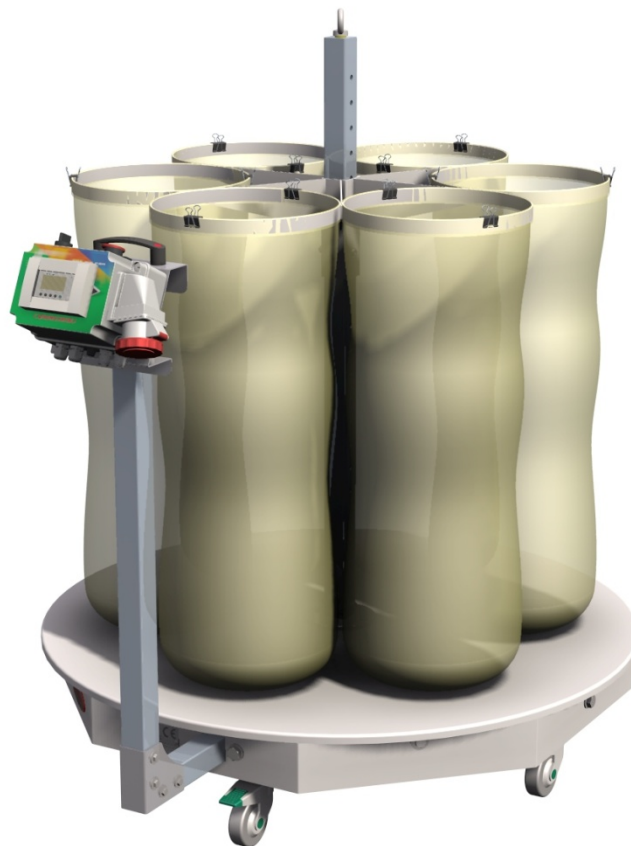


BAGS / BOXES CAROUSEL CPS/2 Series

User and maintenance manual



DECLARATION OF CONFORMITY

The company:

VIRGINIO NASTRI S.r.l.
Via Seconda Strada, 161 - Z.I. - 36071 ARZIGNANO (VI) ITALY
Tel. +39 - 0444 450 620 - 451 520
Fax +39 - 0444 671 840

declares under its own responsibility that the machine described below:

Type: **Bags/boxes carousel conveyor Mod. CPS/2**
Serial n°: **21608/12**
Year of production: **2012**

is **IN CONFORMITY** with the essential safety requirements dictated:

- **Machines Directive 2006/42/CE**
- **EMC 2004/108/CE**
- **LVD 2006/95/CE**

The following harmonised norms have been applied:

EN 50081 - 2 Electromagnetic compatibility – Generic emission standard - Industrial environment
EN 50082 - 2 Electromagnetic compatibility – Generic immunity standard - Industrial environment

The signer of the declaration is:

Surname: **Virginio**
Name: **Domenico**
Position in the company: **PRESIDENT of VIRGINIO NASTRI S.r.l.**
Place and date: **Arzignano, 19/11/2012**
Signature:

A handwritten signature in black ink, appearing to be 'D. P.' or similar, written in a cursive style.

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INTRODUCTION

P.1 MACHINE DATA

Producer:
 VIRGINIO NASTRI S.r.l.
 Via Seconda Strada, 161 - Z.I. - 36071 ARZIGNANO (VI) ITALY

Technical data regarding the CPS carousel (refer to the drawing on page 8)

Serie	CPS/2	
Electric supply voltage	400 V	50 Hz
Installed power (kW)	0.18	

DIMENSIONS AND MASS

Rotating plate diameter (mm)	1250	
Plate height (mm)	275	
Sack holding shaft height (mm)	1200	
Number Boxes Ø measures (mm)	5	430x350
Rotating plate turns (rpm)	5.8	
Total mass (Kg)	92	
Noise level at the operator's position in dB(A)	< 70	

For technical assistance and information:
 VIRGINIO NASTRI S.r.l.
 Via Seconda Strada, 161 - Z.I. - 36071 ARZIGNANO (VI) ITALY
 Tel. +39 - 0444 450 620 - 451 520
 Fax +39 - 0444 671 840

Note: The user instruction manual is an integral part of the machine itself. Familiarity with the points contained in this manual is essential for safe machine use. This booklet is the Instruction Manual of the previously identified machine and was compiled in accordance with the CEE 89/392 Directive, Annex I, par.1.7.4

P.2 HOW TO USE AND KEEP THE INSTRUCTION MANUAL

This instruction manual describes machine use as forecasted by design hypothesis, supplies information on how to transport, use, carry out maintenance on and dismantle the machine, and also how to order spare parts.
 The instruction manual is a part of the machine and must be kept “for future reference” until final dismantling. It must be kept in the most opportune manner in the place where the carousel is used, and must always be easily reachable.
 This manual mirrors the technical state of the machine at the machine marketing date.
 VIRGINIO NASTRI S.r.l. reserves the right to update production and manuals without the obligation to update previous production and manuals.
 A new manual can be requested if the one supplied with the machine is lost or damaged, or if another copy is necessary. When requesting a new copy, please refer to the data given on the CE plate on the machine.

P.3 SAFETY WARNINGS

In order to ensure maximum working reliability, VIRGINIO NASTRI S.r.l. accurately selects the materials and components used to produce the machine, which is regularly tested before shipment. Good machine return through time depends on correct use and suitable maintenance, in accordance with the instructions indicated in this manual.

All the construction elements, as well as the connection and command organs, have been designed and produced with a safety level that permits resistance to stress that is abnormal or at least above the levels indicated in this manual. The materials are of the best quality and their entry into the company, their storage and their use is constantly controlled in order to guarantee the absence of damage, deterioration and malfunctions.

It should, however, be remembered that:

- 1) THE MACHINE MUST NOT BE USED NOR INTERVENTIONS CARRIED OUT ON IT IF THIS MANUAL AND ALL ITS PARTS HAVE NOT BEEN FULLY READ AND UNDERSTOOD.
- 2) IT IS NECESSARY TO USE ALL THE PRECAUTIONS LISTED IN SECTION A: “SAFETY PRESCRIPTIONS AND INFORMATION”.
- 3) IT IS FORBIDDEN TO USE THE MACHINE IN CONDITIONS OR MANNERS THAT ARE DIFFERENT FROM THOSE INDICATED IN THE MANUAL. VIRGINIO NASTRI S.r.l. CANNOT BE HELD RESPONSIBLE FOR FAULTS, INCONVENIENCES OR INJURY CAUSED BY THE NON-OBSERVANCE OF THIS POINT.

This manual has been divided into three parts:

- | | |
|------------|---|
| SEZIONE A. | which looks at “SAFETY PRESCRIPTIONS AND INFORMATION” |
| SEZIONE B. | in which the MACHINE CHARACTERISTICS – OPERATION – TRANSPORTATION aspects are indicated |
| SEZIONE C. | which describes the MAINTENANCE AND LUBRICATION INTERVENTIONS with an annexed LIST AND DESCRIPTION OF THE SPARE PARTS |

To make reading easier, the following terms have been used:

DANGER

The term DANGER is used in situations where not respecting the regulations or tampering with organs can cause serious injury to people.

ATTENTION

The term ATTENTION is used in situations where not respecting the instructions can damage the machine or other elements associated with it or the surrounding environment

SECTION A

General information on how to use the machine safely

A.1 AUTHORISED MACHINE USE

The carousel precisely counts the number of moulded pieces that accumulate in each sack/box. It is generally positioned at the belt conveyor discharge point.

The following can be regulated:

- The delay time for piece unloading
- The number of moulds desired
- The number of available sacks.

ATTENTION

The maximum weight that can be loaded onto the carousel should not exceed a total of 50 Kg.

The carousel can be easily used by all people who operate the plant in which it is installed, and if used correctly does not present any risks for the operator.

We recommend reading this manual, however, before using the machine.

VIRGINIO NASTRI S.r.l. declines any responsibility in the following cases:

- If the carousels are used in evident contrast to the manner indicated in this instruction booklet
- If there are supply faults
- If the necessary maintenance is not carried out as indicated
- If unauthorised modifications are made
- If unauthorised spare parts or spare parts that are not specifically for the model are used
- In cases of exceptional events

A.2 INFORMAZIONI SUI RISCHI RESIDUI

Residue risk: a risk that remains in spite of all the precautions adopted, or a potential risk that is not evident (Directive 89/392/par.1.7.2.).

The carousel does not present residue risks for the operator, as long as the instructions given in this manual are followed.

A.3 REFERENCE STANDARDS AND PROVISIONS

- The carousel was designed and manufactured to satisfy the Essential Safety requirements as dictated by the 89/392 Directive, Annex I.
- Reference is made to the EN 60204 – 1 Standard, September 1993 edition, for electric equipment.

SECTION B

Information on how to use the carousel

WARNING: Before reading this section you must be familiar with what is indicated in section A, an integral part of the user manual which must be understood for using the machine SAFELY.

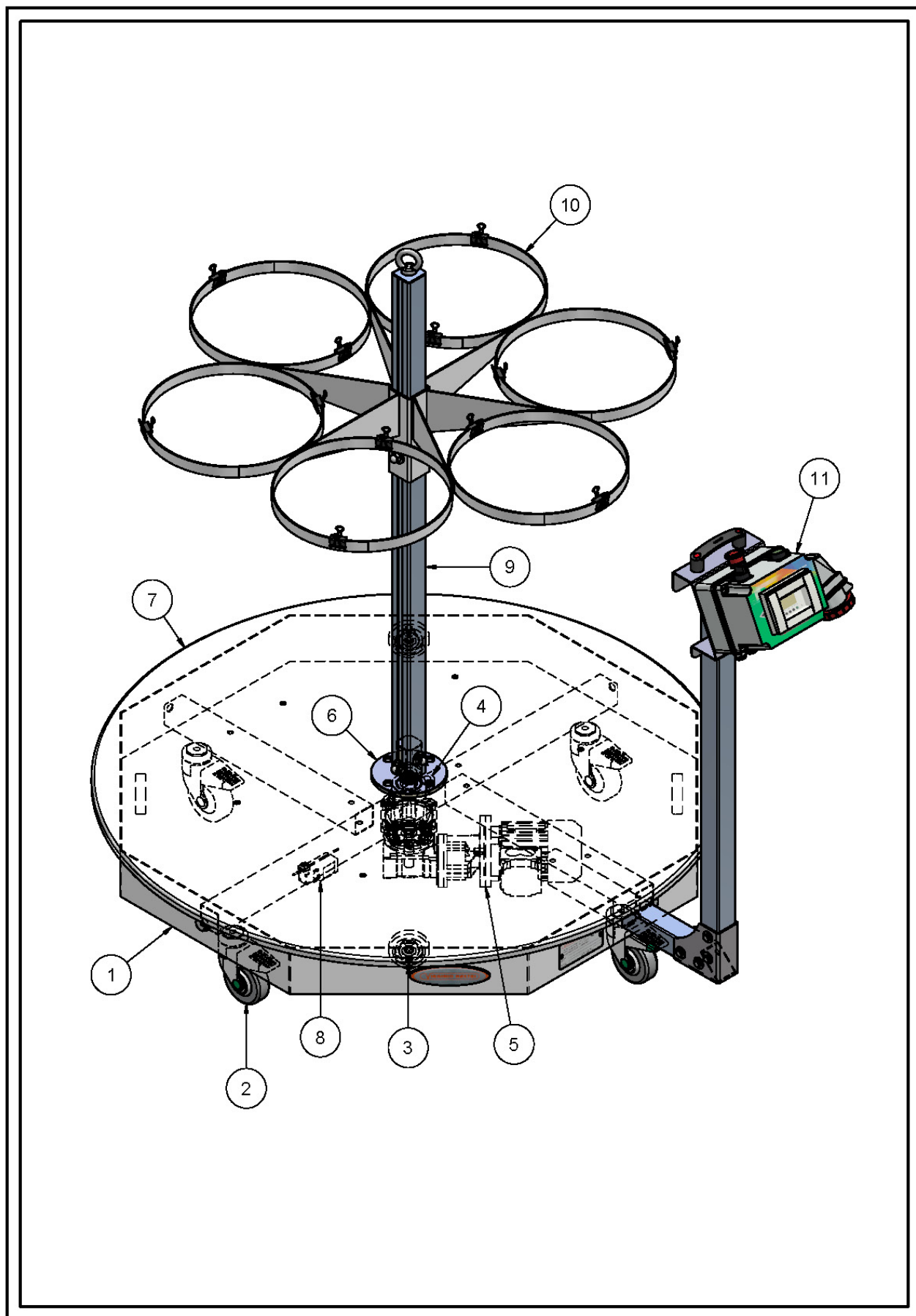
B.1 TECHNICAL DESCRIPTION

The machine of this series is made up of a support frame (1) supported by 4 casters with locking device (2). The casters make it easier to move the machine around the work area. The machine also has internal support wheels (3) and a bearing support (4). There is a motor/gearbox (5) which transmits the rotational movement to the shaft (6) and the steel plate (7) over the frame. On the plate there are stop positions for bag changing controlled by a position bar switch (8) fixed on the support frame.

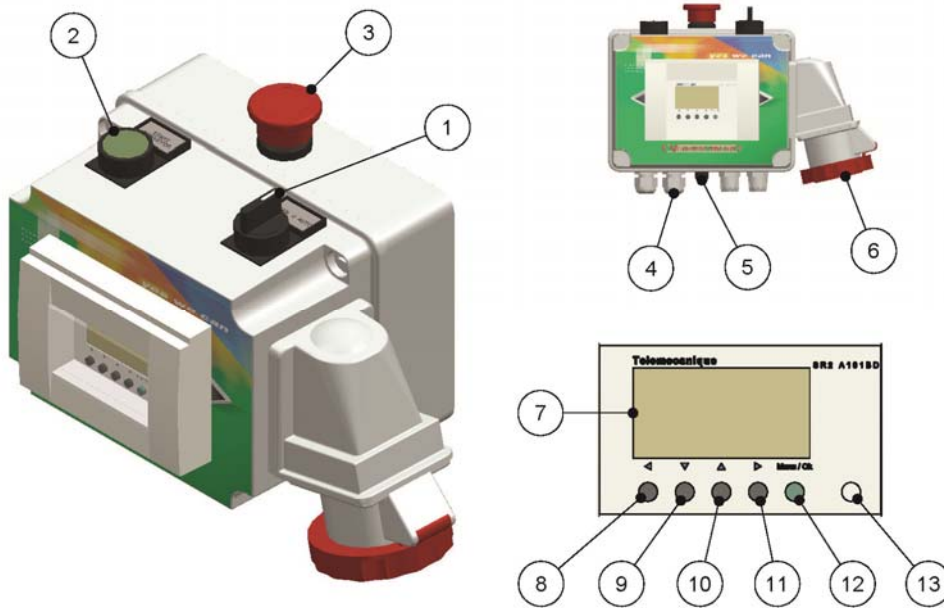
A tube (9) fixed on the shaft allows height adjustment of the support bag rings (10) by fixing screws.

This machine is commanded by an independent electric panel (11) which allows pieces counting and bag changing

The noise level at the operator's work place is <70 dB(A).



B.2 COMMANDS



Pic. A

Control box (Pic. A)

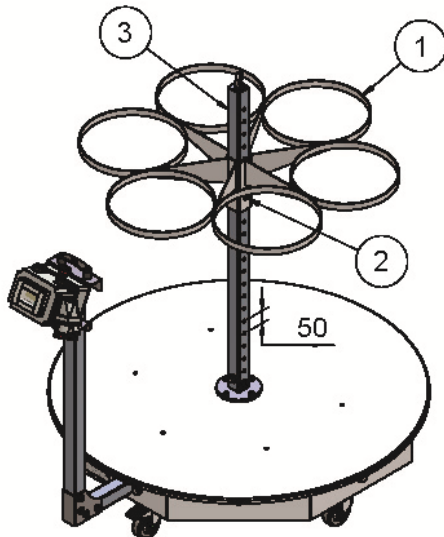
1. Manual/Automatic selector
2. Stop/start conveyor's switch
3. Emergency stop button
4. Cable connection for external signal
5. Fusible
6. Feeding conveyor socket
7. Display
8. Direction button ◀
9. Direction button ▼
10. Direction button ▲
11. Direction button ▶
12. Button **MENU / OK**
13. Button **SHIFT**

Emergency stop: when necessary remove the electric panel power plug.

CC1 = No. OF MOULD SHOTS	DISPLAY	TT1 = DELAY TIME	DISPLAY
1. Connect the control box power supply and place selector (1) to AUT	1 2 3 4 5 6 RUN LD	1. Connect the control box power supply and place selector (1) to AUT	1 2 3 4 5 6 RUN LD
2. Push MENU (12)	1 2 3 4 MONITORING PARAMETER RUN/STOP VERSION	2. Push MENU (12)	1 2 3 4 MONITORING PARAMETER RUN/STOP VERSION
3. Push ▼ (select PARAMETER) and press OK	CC1 COUNTER RC1 C1 V=+00000 C1 ⓈDC↑T:T0 P=00004	3. Push ▼ (select PARAMETER) and press OK	CC1 COUNTER RC1 C1 V=+00000 C1 ⓈDC↑T:T0 P=00004
4. Select CC1 parameter	CC1 COUNTER RC1 C1 V=+00000 C1 ⓈDC↑T:T0 P=00004	4. Push ▲ twice to shift from CC1 to TT1	TT1 TIMER A RT1 T1t = 000.0 T1 Ⓢt=001.1 S
5. Push ▶ twice to change the selected parameter	CC1 COUNTER RC1 C1 V=+00000 C1 ⓈDC↑T:T0 P=00004	5. Push ▶ to change the selected parameter	TT1 TIMER A RT1 T1t = 000.0 T1 Ⓢt=001.1 S
6. Using ▲ ▼ buttons increase or decrease the actual value until you reach the desired value and push OK	CONFIRM CHANGES ? YES NO	6. Using ▲ ▼ buttons increase or decrease the actual value until you reach the desired value and push OK	CONFIRM CHANGES ? YES NO
7. Push OK to confirm YES, to return to point 5. Then push MENU button to display the main menu	1 2 3 4 5 6 RUN LD	7. Push OK to confirm YES, to return to point 5. Then push MENU button to display the main menu	1 2 3 4 5 6 RUN LD

Note: the command panel can receive external consent both in 24V and with a clean contact. For 24V consent, connect the white cable to negative and the green one to positive. For clean contact, connect the brown cable and the green cable.

B.3 REGULATIONS



Pic. B

Regulating the height of the sack holding rings (Pic. B)

To regulate the height of the sack holding rings, the operator must loosen the screw (2) and adjust the sack holding rings along the tube (3). Once the desired height has been reached, reinsert and fix the screw (2).

B.4 TRANSPORTATION AND INSTALLATION

Transportation

The carousel is packed using stretch film and the electric apparatus is additionally protected by sponge rubber.

ATTENZIONE:

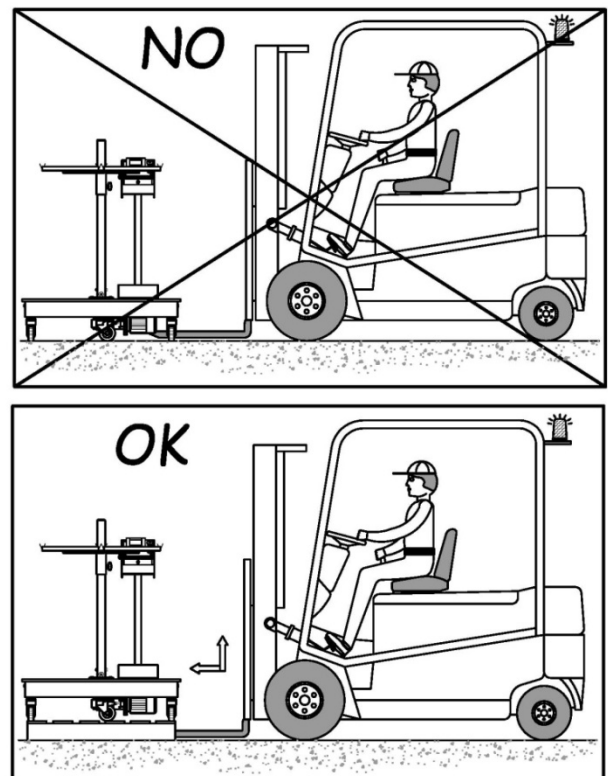
The packing material (plastic film and sponge rubber) should not be disposed of in the environment but in accordance with current norms.

The carousel should be raised using a fork lift truck. The overall dimensions of the carousel are given in paragraph P.1.

DANGER:

For operator safety and machine integrity, please refer to Pic. C, which shows where to insert the forks in order to raise the carousel in a stable manner.

Once on the lorry loading surface, the machine should be fixed using levers to block the wheels. Suitable slings or fixing methods should also be prepared to ensure stability during transportation.



Pic. C

Installation

No particular preliminary operations are necessary when starting the carousel for the first time.

The carousel should be connected to an outlet having suitable characteristics. Use the supplied plug.

When laying the cables, please make sure that they are protected against damage and that they cannot trip the operators.

ATTENTION:

Before starting the carousel:

- make sure that the supply voltage corresponds to the one indicated on the plate. The plate can be found on the electric panel
- make sure that the motors are rotating in the correct direction. Also make sure that the carousel rotates clockwise and in the direction shown by the arrow

ATTENTION:

When the machine has been installed, lock the casters using the levers on each wheel.

SECTION C

Information on maintenance and repairs

C.1 MAINTENANCE INSTRUCTIONS

GENERAL NOTES

The operator must ensure that the machine is kept clean of foreign material such as deposits, oil or others.
The machine should therefore be cleaned at the end of each work shift when it has stopped and is in a stable condition.

ATTENTION:

Before starting, the operator should switch off the carousel and extract the mains plug to avoid any possibility of accidental starting.

If compressed air is used to clean the machine, protective goggles with additional mask should be used. Any people in the surrounding area should also be removed to avoid the danger of being hit and injured by material and dust.

Do not use pressurised water directly on the electric apparatus.

It is forbidden to use flammable liquids for cleaning.

Periodically check the state of the plates and replace them if necessary.

Once the machine has been cleaned, the operator should make sure that there are no worn or damaged parts (if there are, immediately request the intervention of the maintenance technician) or parts that are not solidly fixed (do as much as possible).

The operator and maintenance technician must wear suitable working clothes that do not fly about, and should not wear chains, bracelets or other items that could easily catch in the moving mechanical organs. Operators with long hair should use a hairnet to prevent the risk of entanglement.

The protection and safety devices must not be removed unless a repair and/or maintenance operation is to be carried out.

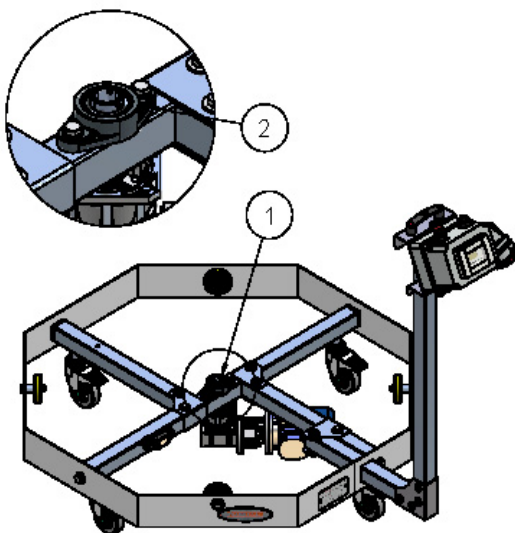
These devices must be replaced as soon as the reason for their temporary removal has been corrected, and in any case before the machine is started again.

ATTENTION:

The carousel does not require particular maintenance operations, just some simple interventions.

Inspect to ensure that:

- the electric cable insulation sheath is in good condition (approx. every 2000 working hours).



Pic. D

ATTENTION:

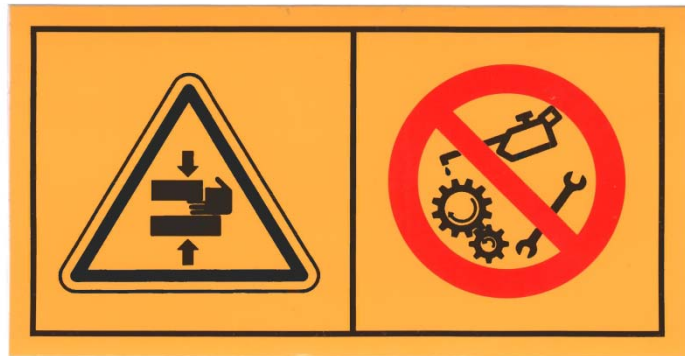
Before carrying out this operation, the machine should be put out of service. In addition, the plug should be pulled out from the mains after the carousel has been switched off.

Lubrication:

grease the support (1) under the rotating plate every month.
Fill the lubricator (2) by oil as shown in Pic. D.

C.2 PLATES AND WARNINGS

The following danger symbol is present on the wrapping of terminal boards that can be powered:



The plate shown below is also present on the belt:



C.3 SPARE PARTS

Whenever it is necessary to order spare parts, please refer to the address given in para. P1. When ordering, always give the part code and the requested quantity of each part ordered.

Note: Only original spare parts supplied by VIRGINIO NASTRI S.r.l. guarantee operation reliability.

It should be noted, in particular, that some components have safety characteristics for the personnel, therefore these pieces should only be replaced with the parts recommended by VIRGINIO NASTRI S.r.l.

SPARE PARTS AND CODES

<u>CODE</u>	<u>DESCRIPTION</u>
CPS 001	SUPPORT FRAME
CPS 002	CASTERS WITH BRAKE
CPS 003	SUPPORT UCFL 204
CPS 004	PLATE SUPPORT WHEELS
CPS 005	POSITION BAR SWITCH
CPS 006	MOTOR/GEARBOX
CPS 007	ROTATING PLATE
CPS 008	STOP POSITION FOR BAG/BOX
CPS 009	DRIVE SHAFT
CPS 010	TUBE FOR HEIGHT ADJUSTMENT
CPS 011	RINGS FOR BAGS HOLDING
CPS 012	CLIP FOR BAG STOP (32 mm)
CPS 013	STOPS FOR BOXES POSITION (OPTIONAL)
CPS 014	CONTROL BOX SUPPORT STAND
CPS 015	CONTROL BOX

