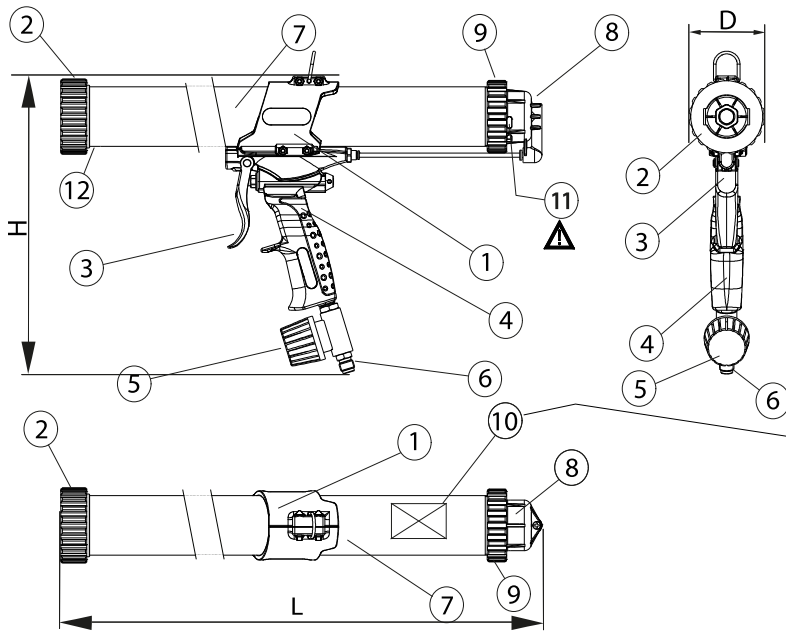


# USER'S INSTRUCTIONS FOR CSG II SERIES MODELS: 210 - 245 - 270 - 370 - 400 - 450 - 660 - 1100



## 1 - PRODUCT DESCRIPTION

- 1) Body of the Applicator
- 2) Front ring nut
- 3) Control lever
- 4) Handle
- 5) Pressure regulator
- 6) Feeding: 1/4 gas male threaded connector
- 7) Material holder tube
- 8) Dump valve
- 9) Rear ring nut
- 10) CE mark
- 11) Exhaust air outlets
- 12) Safety hole

FAC-SIMILE

PNEUMATIC APPLICATOR  
 mod. - xxx/xxx xx - cod. xxxxxxx  
 P.M.T. srl - Via G.Marconi 3/7  
 24051 Antegnate (BG) ITALIA



week - year  
 Series XX

MAX PRESSURE 10 bar (145 psi)



\* The various products are differentiated by the tube length and the extruded product type.

## 1.1 Technical details

Model	# Basic setup	Cartridge	Soft-pack	Cartridge (ml)	Soft-pack (ml)	L (mm)	H (mm)	D (mm)	Net Weight (g)	Total Mass (g)	Connec-tion	Pressure Maxim
CSG II 210	-	●	-	≤ 310	-	260	263	78	705	1045	1/4"GAS maschio	10 Bar 145 psi
CSG II 245	* For soft-pack	●	●	≤ 310	≤ 400	307	263	78	1125	1420	1/4"GAS maschio	10 Bar 145 psi
CSG II 270	-	-	●	-	≤ 400	307	263	78	1100	1395	1/4"GAS maschio	10 Bar 145 psi
CSG II 370	* For soft-pack	●	●	≤ 310	≤ 600	410	263	78	1300	1565	1/4"GAS maschio	10 Bar 145 psi
CSG II 400	-	-	●	-	≤ 600	440	263	78	1100	1365	1/4"GAS maschio	10 Bar 145 psi
CSG II 450	** For cartridge	●	●	≤ 310	≤ 400	556	263	78	1300	1660	1/4"GAS maschio	10 Bar 145 psi
CSG II 660	-	-	●	-	700	665	263	78	1270	1570	1/4"GAS maschio	10 Bar 145 psi
CSG II 1100	-	-	●	-	1800	1150	263	78	1700	2030	1/4"GAS maschio	10 Bar 145 psi

# **Basic setup:** It is the mode with which the gun is assembled at the factory and provided to the client.

\* **Cartridge based conversion kit:** plastic spacer with gasket (included in the supply).

\*\* **Bag based conversion kit:** bag holder, tube scraper, piston collecting soft-pack, soft-pack awards cone (included in the supply).

## 1.2 Noise emissions and vibrations

When releasing the lever, the level of equivalent A-weighted sound pressure, measured at a 50 cm. horizontal distance during the application of a sealant and with a gun feeding pressure of 7 Bar / 101,5 PSI is > 80 dBA. Therefore the use of ear defenders is recommended. The hand/arm system vibration level was detected on an equivalent model and it is less than 2,5 m/g2.

## 1.3 Storage

The applicator is supplied in a single KEB WHITE ST/B343 cardboard box, with a 2.8-3 mm. thickness low flute; the gun is held in a polyethylene bag. Keep at a temperature between -5°C and 45°C, with ambient humidity not exceeding 70%.

Never remove the pressure reducer from the machine in an attempt to increase the inlet pressure. The applicator is safe up to 10 bar 145 PSI. Do not use any other expedient to increase the pressure.

To properly use the applicator, with one hand, hold the back of the material tube up against the nut and with the other, grasp the grip to operate the control lever.

## 2 - CAUTION

The applicators of the CSG II family in this manual are called Applicators, Device or Machines, indistinctly.



*This symbol draws your attention to safety related issues. Read carefully the recommendations included and strictly comply with them.*



*Before using the applicator read the instructions and strictly comply and understand this instruction manual*



*Before any repair, maintenance and refill operations, disconnect the air feed.*



*Before any repair and extraordinary maintenance operations, contact the applicator dealer or trained staff. Improper interventions will render the warranty null and void.*



*When choosing the product to extrude and before using the applicator, check the product compatibility with the work environment and the adopted individual protection devices, according to its safety data sheet. During usage, safety devices (individual protections) are to be worn on top of one's clothes, in compliance with the product safety data sheet.*



*Using safety glasses and ear defenders is recommended in any case.*



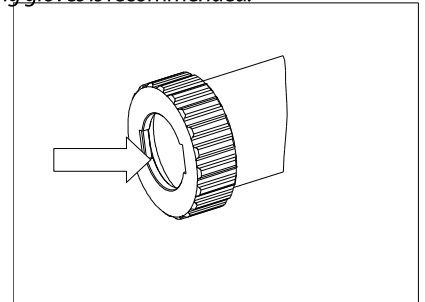
*During replenishing material tooling operations hand abrasions may be possible, therefore wearing gloves is recommended.*



**CAUTION: never put your hands inside the material tube!!!**  
**Considerable risk of fingers and limbs being crushed. Never put your hands inside the material tube when the power supply is connected to the applicator. Never start up the machine without the front nut securely screwed on and/or with material inside**



**To avoid any risk, do not put your hands or fingers inside the machine in any case whatsoever; in the case of blockage, fault or other type of malfunctioning, first of all disconnect the machine from the power supply and make sure that the machine discharges the pressure from the cylinder; if you are unsure how to proceed, contact your dealer without performing any operations on the machine.**



## 3 - INTENDED AND FORBIDDEN USES

### 3.1 Intended uses

- 3.1.1 Extrusion of sealants (silicone, mastic, glues, etc.) contained in dedicated aluminium, plastic or soft-packs cartridges.
- 3.1.2 Begin the application works only after having read and understood the content of this manual and the information provided on the technical data and safety sheet of the product you are using, wearing all specified PPE.
- 3.1.3 Disconnect the air from the applicator before performing any maintenance, cleaning or replenishing and in any case that the front nut appears to be loose; the above operations are to be performed only as specified in this manual.
- 3.1.4 Work only in safe conditions as described in this manual, in a well-lit work area with good visibility and good ventilation; the work area must be easy for the operator to move about in, free of any harmful obstacles or obstructions that prevent work from being performed properly and without risk. The presence of unskilled or unauthorised personnel must be restricted only to necessity, and the knowledge of standard safety and fire prevention measures is mandatory.

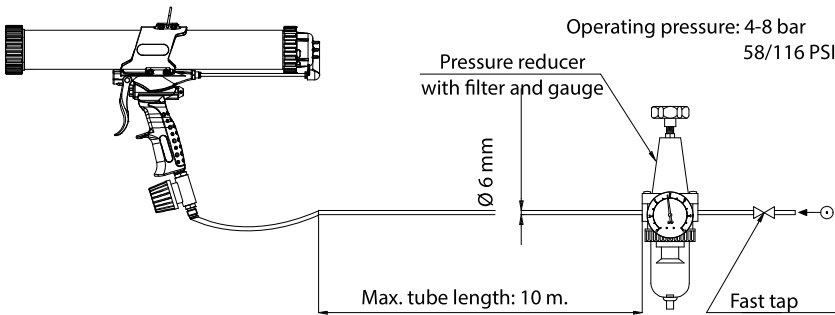
### 3.2 Reasonably foreseeable incorrect uses

- 3.2.1 Working partially applying the environmental and safety instructions this manual contains or without having understood this manual.
- 3.2.2 Performing any operation without having checked for the presence and tightening of the front nut.

### 3.3 Forbidden uses

- 3.3.1 Any use other than extrusion of the above-listed products, or contained in non-standard or loose containers.
- 3.3.2 Operating the applicator without having read and understood this manual, or without wearing the specified PPE
- 3.3.3 Using in potentially explosive atmospheres of any classification or using products that generate potentially explosive atmospheres, also including cleansing liquids, cleaners and lubricants.
- 3.3.4 Using the device without tightening the front ring nut properly, or worse without the front nut.
- 3.3.5 Never cover exhaust air outlets
- 3.3.6 Never use in environments where dusts or other volatile materials are present, especially if inflammable.
- 3.3.7 Never immerse the gun in solvents or acids.
- 3.3.8 When cleaning the machine, never use hydrogenated hydrocarbons based solvents and/or detergents (1.1.1 Ethyl trichloride, methylene chloride, etc.) as they could oxidize the galvanized components thus triggering chemical reactions also of explosive nature; never use highly acid or basic substances when cleaning.
- 3.3.9 During usage, especially in the air lever release stage, keeping the machine at a distance of less than 30 cm. from the face may be harmful, as the exhaust air being released through the outlets (11), may hit your face, in eyes and ears.
- 3.3.10 Pointing the machine toward yourself, other people, animals, plants or objects other than the object to be treated, in the event of serious malfunctioning of the machine or without the front nut, the remote probability that the piston will be ejected exists.
- 3.3.11 Replenishing, cleaning and maintaining without having isolated or disconnected the compressed air supply from the applicator.
- 3.3.12 Exceeding 10 bar / 145 PSI at the device's inlet.
- 3.3.13 It is forbidden to make any modifications or repairs at the device.

#### 4 - START-UP to be carried out by the operator



Before gun start-up and usage, wear the recommended individual safety devices:

- Safety gloves
- Ear defenders
- Safety glasses



#### 4.1 Air feeding system

Connect the machine to a compressed air system featuring the following characteristics:

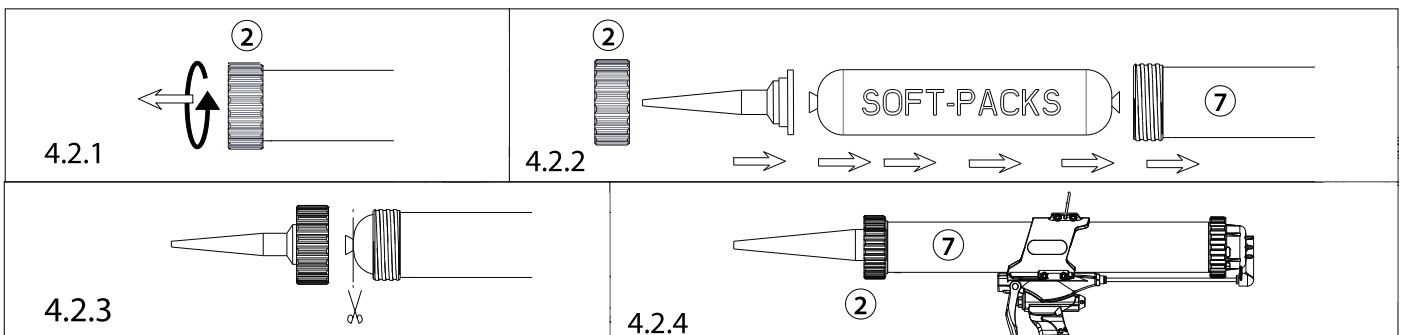
- Max. air humidity 5%;
- Air temperature from -10° C to +70° C
- System capacity 500 l/min at least
- System equipped with lubricator, pressure reducer and gauge. Lubrication must be: 3-4 drops of lubricant every 1000 l/min.

The machine is equipped with a ¼ gas male threaded connector, to which connection is possible according to specific needs. The tube shall be a wound conductive tube for dynamic laying with resistance lower than 1 Mega Ohm and bursting pressure at least twice the maximum pressure of the system. Air consumption is reduced and proportional to the number of times in which the product supply lever is released.

#### 4.2 Bag refill (Mod. 245 - 270 - 370 - 400 - 450\* - 660 - 1100) to be carried out by the operator

(\*) These models are equipped with a bag conversion kit.

- ⚠ Always disconnect the machine from air feed during bag/cartridge replacement operations and any other time the front ring nut is unscrewed from the tube. Accidental pressure on the lever may cause the violent unload of the bag the crushing of fingers or any other risk for the operator and people nearby.
- ⚠ Always control the refill material expiry date.
- ⚠ Never introduce bags that are damaged or not perfectly intact.

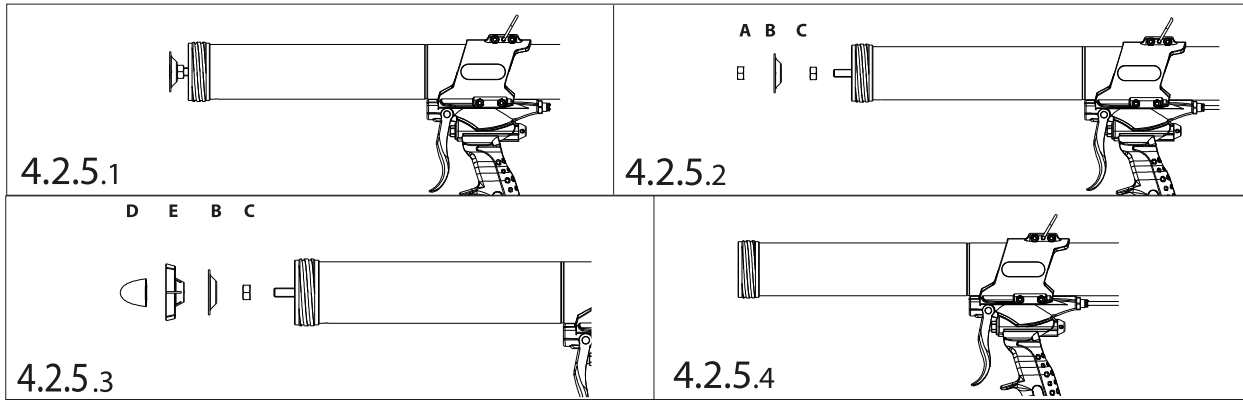


- 4.2.1 Unscrew the front ring nut counter-clockwise (2) and remove it from the machine.
- 4.2.2 Introduce and fix the bag nozzle to the front ring nut (2) (push the piston back in case it is forward); secondly introduce the bag in the material holder tube (7); push the bag to the very bottom letting out only the part which is meant to be cut.
- 4.2.3 Cut the bag just under the closing metal band.
- 4.2.4 Tighten clockwise the front ring nut (2) to the material holder tube (7). The ring nut shall contain the plastic nozzle.
- 4.2.5 (Model CSG II 450 only) before introducing the bag in the material holder tube, make sure the bags extrusion kit has been assembled, as outlined below.

#### Assembly of bag kit (Mod. 450)

⚠ **Caution: this is the only operation to perform without the front nut. Before performing it, be sure that there are no bags or cartridges inside! Carefully read the following!**

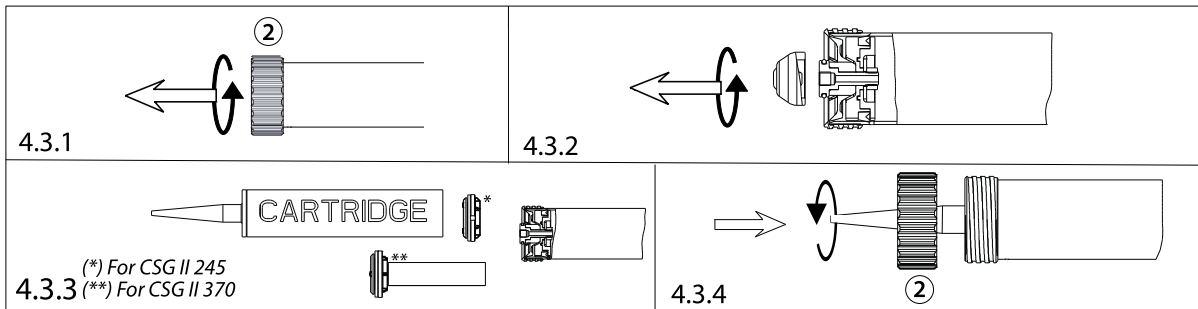
- 4.2.5.1 Before starting, prepare two 13 mm spanners and a 5 mm Allen wrench. Totally unscrew the knob of the pressure reducer on the machine anti-clockwise, then slowly, clockwise with the control level pressed until the piston inside starts to slowly move, stop pressing the control lever and remove the front nut when the lever reaches it and stops. Afterwards, press the control lever again with one hand on the grip and one on the pipe, as recommended, until the piston completely comes out of the pipe. Now disconnect or switch off the power supply.
- 4.2.5.2 Tighten the nut C with the two open ended spanners and unscrew and remove the locking nut A, also remove the metal cartridge presser B (standard).
- 4.2.5.3 In the following order, tighten: the locking nut C (if removed to the previous position), the cartridge presser B, the (blue) plastic support F, the scraper E, and with the 5 mm allen key the aluminium plastic bag presser D.
- 4.2.5.4 Ensure all components are tightened properly with the spanners and key previously employed.



### 4.3 Cartridge refill (Mod 210 - 245\* - 370\* - 450) to be provided by the operator

(\*) These models have a kit for conversion to cartridges.

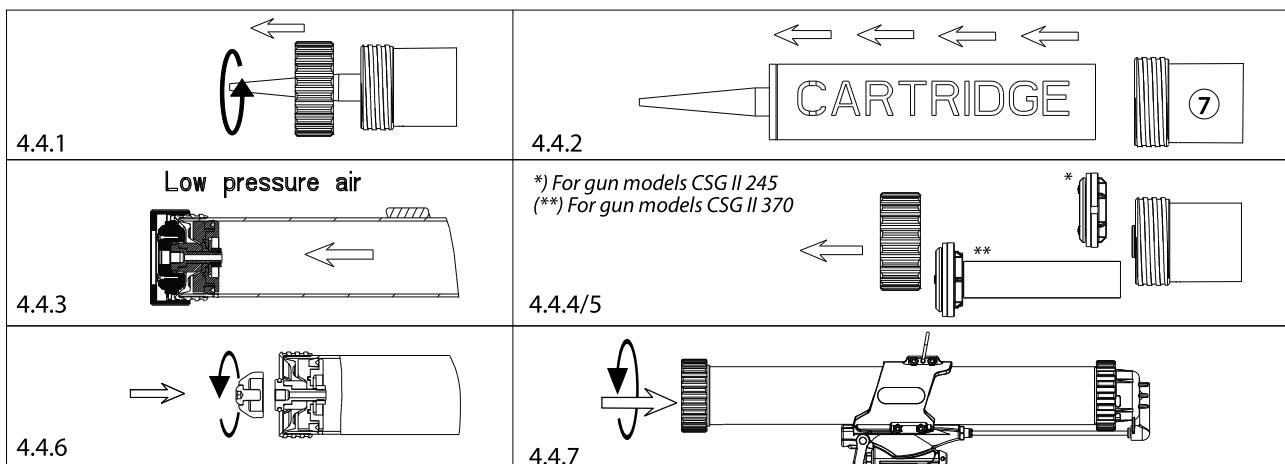
- Always disconnect the machine from the air supply when replacing the bag or at any other time when the front ring nut is unscrewed from the tube, to avoid inadvertent pressure on the lever from causing sudden ejection of the bag the crushing of the fingers or any other risk for the operator and people nearby.
- Always check the expiry date of all refill material used.
- Never attach damaged or defective bags or cartridges to the gun.
- Before disconnecting the air supply, press the control level to move the gun to the forward position, and never remove the front ring nut during this procedure.



- 4.3.1 Move the piston forward to the end of the stroke, after which shut off the air supply, then turn the front ring nut (2) anti-clockwise and remove it from the applicator.
- 4.3.2 Use a 5 mm Allen key to unscrew the bag pressing cone anti-clockwise and remove it from the gun.
- 4.3.3 Cut the front part of the thread of the cartridge while avoiding damaging the thread behind it, turn the plastic nozzle supplied clockwise with the cartridge attached, and then insert it on the gun the cartridge adaptor supplied (see exploded drawings); the adaptor must be fitted fully down onto the central brass element, fitted with a rubber O-ring, to ensure perfect airtight sealing; insert the cartridge onto the adaptor ensuring that the piston and adaptor are pushed fully down into their seat.
- 4.3.4 Cut the front part of the thread of the cartridge while avoiding damaging the thread behind it, tighten the plastic nozzle supplied clockwise with the cartridge on it, push the cartridge all the way in while pulling back the piston (CSG II 450), or push up to the rear seal at the back of the tube (CSG II 210)
- 4.3.5 Turn the front ring nut clockwise until it exerts sufficient pressure onto the cartridge.

If the piston assembly tends to rotate, use a slotted screwdriver inserted in the spokes of the blue scraper to adjust.

### 4.4 Refitting the bag attachment (Mod 245 - 370) by the operator



- 4.4.1 Disconnect or shut off the machine from the air supply, turn the front ring nut (2) anti-clockwise and remove.
- 4.4.2 Extract the cartridge from the material holder tube (7).
- 4.4.3 For safety purposes, refit the front ring nut (2) turning it clockwise through two turns only, then turn the pressure regulator anti-clockwise to the end of its stroke; connect the machine to the air supply, keeping the trigger pressure and then gradually unscrew the regulator clockwise until the gun and adaptor move forward; when these elements reach the front ring nut, shut off or disconnect the air supply.
- 4.4.4 Turn the front ring nut anti-clockwise.
- 4.4.5 Remove the adaptor with care.
- 4.4.6 Use a 5 mm Allen key to to screw on the bag pressing cone clockwise, tighten it fully down avoid excessive pressure.
- 4.4.7 Turn the front ring nut (2) clockwise.

## 5 - USE

- 5.1 See 4.1 for connection to the pneumatic air feed
- 5.2 Before using the applicator, always check:
  - 5.2.1 Opening the disconnection switch and supply air pressure regulator.
  - 5.2.2 The opening of the pressure regulator on the machine.
- 5.3 See 4.2 and following points for bag or cartridge refill.
- 5.4 Use the control lever to activate the applicator and start working.
- 5.5 Disconnect the air feed to stop using the machine ; if some material is left inside the cartridge, close it at the front to avoid product dry up.

## 6 - ADJUSTMENT

- 6.1 **Regulation of the extrusion speed and inlet air pressure.**  
Loosen the pressure regulator knob by turning it anti-clockwise to decrease the air pressure with consequent slower extrusion speed. On the contrary, tighten the pressure reducer knob by turning it clockwise to gradually increase the air pressure with consequent faster extrusion speed.
- 6.2 **Adjustment of the gun thrust**  
The standard operating pressure of the gun is from 4 to 8 BAR - 58/116 PSI according to material density. In case of extrusion of a very thick material or a greater density of the product because of a lower temperature in the work environment, directly adjust the feeding system pressure regulator. Increase air pressure to increase gun thrust.

## 7 - RESIDUAL RISKS

- **Violent ejection of the piston, material or adapters:** this occurs mainly and only when what is stated in this manual has not been scrupulously followed, or if the front part of the machine is defective or damaged. NEVER point the device at people or animals, and NEVER use it if the front nut or the front part of the material tube is obviously damaged, or in any case that it is obvious that the machine or one of its parts is not totally efficient, above all if located in the front part!
- **Air jet:** it mainly occurs when releasing the lever. In that moment, the air contained in the material holder tube is unloaded through the outlets. Pay attention not to put it close to eyes and ears; pay attention to the presence of dusts and dangerous volatile substances. Always use safety glasses and in case of volatile dusts, use appropriate individual protection devices to protect the respiratory system. Check their efficacy with the substances involved.
- **Lesions to hands:** it may mainly occur during loading and/or ordinary maintenance operations, the threads and the use of cartridges and bags opening tools can cause cuts or abrasions. Always use safety gloves.
- **Tube whiplash:** it mainly occurs when disconnecting the machine from the main system. The disconnected machine tube can move suddenly and unexpectedly; always use the disconnecter on the main system before disconnecting the machine.

## 8 - CLEANING AND ORDINARY MAINTENANCE to be carried out by the operator

 When carrying out cleaning and ordinary maintenance operations, the machine shall not be connected to the feeding system.

### Cleaning

FREQUENCY	CAUSES	DESCRIPTION
On each charge	Fresh material residues	Always carefully remove material residues from the machine surfaces, dispose in compliance with the applicable regulations in the country of use.
Every week	Dusts or filth	Carefully clean the exhaust air outlets (11.1) with a clean cloth and a detergent and check for potential clogging.
Every 2 weeks	Dusts, filth or material residues	Carefully clean the front ring nut thread (2) with a clean cloth and a detergent and the relevant thread on the cartridge holder tube.
Every 2 weeks	Dusts or filth	Carefully clean the connector between the machine and the feeding system (6) with a clean cloth and a detergent.
Every month	Dusts or filth	Carefully clean the machine with a clean cloth and a detergent, especially the handle, as ease of holding is a priority.
Every 2 weeks (CSG II 450 only)	Dusts, filth or material residues	After removing the material holder tube, carefully clean the transmission bar with a clean cloth and a detergent.

\* Time slots are to be intended as actual working time.

## Ordinary maintenance

FREQUENCY	OPERATION	DESCRIPTION
Every 2 weeks	Threads greasing	Grease the ring nut thread (2) as well as the relevant cartridge holder tube thread, with lubricating grease.
Every week	Material holder tube inner greasing	Grease the material holder tube inner surface with a brush.
Every 2 weeks	Dusts, filth or material residues	Carefully clean the front ring nut thread (2) and the relevant cartridge holder tube thread with a clean cloth and a detergent.
Every 2 weeks	Dusts or filth	Carefully clean the connector between the machine and the feeding system with a clean cloth and a detergent.
Every month	Dusts or filth	Carefully clean the machine, with a clean cloth and a detergent, especially the handle, as ease of holding is a priority.
Every 2 weeks (CSG II 450 only)	Transmission bar greasing	After removing the material holder tube carefully clean the transmission bar. Manually move forward the piston twice.

\* Time slots are to be intended as actual working time.

### 9 - EXTRAORDINARY MAINTENANCE to be carried out by the maintenance operator / dealer

- **Material holder tube gaskets replacement:** after extensive use air leakages on the back of the material holder tube may occur. The outlet OR needs to be replaced. Contact your dealer.
- **Replacement of the piston lip gasket (also for CSG II 450 thrust piston):** after extensive use an excessive waste of the thrust piston lip seal may occur, thus leading to a lower performance and air leakage on the front of the machine. The lip seal needs to be replaced. Contact your dealer.

### 10 - FAULTS AND BREAKDOWNS to be carried out by the maintenance operator / dealer

In the event of faults and/or breakdowns of gun components, do not try to repair them. Do not use the gun with temporary repairs or damaged or worn out components, or with non-original components used as a replacement. Repairs shall be carried out by authorized workshops or directly by the manufacturer. Contact your dealer.

### 11 - FREQUENT ISSUES

INCONVENIENTS	CAUSES	REMEDIAL ACTIONS
After charging the material and connecting the machine to the system, nothing occurs when pushing the lever.	No feeding.	Check disconnecting opening on the system. Check pressure regulators. Check for potential leakages in the tube.
Irregular or slow extrusion	Very thick product.	Increase air capacity with the flow regulator. Increase air pressure with the pressure regulator.
Loss of pressure and extrusion power of the machine.	Slow front ring nut. Damaged cartridge lip	Tighten the ring nut properly. Check cartridge user's instructions. Replace the damaged cartridge.
The machine does not work properly.	Damaged or dirty components.	Carry out cleaning and ordinary maintenance operations. If the issue is due to damaged components, contact your dealer.

### 12 - NOTE REGARDING REACH REGULATION NO. 1907/2006

According to the obligations of the above-mentioned regulation, the manufacturer reports that: some components of the series CSG II applicators contain a concentration of lead (Pb) CAS: 7439-92-1 greater than 0.1% calculated weight/weight, precisely in the brass parts and in some aluminium alloys a varying percentage but in any case less than 3% considering weight on weight.

Lead (Pb) is contained in the list of SVHC (Substances of Very High Concern) candidates of the ECHA (European Chemicals Agency).

### 13 - DISPOSAL

The components of our CSG II applicators are mostly made with highly recyclable materials. Please deliver the applicator to a qualified waste disposal centre so that it is disposed of in the proper manner and that its parts are sent to recycling. The information provided in point 12 must be notified to the waste disposer/recycler of the applicator.

### 14 - WARRANTY

The machines and their tools are covered by the warranty, if not subject to wear and tear, in compliance with European regulations. All components deemed faulty will be replaced by our technical department with no charges, only if returned without tampering or stains and if delivered DDP to our plant. The manufacturing company is not liable for personal injuries or damage to property due to products or gun misuses, which are expressly forbidden by this manual. In addition the company recommends to carefully comply with the user's instructions. The sale of disassembled, altered or incomplete machines or tools (upon specific request of the client) is not covered by warranty as our technical department could not test and approve them.