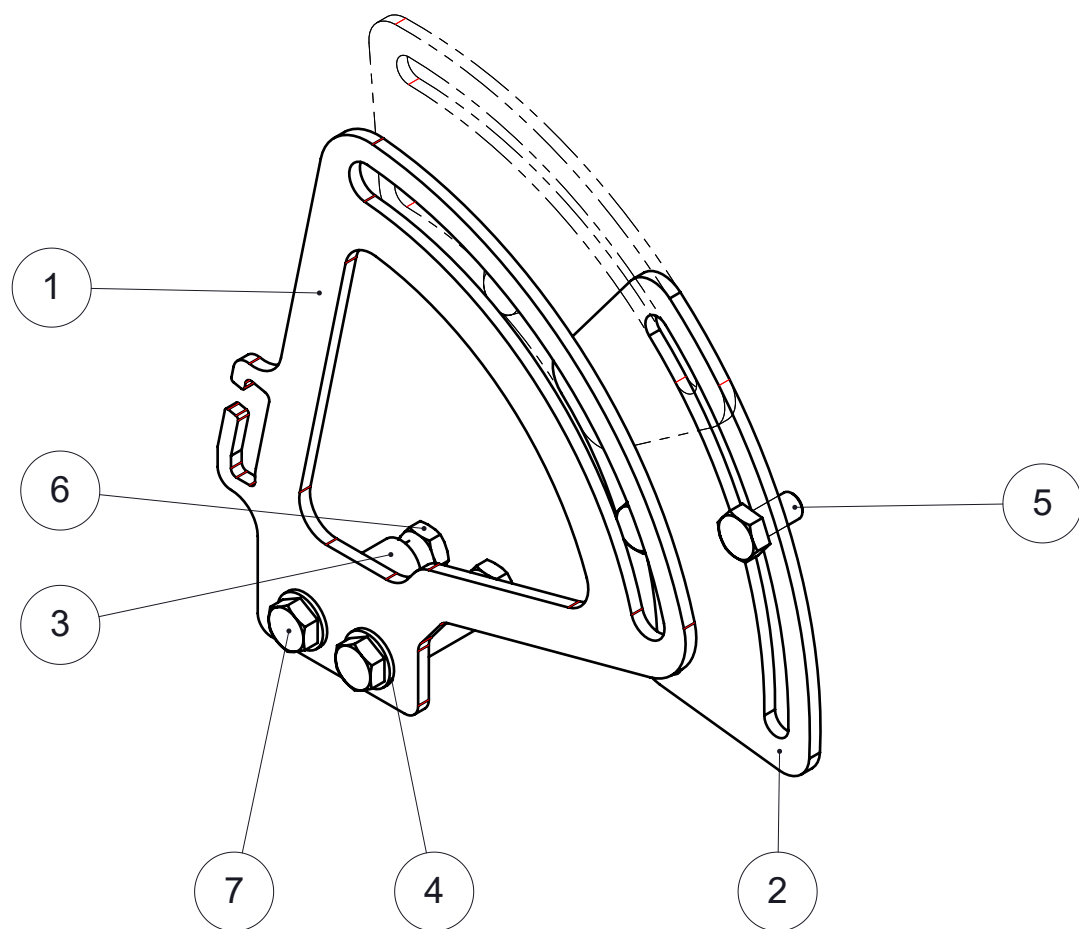
TUBO / PIPE / TUYAU / ROHR / TUBO

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01066003135	TUBO / PIPE / TUYAU / ROHR / TUBO	NR	1
2	15001075	RACCORDO / UNION / RACCORD / VERBINDUNGSSTUECK / ENLACE	NR	2
3	15001033	RACCORDO / UNION / RACCORD / VERBINDUNGSSTUECK / ENLACE	NR	2
4	15001005	RACCORDO / UNION / RACCORD / VERBINDUNGSSTUECK / ENLACE	NR	1



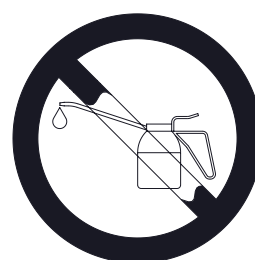
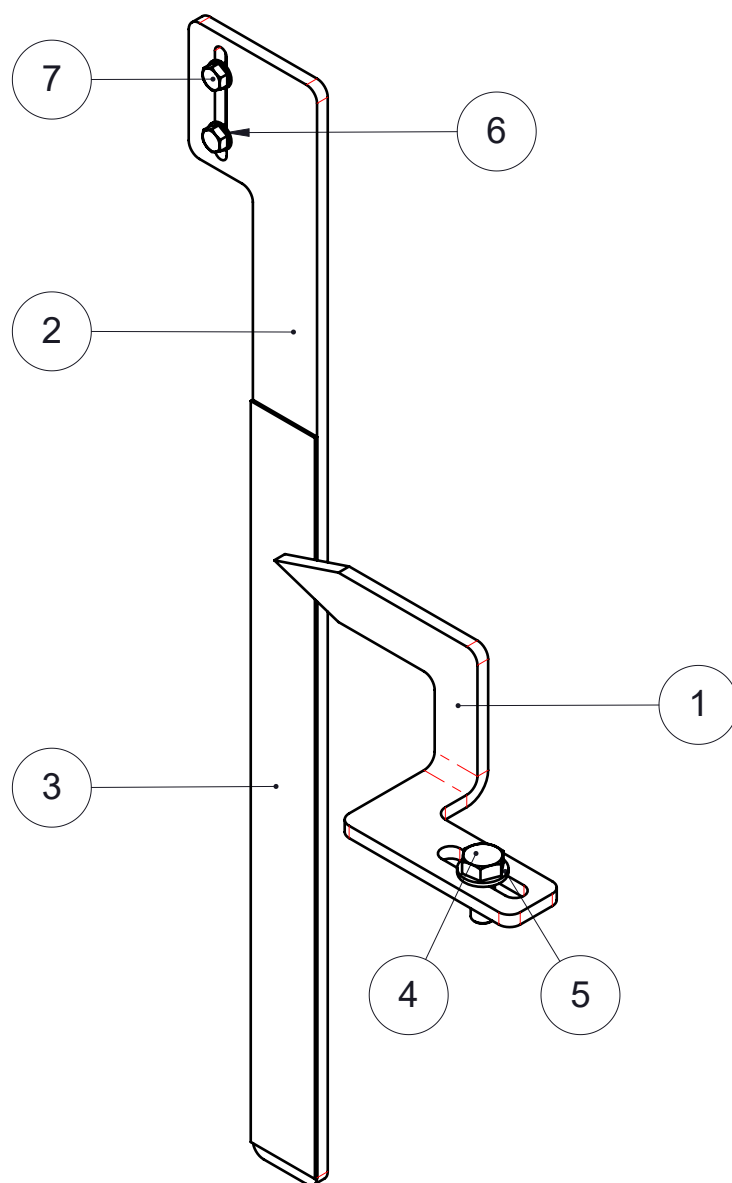
G01071003061

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01071007059	PIASTRA / PLATE / PLAQUE / PLATTE / PLACA	NR	1
2	P01071007060	PIASTRA / PLATE / PLAQUE / PLATTE / PLACA	NR	1
3	P01071007061	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	2
4	12720005	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	2
5	12700240	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
6	12712007	DADO / NUT / ECROU / MUTTER / TUERCA	NR	2
7	12700249	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2



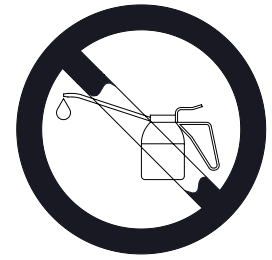
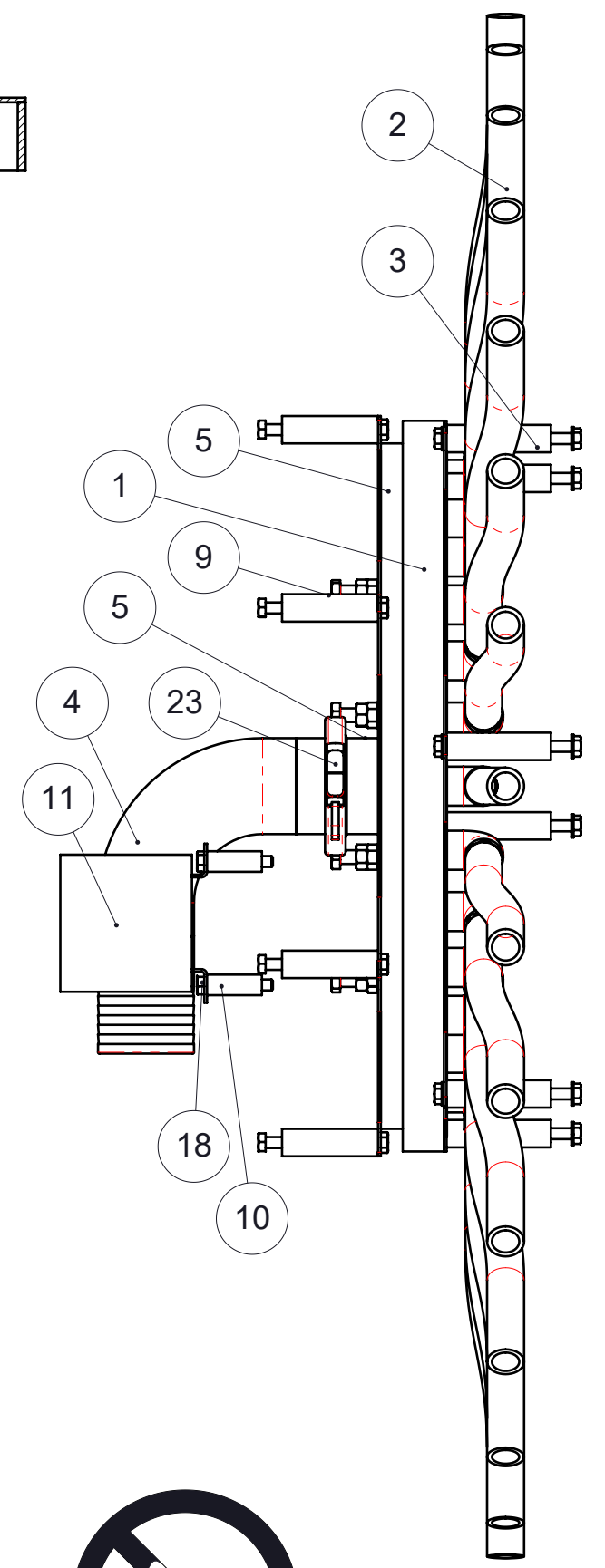
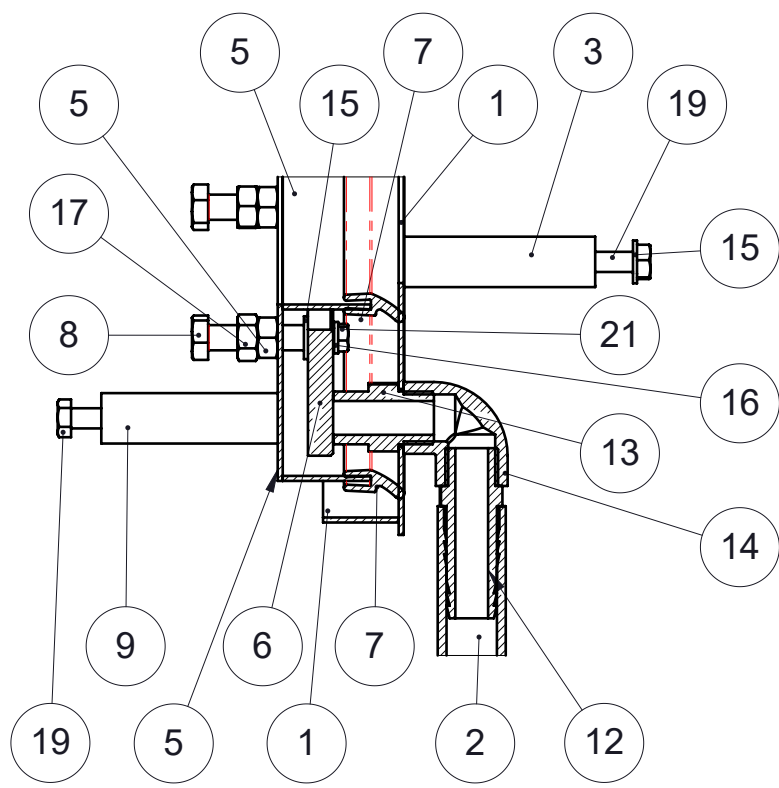
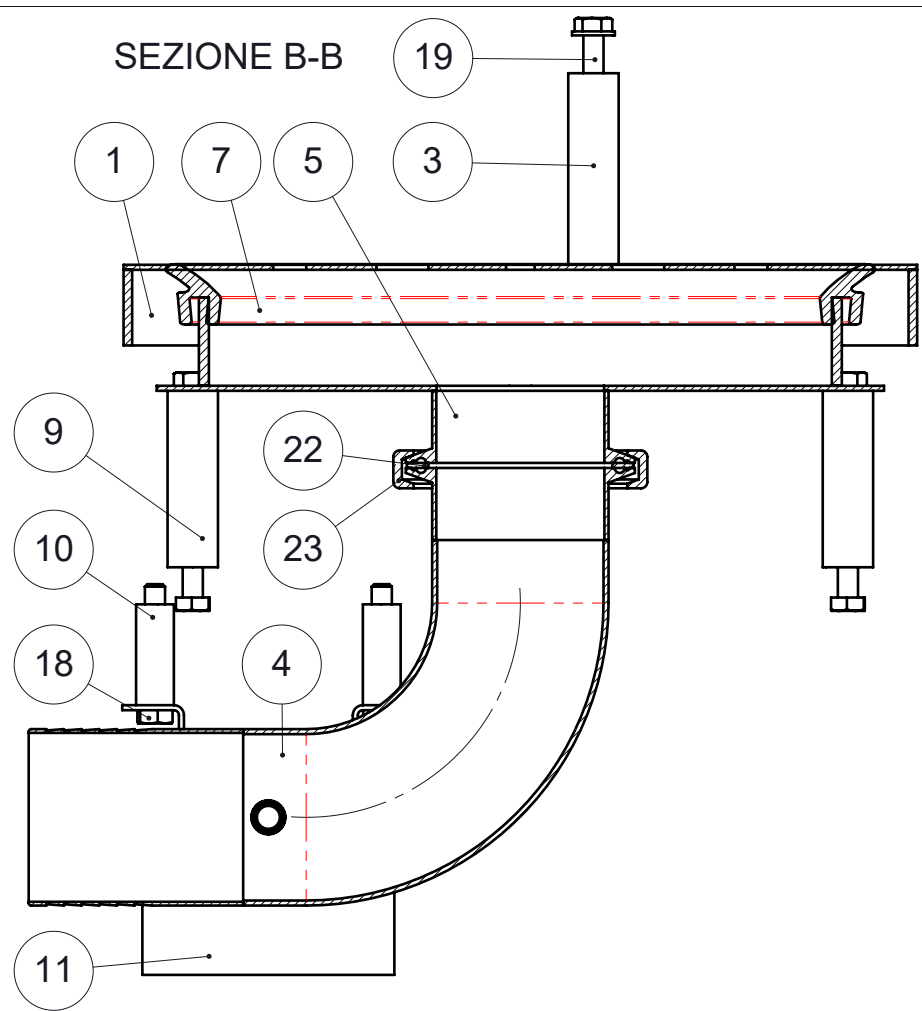
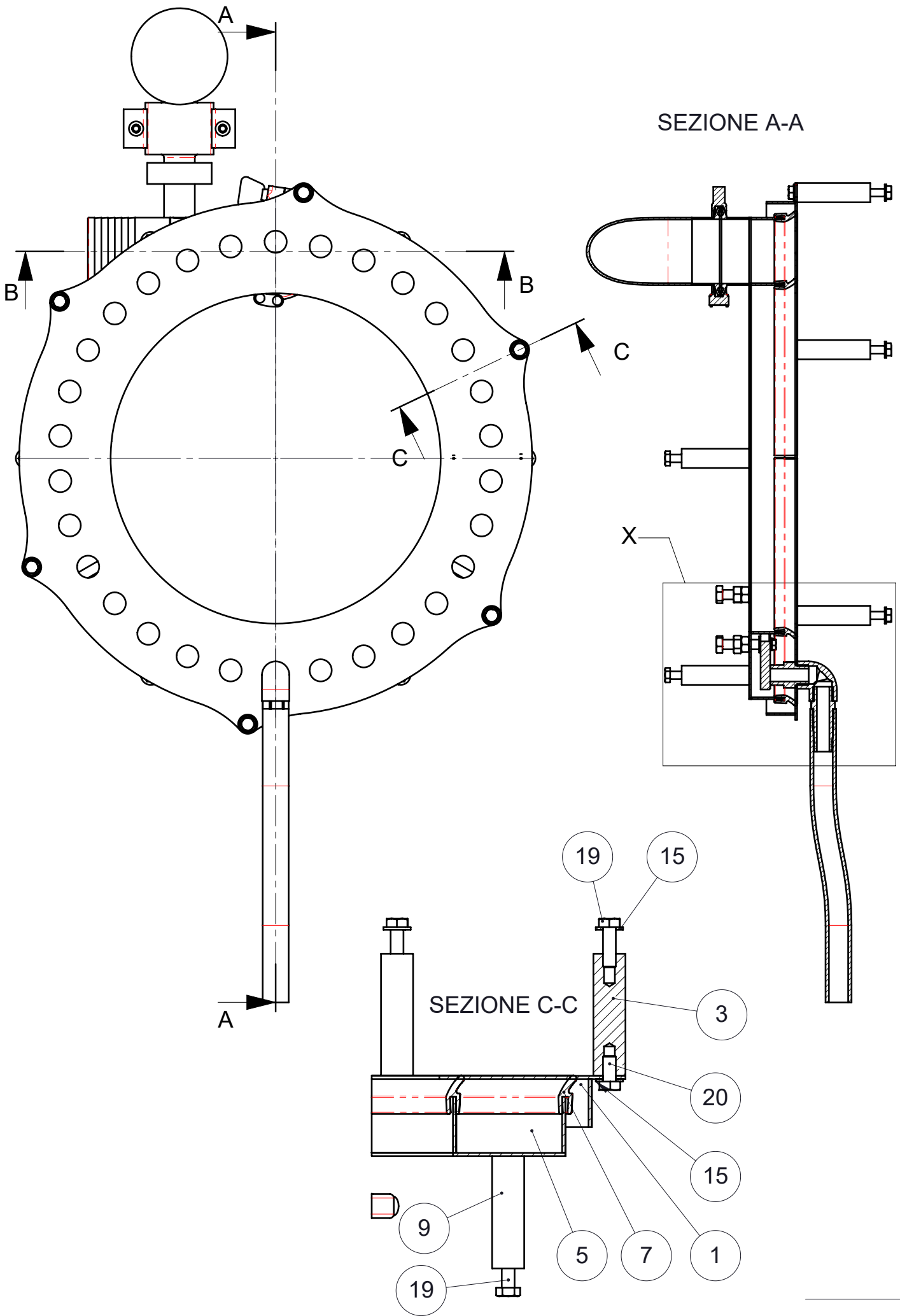
INDICATORE / INDICATOR / INDICATEUR / ANZEIGER / INDICADOR

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01071007252	INDICATORE / INDICATOR / INDICATEUR / ANZEIGER / INDICADOR	NR	1
2	P01071007297	SUPPORTO / SUPPORT / SUPPORT / HALTERUNG / SOPORTE	NR	1
3	15107001	RIGA MILL. / RULER / REGLE DE DES. / MILLIM. / LINEA MIL.	NR	1
4	12700242	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	1
5	12720005	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	1
6	12720003	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	2
7	12700200	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2



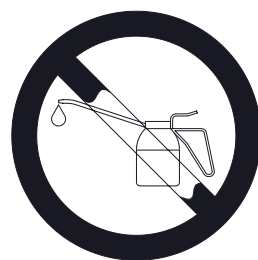
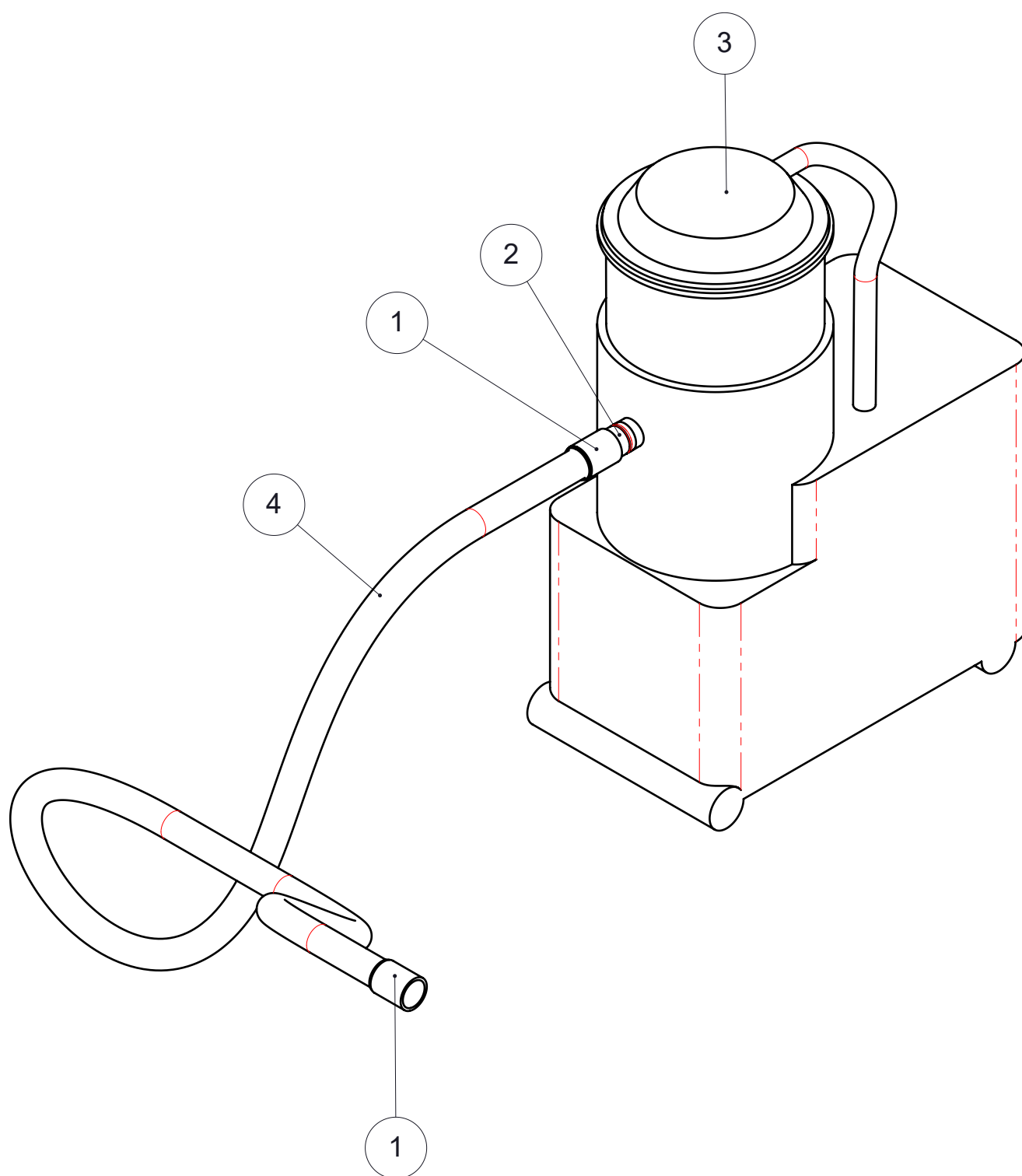
ASPIRAZIONE / SUCTION / ASPIRATION / SAUGSEITE / ASPIRAC.

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01072007208	COLLETTORE / MANIFOLD / DISTRIBUTEUR / KOLLEKT. / COLECTOR	NR	1
2	P01072007109	TUBO / PIPE / TUYAU / ROHR / TUBO	NR	30
3	P01072007090	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	6
4	P01072007089	TUBO / PIPE / TUYAU / ROHR / TUBO	NR	1
5	P01072007087	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	1
6	P01032007073	SETTORE / SECTOR / SECTEUR / BEREICH / SECTOR	NR	1
7	P01032007072	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1
8	P01032007039	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
9	P01032001153	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	6
10	P01027003449	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	2
11	15144072	VACUOSTATO / VACUUM SWITCH / CON.VIDE / VAKUÜ. / CON.VACIO	NR	1
12	15020032	PORTAGOMMA / CONNECT.NOZZLE / EMBOUT / SCHLAUCH. / BOQUIL.	NR	30
13	15020022	NIPPLO / NIPPLE / RACCORD / NIPPEL / RACOR	NR	30
14	15020002	GOMITO / ELBOW / COUDE / KURVE / CODO	NR	30
15	12720005	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	16
16	12720004	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	4
17	12711008	DADO / NUT / ECROU / MUTTER / TUERCA	NR	4
18	12700249	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
19	12700244	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	18
20	12700240	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6
21	12700215	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
22	11911084	GUARNIZIONE / GASKET / JOINT / DICHTUNG / EMPAQUETADURA	NR	1
23	11911053	CHIUSURA / ENCLOSURE / FERMETURE / VERSCHLUSS / CIERRE	NR	1



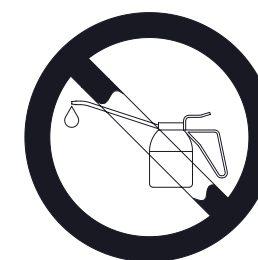
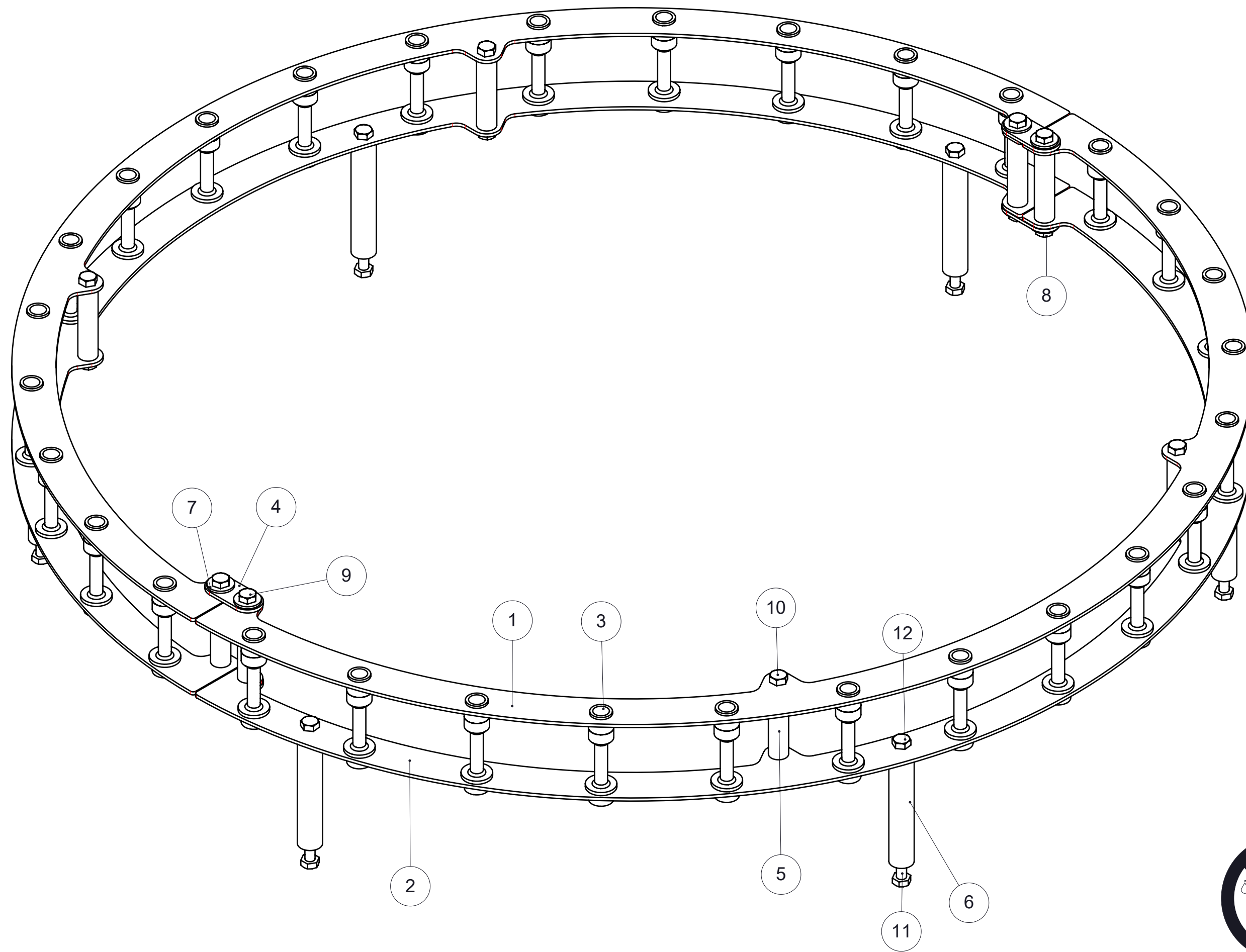
ASPIRAZIONE / SUCTION / ASPIRATION / SAUGSEITE / ASPIRAC.

N°	ID	MULTILINGUA	UNIT	Qtà
1	17017172	MANICOTTO / SLEEVE / MANCHON / MUFFE / MANGUITO	NR	2
2	17017177	RACCORDO / UNION / RACCORD / VERBINDUNGSSTUECK / ENLACE	NR	1
3	17017312	ASPIRATORE / ASPIRATOR / ASPIRATEUR / ANSAUGER / ASPIRADOR	NR	1
4	P01072007120	TUBO / PIPE / TUYAU / ROHR / TUBO	NR	1



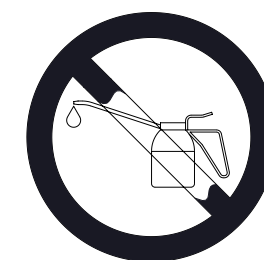
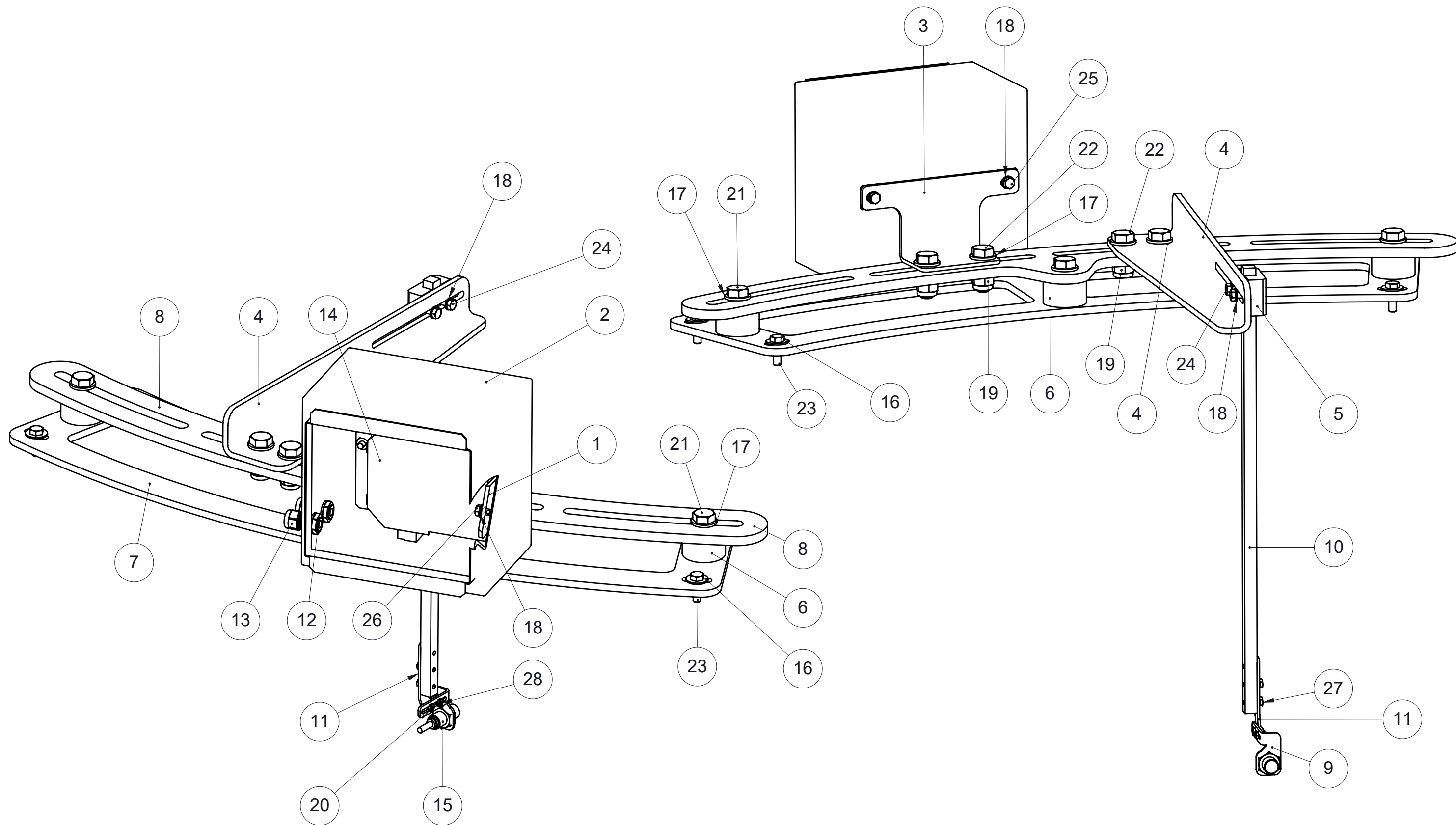
FLUSSIMETRO / FLOWMET. / DEBITMET. / DURCHFLUS. / FLUJOME.

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01073005194	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	1
2	P01073005192	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	1
3	P01073005182	FLUSSIMETRO / FLOWMET. / DEBITMET. / DURCHFLUS. / FLUJOME.	NR	30
4	P01073005064	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	4
5	P01073001063	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	8
6	P01023001046	COLONNETTA / STUD / GOUJON / STIFTBOLZEN / COLUMNILLA	NR	6
7	12722009	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	8
8	12711007	DADO / NUT / ECROU / MUTTER / TUERCA	NR	8
9	12700256	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
10	12700255	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
11	12700245	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6
12	12700240	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	6



SENSORE / SENSOR / CAPTEUR / SENSOR / SENSOR

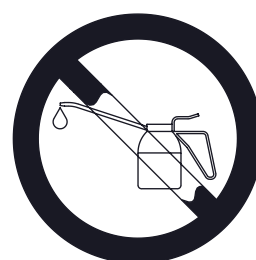
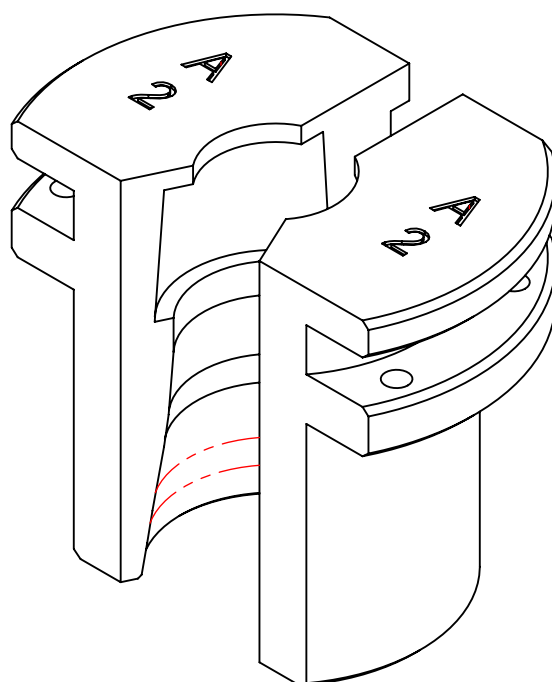
N°	ID	MULTILINGUA	UNIT	Qtà
1	P01073005209	STAFFA / BRACKET / ATTACHE / BUEGEL / SOPORTE	NR	1
2	P01073005208	SCATOLA / BOX / BOITE / SCHACHTEL / CAJA	NR	1
3	P01073005207	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	1
4	P01073005206	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	1
5	P01073005205	BLOCCETTO / SUB BASE / BLOC / UNTERLAGE / BLOQUECILLO	NR	1
6	P01073005204	DISTANZIERE / SPACER / ENTRETOISE / DISTANZST. / SEPARADOR	NR	3
7	P01073005203	PIASTRA / PLATE / PLAQUE / PLATTE / PLACA	NR	1
8	P01073005202	GUIDA / GUIDE / GUIDE / FUEHRUNG / GUIA	NR	1
9	P01073005201	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	1
10	P01073005200	STAFFA / BRACKET / ATTACHE / BUEGEL / SOPORTE	NR	1
11	P01073005110	LAMIERA / SHEET / TOLE / BLECH / CHAPA	NR	1
12	18370030	GHIERA / LOCK RING / COLLIER DE SER. / NUTMUT. / ABRAZAD.	NR	2
13	18370020	RACCORDO / UNION / RACCORD / VERBINDUNGSSTUECK / ENLACE	NR	2
14	18332105	ALIMENTATORE / FEEDER / ALIMENT. / SPEISEAP. / ALIMENTADOR	NR	1
15	18332015	SENSORE / SENSOR / CAPTEUR / SENSOR / SENSOR	NR	1
16	12722017	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	4
17	12720006	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	11
18	12720003	RONDELLA / WASHER / RONDELLE / SCHEIBE / ARANDELA	NR	7
19	12716007	DADO / NUT / ECROU / MUTTER / TUERCA	NR	4
20	12711003	DADO / NUT / ECROU / MUTTER / TUERCA	NR	2
21	12700267	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	3
22	12700266	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
23	12700221	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	4
24	12700203	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
25	12700200	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
26	12700199	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	3
27	12700185	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2
28	12700171	VITE / SCREW / VIS / SCHRAUBE / TORNILLO	NR	2



G01075003164

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

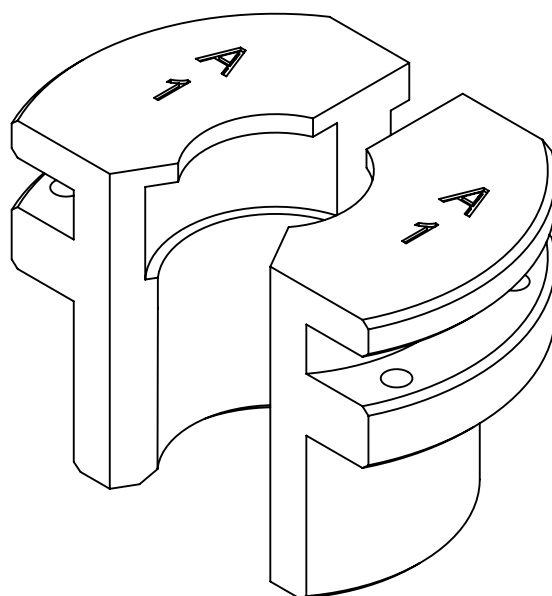
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G01075003165

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

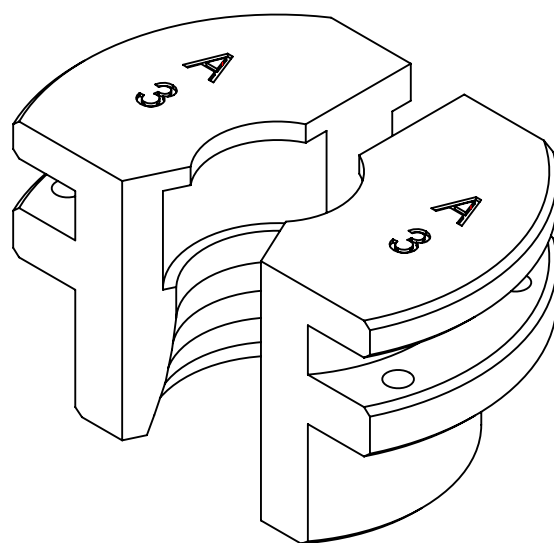
N°	ID	MULTILINGUA	UNIT	Qtà
1	P01075005188	TAMPONE / PAD / TAMPON / PUFFER / TAMPON	NR	1



G01075003166

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

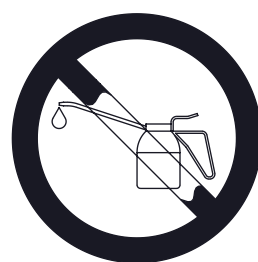
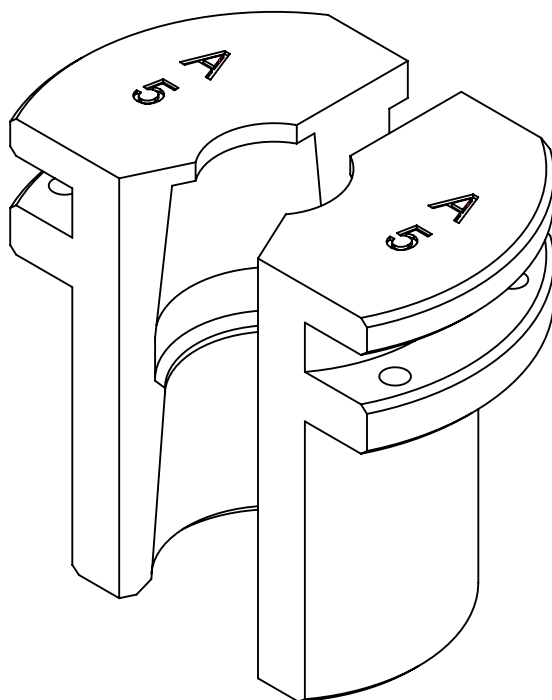
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G01075003167

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

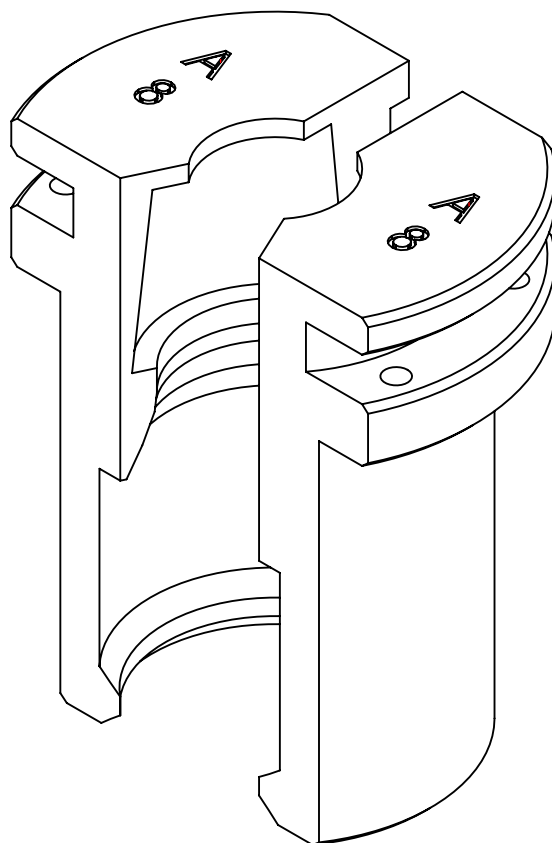
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G01075003168

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

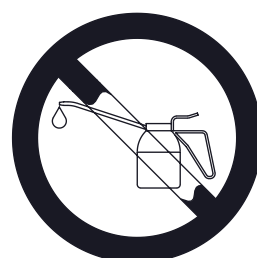
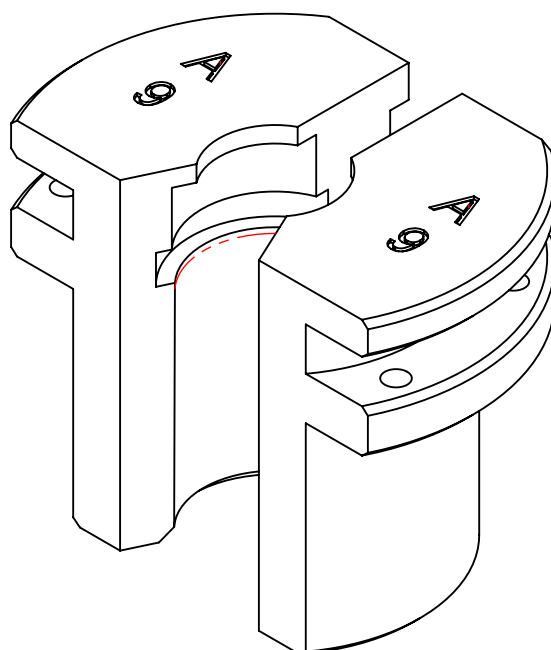
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G01075003169

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

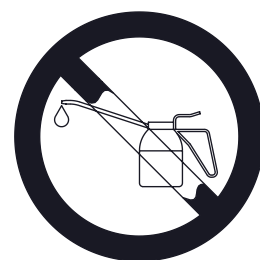
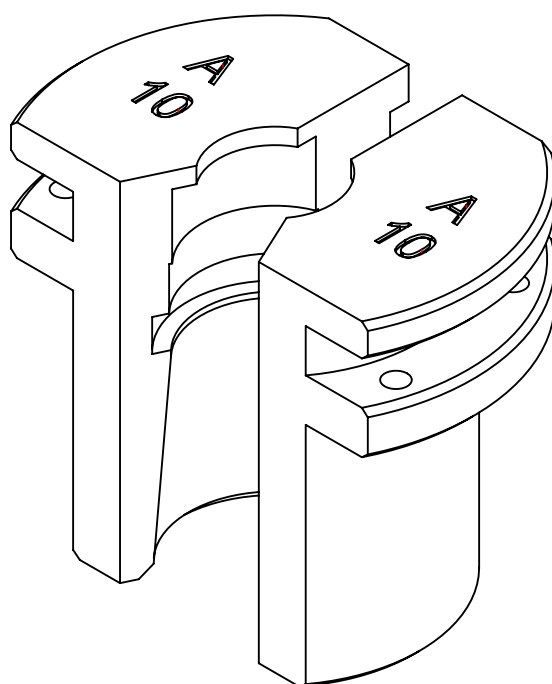
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G01075003170

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

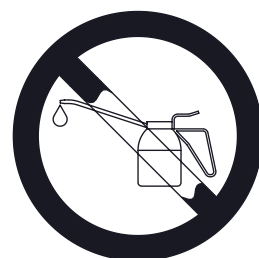
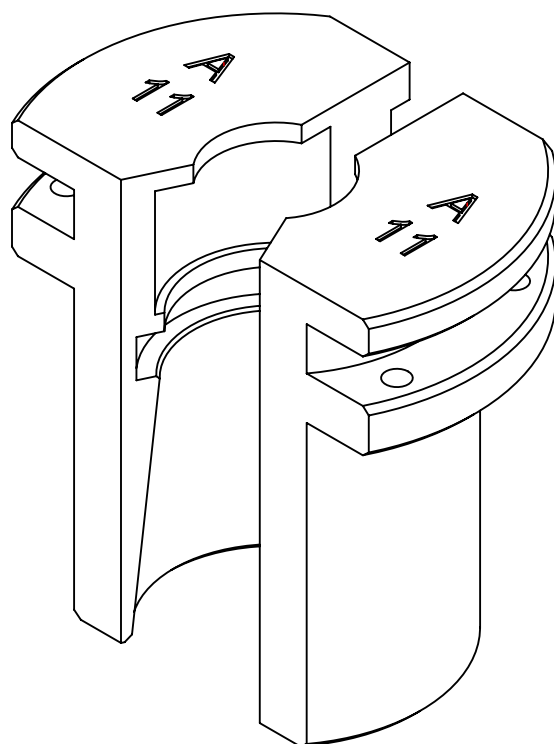
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G01075003171

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

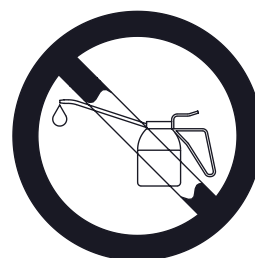
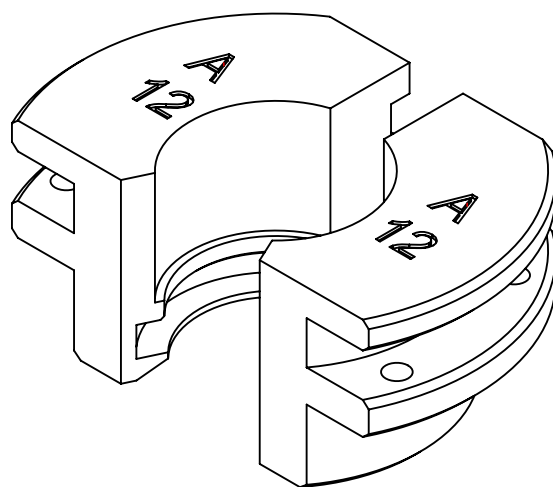
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G01075003172

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

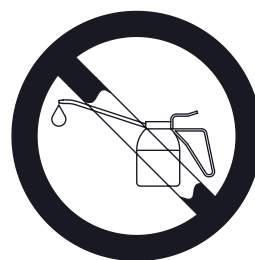
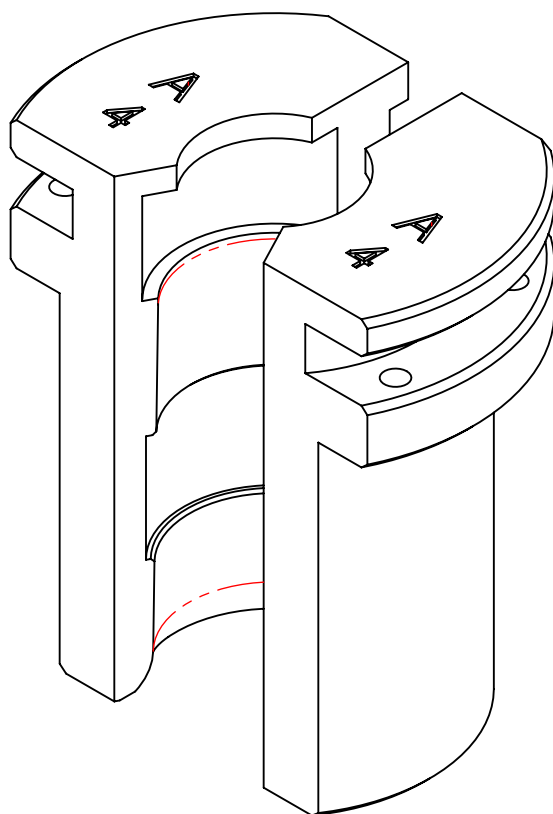
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G01077003054

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

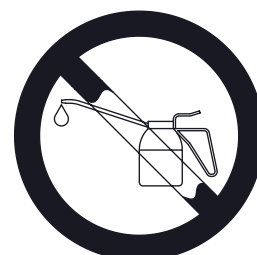
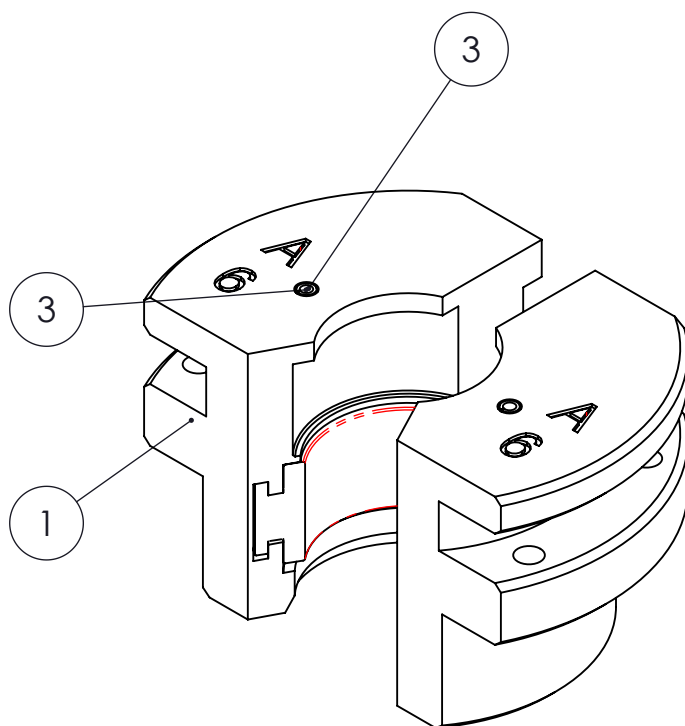
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G01077003055

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

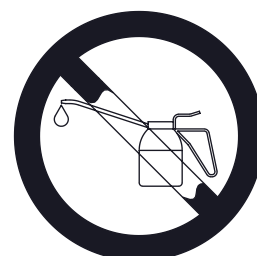
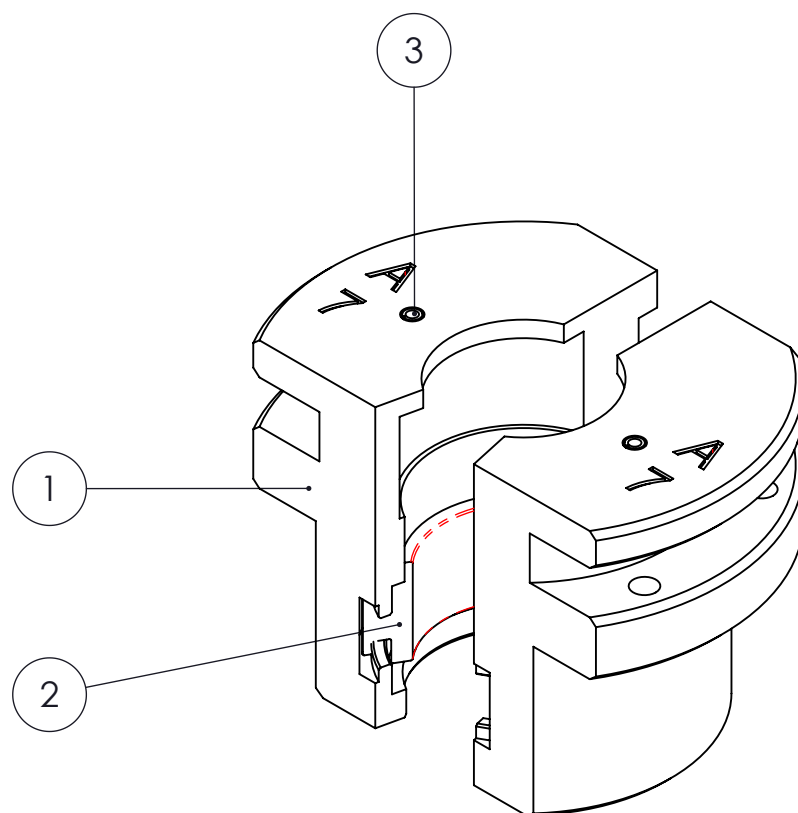
N°	ID	MULTILINGUA	UNIT	Qtà
1	P01077005055	TAMPONE / PAD / TAMPON / PUFFER / TAMPON	NR	1
2	P01077001004	GOMMA / RUBBER / CAOUTCHOUC / GUMMI / GOMA	NR	2
3	13206076	SPINA / PEG / GOUPILLE / STIFT / ENCHUFE	NR	2



G01077003056

TAMPONE / PAD / TAMPON / PUFFER / TAMPON

N°	ID	MULTILINGUA	UNIT	Qtà
1	P01077005056	TAMPONE / PAD / TAMPON / PUFFER / TAMPON	NR	1
2	P01077001004	GOMMA / RUBBER / CAOUTCHOUC / GUMMI / GOMA	NR	2
3	13206076	SPINA / PEG / GOUPILLE / STIFT / ENCHUFE	NR	2





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