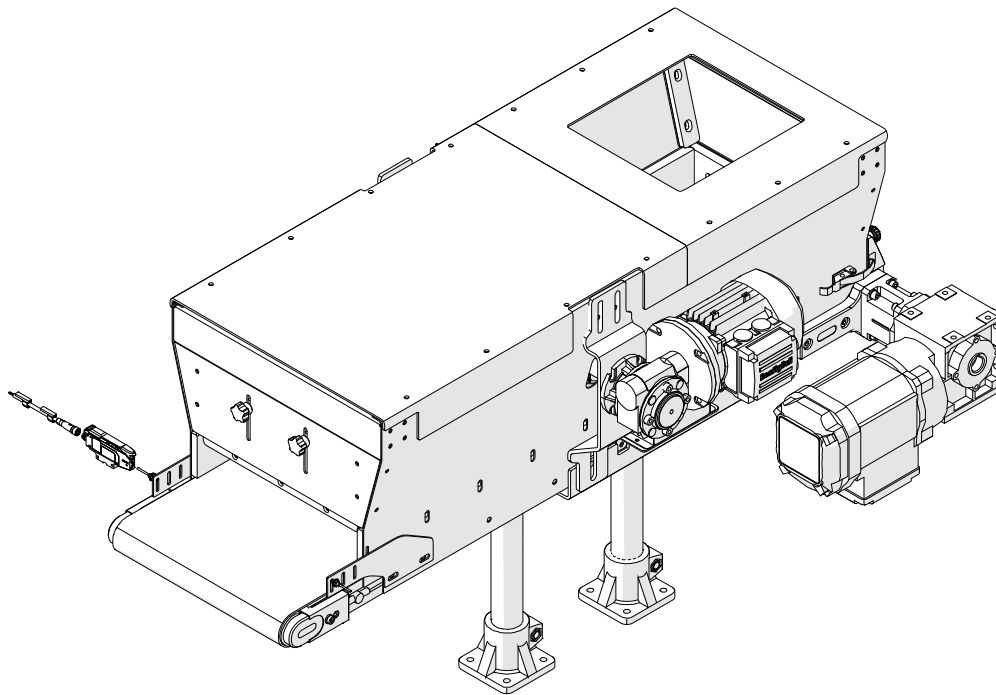


# ASSEMBLY MANUAL

TRANSLATION OF THE ORIGINAL INSTRUCTIONS



## CONVEYOR HOPPER Mod. CH60 Capacity 60 L

EAR OF MANUFACTURE:

2022

Revision 1.0 - Edition 09/2022

**ARS S.r.l.**

Via P. Gobetti, 19 - 52100 Arezzo (AR) Italy

Tel. +39 0575 398611 - Fax +39 0575 398620

info@arsautomation.com - www.arsautomation.com

## **INTRODUCTION**

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## **EDITOR'S NOTE**

This documentation is specifically intended for technicians; therefore, some of the information that can easily be understood from reading the texts and analysing the drawings might not be detailed further.

The Publisher is in no way responsible for the information and data in this manual: all of the information contained herein has been provided, checked and approved by the Manufacturer.

The Publisher is in no way liable for the consequences resulting from any incorrect operations carried out by the user.

## **GENERAL REMARKS**

All of the operating and maintenance instructions and recommendations described in this manual must be followed.

To obtain the best results, the Manufacturer recommends that the cleaning and maintenance operations be carried out regularly to keep the partly completed machinery in perfect working order.

It is particularly important to train personnel in charge of the partly completed machinery on its use, as well as on maintenance and monitoring compliance with the operating procedures and with all of the safety regulations set forth in this manual.

Edition: 09.2022

Revision: 1.0

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# 1 IDENTIFICATION

## 1.1 Manufacturer's Identification

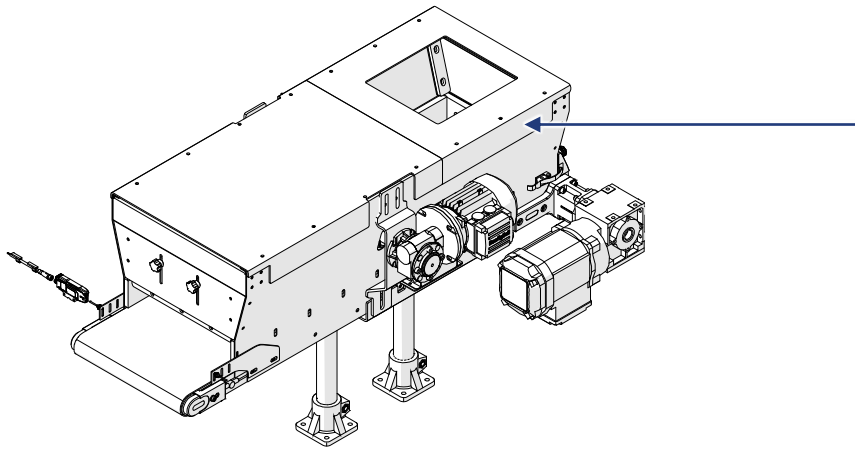
|                     |   |
|---------------------|---|
| <b>Manufacturer</b> | <b>ARS S.r.l.</b>   |
| <b>Address</b>      | Via P. Gobetti, 19<br>52100 Arezzo (AR) - Italy<br>Tel. +39 0575 398611 - Fax +39 0575 398620<br>info@arsautomation.com - www.arsautomation.com |

## 1.2 Identification of the partly completed machinery

|                            |                                 |
|----------------------------|---------------------------------|
| <b>Typology</b>            | HOPPER WITH POWER CONVEYOR BELT |
| <b>Name</b>                | CONVEYOR HOPPER                 |
| <b>Model</b>               | CH60                            |
| <b>Capacity</b>            | 60 L                            |
| <b>Serial no.</b>          | 1145061022                      |
| <b>Year of manufacture</b> | 2022                            |

### 1.3 Identification plate

The partly completed machinery is equipped with an **identification plate** located on the side of the belt drive. By communicating the data engraved on the rating plate to the manufacturer, the exact identification of the partly completed machinery can be obtained.



|   |  |   |                     |
|---|--|---|---------------------|
| <br>www.arsautomation.com<br>www.flexibowl.com |  | Via G. Vico, 7<br>52100 Arezzo<br>Italy | <b>Year</b><br>2022 |
| <b>Model</b><br>Conveyor Hopper 60lt DX<br>with motorized brush   | <b>ID Number</b><br>GM000853 +<br>GM000860 | <b>Serial Number</b><br>1145061022      |                     |
| <b>Input Voltage</b><br>400 VAC/50Hz  | <b>Power</b><br>0,18 +0.09 kW              | <b>Weight</b><br>45 kg                  |                     |



**CAUTION!**

It is strictly forbidden to remove the identification plate and/or replace it with other plates. If the plate is damaged or removed accidentally, the customer must inform the Manufacturer.

## 1.4 Content of the Declaration of Incorporation



Ars srl  
Via G. Vico, 7 – 52100 Arezzo  
Tel +39 0575 398611 Fax +39 0575 398620

**DICHIARAZIONE ORIGINALE**  
**DICHIARAZIONE DI INCORPORAZIONE DI QUASI MACCHINA**  
Ai sensi della Direttiva Macchine 2006/42/CE, allegato II.1.B

Il fabbricante

**ARS srl**

Via Giambattista Vico, 7, 52100 Arezzo, Italia  
Tel +39 0575 398611 Fax +39 0575 398620

E-mail: [info@arsautomation.com](mailto:info@arsautomation.com) website: [www.arsautomation.com](http://www.arsautomation.com)

dichiara che la quasi-macchina:

|                 |   |
|-----------------|---|
| Nome            | <b>Tramoggia a nastro 60 litri</b>  |
| Designazione    | <b>Tramoggia con nastro trasportatore motorizzato capacità 60 litri</b>   |
| Revisione       | <b>1.0 e seguenti</b>   |
| Modello         | <b>CH60</b>   |
| Numero di Serie | <b>così composto CONFOIDMMYY (CONFO numero conferma d'ordine o commessa, ID numero progressivo esemplare, MM mese, YY anno)</b> |
| Funzione        | <b>Sistema a nastro per l'alimentazione di componenti sfusi</b>   |

ottempera i seguenti Requisiti Essenziali di Sicurezza della **Direttiva Macchine 2006/42/CE**:

1.1.1, 1.1.2, 1.1.3, 1.3.7, 1.5.1, 1.5.5, 1.5.6, 1.5.8, 1.6.1, 1.7.1, 1.7.3, 1.7.4

Dichiara inoltre che:

- la quasi-macchina è conforme alle seguenti direttive comunitarie pertinenti
  - Direttiva Macchine **2006/42/CE**
  - Direttiva Compatibilità Elettromagnetica **2014/30/UE**
- la documentazione tecnica pertinente è stata compilata in conformità dell'allegato VII B della Direttiva 2006/42/CE;
- ARS srl si impegna a trasmettere, in risposta a una richiesta adeguatamente motivata delle autorità nazionali, informazioni pertinenti sulla presente quasi-macchina;
- il fascicolo tecnico della quasi macchina è costituito e custodito presso la sede operativa e legale di ARS srl e la persona incaricata è MARCO MAZZINI nato ad Arezzo il 03/09/1955, codice fiscale MZZMRC55P03A390D, legale rappresentante di ARS srl.

***La quasi-macchina non deve essere messa in servizio finché la macchina finale in cui deve essere incorporata non è stata dichiarata conforme, se del caso, alle disposizioni della direttiva 2006/42/CE.***

Arezzo, 31/08/2022

Il legale rappresentante di ARS srl  
Ing. MARCO MAZZINI

## 1.5 Reference directives

To certify compliance of the partly completed machinery with the provisions, before placing it on the market the Manufacturer carried out the risk assessment in order to verify compliance with the essential health and safety requirements of the Directive as well as the tests and inspections required by the applicable reference standards. The technical construction file was prepared in compliance with the provisions of Annex VII of **Directive 2006/42/EC** and is available for inspection by the supervisory bodies upon a reasoned request, as required by the legal provisions in force.

The manufacturer therefore places the partly completed machinery on the market together with:

|                                     |   |
|-------------------------------------|---|
| <b>Declaration of Incorporation</b> |   |
| <b>Instruction manual</b>           | Drafted according to point 1.7.4 and Annex VI of the Machinery Directive 2006/42/EC |

it should also be noted that the partly completed machinery has been designed in compliance with the following Directives:

|                   |   |
|-------------------|---|
| <b>2006/42/EC</b> | Machinery Directive                     |
| <b>2014/30/EU</b> | Electromagnetic Compatibility Directive |

and that the following harmonised standards have been applied:

|                              |   |
|------------------------------|---|
| <b>UNI EN ISO 12100:2010</b> | Safety of machinery - General principles for design - Risk assessment and risk reduction. |
|------------------------------|---|



## 2 PRELIMINARY INFORMATION

### 2.1 Recipients

**The manual is intended for operators in charge of using and controlling the partly completed machinery throughout all stages of its technical life.**

It contains topics that refer to correct use of the partly completed machinery, in order to maintain its operating and quality features unchanged over time.

It also contains all of the information and warnings needed for safe and correct use.

The manual, like the Declaration of Incorporation, is an integral part of the partly completed machinery and must always accompany it whenever it is moved or resold.

It is the responsibility of the user to keep this documentation intact so that it can be consulted throughout the partly completed machinery's service life.

### 2.2 Supply and storage

The manual is supplied in **paper and electronic format**.

All additional documentation is provided as an annex to this manual.

Store this manual with the partly completed machinery so that it can be easily consulted by the operator.

The manual is an integral part for safety purposes, therefore:

- **it must be kept intact** (in all its parts); if it is lost or damaged, a copy must be requested immediately.
- **It must follow the partly completed machinery until it is scrapped** (even if it is relocated, sold, etc.);
- **the attached documents are an inherent part of this documentation** therefore the same recommendations/requirements in this manual apply to them.

The **Manufacturer** disclaims any liability for partly completed machinery misuse and/or for damage caused following operations not specified in the technical documentation.

### 2.3 Updates

If the partly completed machinery requires modifications or functional replacements, the Manufacturer is responsible for reviewing or updating the manual.

The Manufacturer is in charge of delivering the updated manual.

Moreover, if this document is altered in any way by the Manufacturer, the user is responsible for ensuring that only the updated version of the manual is actually made available in the points of use.

### 2.4 Language

The original manual is written in **Italian**.

Any translations into additional languages must be done from the original instructions.

The Manufacturer shall be held responsible for the information in the original instructions; translations into different languages cannot be completely verified, therefore, if an inconsistency is found, please follow the text in the original language or contact our Technical Documentation Office.

## 2.5 Operators



In order to establish with certainty what the skills and qualifications are of the operators assigned with the various tasks (start-up, cleaning, maintenance), see the table below:

| QUALIFICATION                                   | DEFINITION  |
|---|---|
| <p><b>Operator</b></p>                          | <p>Manufacturer's trained personnel who are qualified to use and run the partly completed machinery for production purposes for the activities it was built and supplied for.</p> <p>He/she must be able to perform all of the operations required for smooth operation of the partly completed machinery and to safeguard himself/herself and any co-workers. He/she must have proven experience on correct use of this kind of machine and be duly trained, informed and instructed.</p> <p>If in doubt, he/she must report any anomalies to his/her supervisor.</p> <p><b>Note:</b> he/she is not authorised to carry out any maintenance work.</p>  |
| <p><b>Mechanical maintenance technician</b></p> | <p>Qualified technician able to carry out preventive/corrective maintenance work on all mechanical parts of the partly completed machinery subject to maintenance or repairs.</p> <p>Qualified technician able to access all parts of the partly completed machinery for visual inspections, checking equipment conditions, adjustments and calibrations.</p> <p>Qualified technician able to:</p> <ul style="list-style-type: none"> <li>• run the partly completed machinery like an operator;</li> <li>• work on the mechanical parts for adjustments, maintenance and repairs;</li> <li>• read system diagrams, technical drawings and spare parts lists.</li> </ul> <p>In extraordinary cases, he/she is trained to operate the partly completed machinery with reduced safety devices.</p> <p>Where necessary, he/she can give the operator instructions on how to use the partly completed machinery properly for production purposes.</p> <p><b>Note:</b> he/she is not qualified to work on live electrical systems (if present).</p>  |
| <p><b>Electrical maintenance technician</b></p> | <p>Qualified technician able to carry out preventive/corrective maintenance work on all electrical parts of the partly completed machinery subject to maintenance or repairs.</p> <p>Qualified technician able to access all parts of the partly completed machinery for visual inspections, checking equipment conditions, adjustments and calibrations.</p> <p>Qualified technician able to:</p> <ul style="list-style-type: none"> <li>• run the partly completed machinery like an operator;</li> <li>• work on the adjustments and electrical systems for maintenance, repairs and replacement of worn parts;</li> <li>• read the wiring diagrams and ensure that the operating cycle is correct.</li> </ul> <p>Where necessary, he/she can give the operator instructions on how to use the partly completed machinery properly for production purposes.</p> <p>In the presence of voltage, he/she can work in the electrical panels, junction boxes, control equipment, etc. only if he/she is a person in charge of an electrical installation (PEI - Refer to <b>EN50110-1</b>).</p> |
| <p><b>Lifting vehicle driver</b></p>            | <p>A person in good health who by title, position or experience is trained and instructed in load handling and the operation of lifting equipment.</p>  |

The qualifications indicated in the previous table must fall under a category of persons defined as “**trained person**”:

| QUALIFICATION         | DEFINITION  |
|-----------------------|---|
| <b>Trained Person</b> | An individual that has been informed, instructed and trained on the job and on any hazards resulting from improper use.<br>He/she also knows the importance of the safety devices, the accident prevention regulations and the safe working conditions. |

## 2.6 Symbols used in the manual

| SYMBOL  | DEFINITION  |
|---|---|
|  | Symbol used to identify important warnings for the safety of the operator and/or the partly completed machinery.  |
|  | Symbol used to identify important information in the manual.<br>The information also concerns the safety of personnel involved in partly completed machinery use. |

## 2.7 Glossary

Technical terminology or terminology with an uncommon meaning is used in the manuals.

The terms used are explained below:







| TERM                             | DEFINITION  |
|----------------------------------|---|
| <b>Lifting accessories</b>       | Components or equipment not attached to the machines, placed between the machine and the load or on the load itself, allowing the load to be held. Slings and their components are also regarded as lifting accessories.  |
| <b>ATEX</b>                      | <b>It</b> derives from the words <b>AT</b> mosphères and <b>EX</b> plosibles and is the conventional name for two European Union (EU) directives: <ul style="list-style-type: none"> <li>• <b>2014/34/EU</b> for the regulation of equipment intended for use in explosion risk areas;</li> <li>• <b>99/92/EC</b> for the safety and health of workers in explosive atmospheres or potentially explosive environments.</li> </ul> |
| <b>Chains, ropes and webbing</b> | Elements designed and built for lifting purposes as part of lifting machinery or lifting accessories.   |
| <b>Forklift truck</b>            | Operating vehicle used for the handling of goods inside warehouses, industrial environments or on outdoor yards or for loading/unloading from means of transport equipped with wheels and driven by electric, diesel and gas engines.   |
| <b>Harm</b>                      | Any negative consequence deriving from the occurrence of a hazardous event.   |
| <b>P.P.E.</b>                    | Personal Protective Equipment (PPE) is clothing or equipment designed to protect the worker (operator, maintenance technician, technician, etc.) wearing it or carrying it against health and safety hazards.   |
| <b>Fault</b>                     | State of an item characterized by inability to perform a required function.   |

| TERM                                 | DEFINITION   |
|--------------------------------------|--|
| <b>Machinery</b>                     | An assembly, fitted with or intended to be fitted with a drive system, consisting of linked parts or components, at least one of which moves, and which are joined together for a specific application.  |
| <b>Protective measure</b>            | Measure intended to achieve risk reduction, implemented: <ul style="list-style-type: none"> <li>• by the designer (inherently safe design, safeguarding and complementary protective measures, information for use) and/or</li> <li>• by the user (organization: safe working procedures, supervision, permit-to-work systems; provision and use of additional safeguards; use of personal protective equipment; training).</li> </ul>   |
| <b>Hazard</b>                        | Potential source of injury or damage to health.  |
| <b>Exposed person</b>                | Any person wholly or partially in a danger zone.   |
| <b>Prevention</b>                    | The set of provisions or measures that are also necessary according to the particular nature of the work, experience and technique, in order to avoid risks or reduce the probability of their occurrence.   |
| <b>Safeguard</b>                     | Defence against what could cause harm. An element that is placed between who may be harmed and what can cause said harm due to hazards which cannot reasonably be eliminated or from the risks which cannot be sufficiently reduced by inherently safe design measures. Identified as follows: <ul style="list-style-type: none"> <li>• active safeguard that the operators themselves must activate (for example emergency stops) and/or wear (PPE);</li> <li>• passive safeguard that intervenes without human control.</li> </ul> |
| <b>Partly completed machinery</b>    | An assembly which is almost machinery but which cannot in itself perform a specific application.   |
| <b>Guard</b>                         | Physical barrier, designed as part of the machine to provide protection.   |
| <b>Fixed guard</b>                   | Protection held in place (i.e. closed) either permanently (welded) or by means of fastening systems (screws, bolts, etc.) that make it impossible to remove/open without the use of tools (spanners, screwdrivers or Allen keys). Easy-to-remove fastening systems (e.g. plastic knobs) are not permitted.   |
| <b>Movable guard</b>                 | A guard mechanically connected to the machine structure (e.g. with hinges or guides) that can be opened without the use of tools.  |
| <b>Risk</b>                          | Combination of the probability of an injury occurring and the severity of that injury.   |
| <b>Residual risk</b>                 | Risk remaining after protective and preventive measures have been implemented.   |
| <b>Intended use</b>                  | Use of machinery in accordance with the information provided in the instructions for use.  |
| <b>Reasonably foreseeable misuse</b> | Use of machinery in a way not intended by the designer, but which may result from readily predictable human behaviour.   |

## 2.8 Personal protective equipment

When working close to the partly completed machinery, either for installation operations or for maintenance and/or adjustments, it is required to strictly comply with the general accident prevention regulations; for this reason, it is important to use the **personal protective equipment (P.P.E.)** required for each operation.

Below is a full list of the P.P.E. that may be required for the various procedures:

| SYMBOL  | DESCRIPTION  |
|---|--|
|    | <b>Obligation to wear safety or insulating gloves.</b><br>Indicates a requirement for personnel to wear safety gloves for professional use.  |
|    | <b>Obligation to wear safety glasses.</b><br>Indicates a requirement for personnel to wear safety glasses to protect the eyes.   |
|    | <b>Obligation to wear safety shoes.</b><br>Indicates a requirement for personnel to wear safety shoes to protect the feet.   |
|   | <b>Obligation to wear noise protection devices.</b><br>Indicates a requirement for personnel to wear earmuffs or earplugs to protect hearing.  |
|  | <b>Obligation to wear protective clothing.</b><br>Indicates a requirement for personnel to wear specific protective clothing.  |
|  | <b>Obligation to read the instruction manual/booklet.</b><br>Indicates a requirement for personnel to read (and understand) the instructions for use and safety warnings for the partly completed machinery before using it. |

The clothing of those operating or performing maintenance on the partly completed machinery must comply with the essential safety requirements defined in **Reg. EU 2016/425** and the laws in force in the country where it is installed.

## 2.9 Warranty

**IMPORTANT!**

**The full warranty terms are included in the sales contract.**

**The conditions set forth in the sales contract (if different) have priority over the contents of this section.**

The warranty **is subject** to the following general conditions:

- **opening of packaging and incorporation** must be carried out in the presence of technicians authorised by the Manufacturer;
- **the first start-up and** successful testing of the partly completed machinery must be carried out in the presence and under the guidance of the manufacturer's technicians, unless otherwise agreed between the parties;
- **the partly completed machinery must be used within the limits declared** in the contract and specified in the technical documentation;
- **maintenance** must be carried out within the times and in the ways indicated in the manual, using original spare parts and entrusting the operations to qualified personnel.

The warranty shall be rendered **null and void** in the event of:

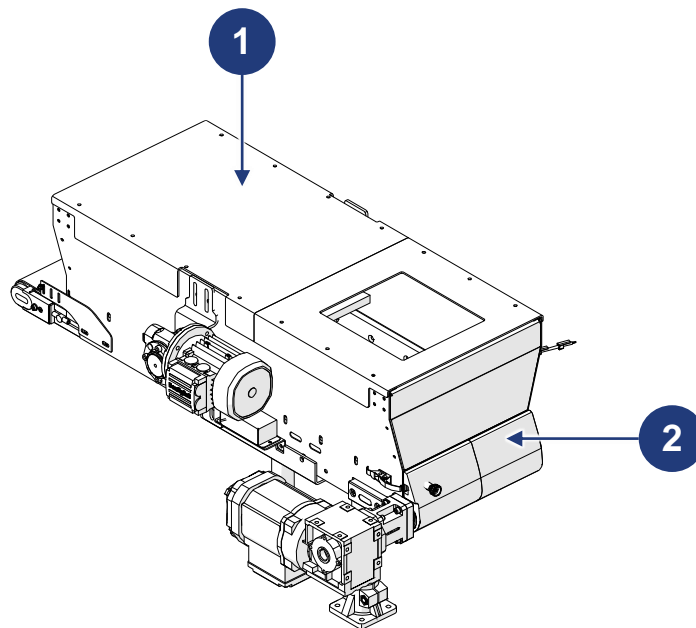
- failure to follow the **safety regulations**;
- **removal or tampering with** control and safety devices (guards, sensors, etc.);
- **misuse of** the partly completed machinery;
- **use of the partly completed machinery by untrained and/or unauthorised personnel** or failure to comply with the required skills of the various operators, as indicated in this manual;
- **modifications or repairs** made by the user (operator, maintenance technician or specialised technician) without authorisation from the manufacturer;
- partial or total **failure** to comply with the instructions;
- **energy (electrical)** supply faults;
- **lack of maintenance**;
- use of **non-original spare parts**;
- **exceptional events** such as floods, fire (if not caused by the machines).

## 3 SAFETY MEASURES

### 3.1 Safety devices

The partly completed machinery is designed and fitted with **safety systems** to minimise risks for the operator. The partly completed machinery features the safety devices described in the table below. Refer to the illustration below for the location of these devices.

| POS. | DEVICE               | DESCRIPTION  |
|------|----------------------|--|
| 1    | <b>Fixed guard</b>   | They consist of fixed type guards (casings), which, placed in exclusive access areas during maintenance, prevent access to dangerous areas of the partly completed machinery.<br>For their removal, they require specific tools. |
| 2    | <b>Movable guard</b> | They consist of opening-type guards (doors), which allow access to the work area of the partly completed machinery in certain situations<br>In order to open these guards safely, specific procedures must be followed.          |



#### CAUTION!

For the incorporation of the partly completed machinery within the final line, the external electrical connection must be provided for the integration of the safety functions of the partly completed machinery by the control logic of the line itself.

## 3.2 Noise

The noise was measured in compliance with the provisions of standards **UNI EN 11200** and **UNI EN ISO 3746**. During the operating cycles, **personnel are exposed to a noise level of:**

- **less than 70 dB(A)**, with no parts inside;
- **less than 75 dB(A)** if there are parts inside. The stated threshold is based on the manufacturer's experience, however, there may be parts/components that in their relative movement, caused by the belt and brush, cause a noise emission above the stated threshold. It is therefore left to the integrator/incorporator to assess the noise emitted according to the specification.

The actual noise level during operation of the partly completed machinery installed on site in a production process is different from the one measured because the noise is affected by a number of factors, such as:

- type and characteristics of the site;
- other adjacent machines in operation.

**It is the user's responsibility to apply the relevant preventive and protective measures in accordance with the legislation of the country in which the partly completed machinery is installed and used.**

## 3.3 Vibrations

The level of vibrations produced by the partly completed machinery, depending on how it is operated, **is negligible and not dangerous** to the health of the operators.



### **CAUTION!**

**Excessive vibrations can only be caused by a mechanical breakdown that must immediately be reported and fixed, so as not to undermine the safety of the partly completed machinery and of the operators.**

## 3.4 Electromagnetic compatibility

The supplied partly completed machinery contains electronic components subject to the regulations on Electromagnetic Compatibility, affected by conducted and radiated emissions.

The emission values are within the regulatory requirements thanks to the use of components that comply with the Electromagnetic Compatibility directive, suitable connections and installation of filters where necessary.

**Thus the partly completed machinery complies with the Electromagnetic Compatibility (EMC) directive.**



### **CAUTION!**

**Any non-compliant maintenance work carried out on the electrical equipment or incorrect replacement of components can compromise the efficiency of the adopted solutions.**



### 3.5 Residual risks

The partly completed machinery is designed to guarantee the essential safety requirements for the operator. Safety has been integrated into the design and construction of the partly completed machinery as much as possible; however, some risks still remain, that operators must be protected from.

| RISK   | DESCRIPTION AND PROCEDURAL INFORMATION   |
|--|--|
| <p><b>Risks due to transport</b></p> <p>Pictograms:</p>                              | <p>The handling procedures are described in the “<b>Transport and installation</b>” chapter in this instruction manual.</p> <p>The following operations:</p> <ul style="list-style-type: none"> <li>• unloading the packaging,</li> <li>• opening the package,</li> <li>• handling the partly completed machinery</li> </ul> <p>expose the operators to the risk due to suspended loads and crushing.</p> <p>These operations may only be carried out by personnel who are skilled in the use of lifting equipment and have been appropriately trained for this purpose. Wear appropriate PPE.</p>   |
| <p><b>Risk due to the presence of live parts</b></p> <p>Pictograms:</p>              | <p>Maintenance operations and access to the partly completed machinery expose operators to an electrical risk.</p> <p>Work on live equipment may only be carried out by skilled and qualified personnel.</p> <p>Please observe the following safety instructions:</p> <ul style="list-style-type: none"> <li>• pay the utmost attention to the safety pictograms related to electrical risks;</li> <li>• do not carry out maintenance work until the power supply has been switched off;</li> <li>• refer to trade equipment manuals for any specific instructions;</li> <li>• Periodically inspect the potential compensation circuit, ensuring that there are no discontinuities.</li> </ul> |
| <p><b>Risk due to the presence of dust, fragments, etc...</b></p> <p>Pictograms:</p> | <p>At the end of the work cycle, there may be residues of powered parts or dust accumulation on the surface of the partly completed machinery.</p> <p>Clean the vibrating surface thoroughly after each use, as described in the '<b>Maintenance</b>' chapter of this manual.</p>  |



**CAUTION!**

**The final manufacturer of the target line must provide for the reduction of mechanical risks in the different areas of the partly completed machinery, according to the general risk analysis of the line itself.**



**CAUTION!**

**The safety functions of ARS S.r.l.'s supply must be integrated into the safety functions of other partly completed machinery or associated machines by the target line manufacturer.**

It is the responsibility of the user to:

- **analyse the risks that might occur while handling and incorporating at one's premises** (the analyses carried out on partly completed machinery handling were made only taking into account its characteristics);
- **delimit the path of forklifts** and/or laser-guided vehicles with floor markings;
- **raise awareness and instruct the personnel involved in the operations on the work stations** and the personnel involved in using the partly completed machinery;
- **affix visual safety signs around the workplace** after assessing the risks in the transit or control areas.

### 3.6 Safety pictograms affixed to the partly completed machinery



The partly completed machinery is supplied with a set of pictograms to allow immediate identification of the residual risks present.

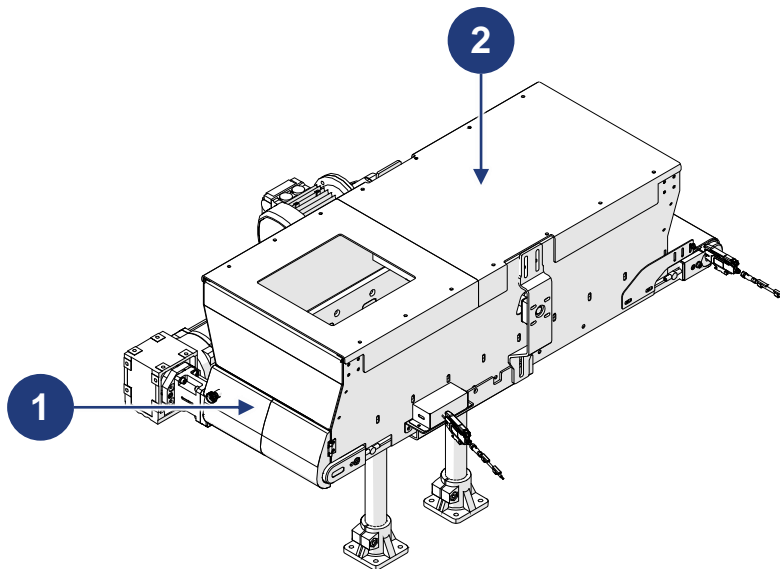


**CAUTION!**

It is forbidden to remove and/or replace pictograms with others of a different meaning.  
The user is obliged to replace any pictograms that are missing and/or difficult to read.

The following table lists the pictograms applied on the partly completed machinery:

| POS. | PICTOGRAM   | DESCRIPTION                             |
|------|---|---|
| 1    |  | Danger of drawing-in / crushing hands.  |
| 2    |  | Prohibition of removing safety devices. |



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## 4 GENERAL DESCRIPTION

### 4.1 Partly completed machinery description



**IMPORTANT!**

**The partly completed machinery, in order to be used, must be incorporated into other machines/partly completed machinery, appropriately structured.**

The partly completed machinery is designed and built to receive small, medium and large bulk components from an upstream system and transfer them to a downstream system.

It is operated by a geared motor, connected to a traction roller, which allows the movement of the conveyor belt (sub-supply component) located at the base of the hopper.

At the rear of the partly completed machinery there is a door for manual emptying at the end of the cycle, while at the front there is a dosing barrier to regulate the outflow of material.

The partly completed machinery can be combined with a feeding system (supplied by the customer) which, via connection to the presence sensors supplied with the partly completed machinery itself, will automatically manage the feeding of material onto the belt.

### 4.2 Intended use (correct)

The partly completed machinery covered by this manual is intended for:

| OPERATION    | PERMITTED   | NOT PERMITTED                            | PROCESSING ENVIRONMENT |
|--------------|---|--|------------------------|
| Handling of: | Bulk components of varying sizes and characteristics. | Any other use other than that permitted. | Industrial             |

**IMPORTANT!**



**The partly completed machinery cannot be used to transport:**

- **objects larger than the size of the hopper;**
- **objects with adhesive or sticky outer surfaces;**
- **sharp objects that could damage the belt fabric.**

The partly completed machinery has been designed to:

- meet the specific requirements indicated in the sales contract;
- be used according to the instructions and limits of use given in this manual.

The partly completed machinery is designed and built to work safely if:

- it is incorporated into a line equipped with appropriate safety and protection devices, according to the relevant regulations;
- it is used within the limits stated in the contract and in this manual;
- the procedures in the instruction manual are followed;
- routine maintenance is carried out within the times and in the ways indicated;
- unscheduled maintenance is promptly carried out if required;
- the safety devices are not removed and/or bypassed.

## 4.3 Reasonably foreseeable misuse

**Reasonably foreseeable misuse** is listed below:

- use of the partly completed machinery without first reading this instruction manual;
- use of the partly completed machinery without incorporating it into a line, according to current regulations;
- use of the partly completed machinery by operators not properly trained in its operation;
- use of the partly completed machinery as a foothold, even if not functioning;
- using the partly completed machinery to obtain production values above the prescribed limits;
- using the partly completed machinery in a way that is not specified in the **“Intended (correct) use” section**.

Any other partly completed machinery use that is not specified must be authorised in writing beforehand by the Manufacturer.

In the absence of this written authorisation, the use is considered **“misuse”**; therefore, the Manufacturer disclaims any liability for damage caused to property or people and deems every type of partly completed machinery warranty null and void.



### **IMPORTANT!**

**Misuse of the partly completed machinery excludes any liability of the Manufacturer.**

## 4.4 Obligations and prohibitions

### 4.4.1 Obligations of users

The **user** (contractor or employer) must:

- take into account the skills and conditions of the operators in relation to their health and safety;
- provide adequate personal protective equipment for the individual procedures;
- provide standard lifting means and procedures;
- ensure that individual workers respect the company rules and regulations on safety and on use of the collective and personal protective equipment available;
- instruct personnel on the procedures in case of an accident;
- instruct personnel on existing residual risks;
- instruct personnel on the devices set up for operator safety;
- instruct personnel on the hazards due to noise emission in the workplace;
- instruct personnel on the general accident prevention rules set forth by European directives and by the legislation in the country of destination of the partly completed machinery.

**Only allow personnel who have read this manual and are properly trained to work on the partly completed machinery.**

#### 4.4.2 Obligations of personnel (operators / maintenance technicians / technicians)

Personnel **must**:

- only carry out maintenance work with the partly completed machinery switched off;
- collect hair (if long) to prevent it from getting caught or contaminating the product;
- only work on the electrical panel, on the junction boxes, on the cables and on all electrical components with the main switch turned off;
- ensure that no persons have direct access to the moving parts of the partly completed machinery during its operation;
- properly use the protective devices provided by the employer.
- immediately report any safety device faults to the employer, manager or supervisor.

#### 4.4.3 Prohibitions of personnel (operators / maintenance technicians / technicians)

Personnel **must not**:

- use the partly completed machinery improperly, i.e. for uses that are not specified in the **“Intended Use” section**;
- remove or change the safety devices or signs without authorisation;
- carry out operations or manoeuvres of their own initiative which do not fall under their responsibility or which can compromise personal safety or that of other workers;
- approaching the partly completed machinery for any purpose if under the influence of alcohol and/or drugs;
- replace or change the speeds and/or power of the partly completed machinery’s components without authorisation from a manager;
- change the partly completed machinery cycle;
- change the electrical connections to exclude the internal safety devices;
- use the partly completed machinery if it has not been installed in compliance with applicable regulations;
- use the partly completed machinery as a support point even if it is not working (with a risk of falling and/or damaging the partly completed machinery);
- use the partly completed machinery outside of the permitted environmental conditions (see **“Chapter 5”**).

#### **CAUTION!**

**The Manufacturer shall not be held liable for damage caused to property or people if:**



- **it is ascertained that the partly completed machinery has been used outside the permitted environments;**
- **the obligations and prohibitions described in this instruction manual have not been complied with.**

## 4.5 Technical specifications

| ELECTRICAL POWER SUPPLY DATA |   |
|------------------------------|---|
| <b>Voltage</b>               | 400 Vac   |
| <b>Power</b>                 | 0.18 kW (belt drive)<br>0.09 kW (optional brush motorisation) |
| <b>Frequency</b>             | 50 Hz   |

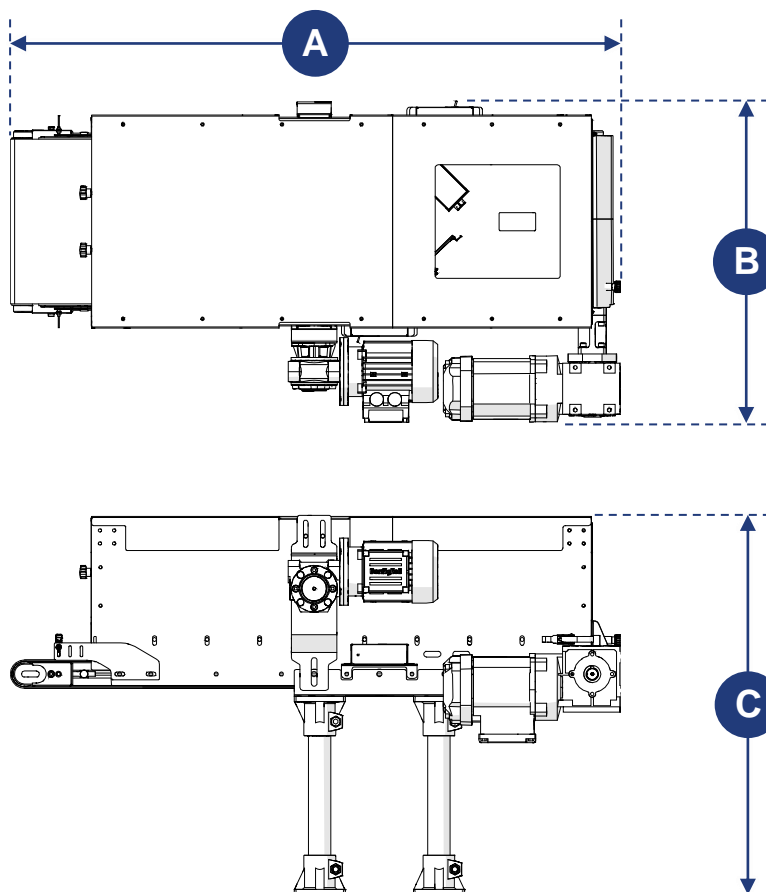
**IMPORTANT!**

For further information, please refer to the wiring diagram and sub-supplier manuals, which are attached to this manual.

| LIMITS OF USE                       |          |
|-------------------------------------|----------|
| <b>Maximum transportable weight</b> | 15 kg/m  |
| <b>Maximum belt speed</b>           | 8 m/min. |



### 4.6 Overall dimensions

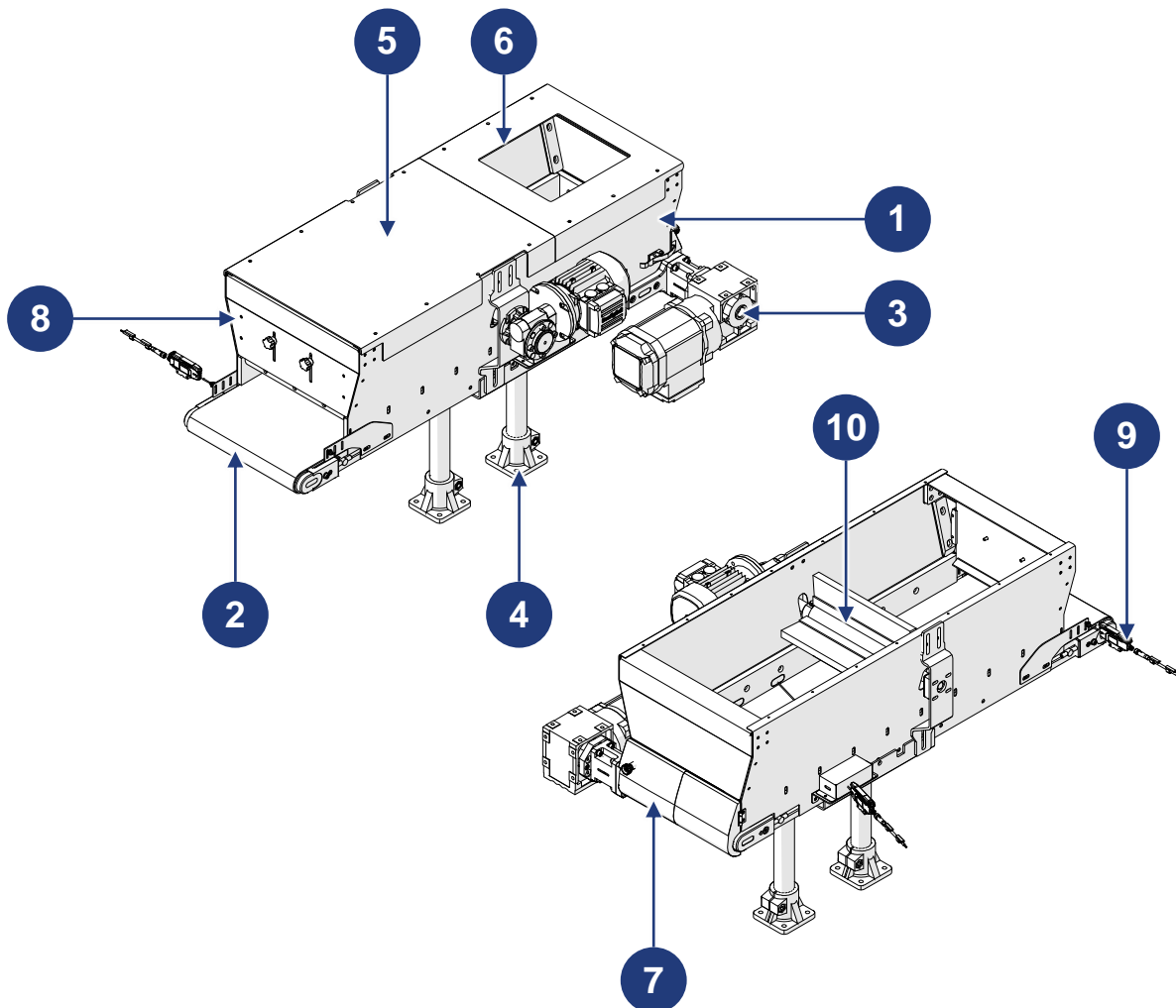


| OVERALL DIMENSIONS |   |
|--------------------|---|
| <b>Length (A)</b>  | 1075 mm (with left-hand drive)<br>1050 mm (with right-hand drive) |
| <b>Width (B)</b>   | 564 mm (with left-hand drive)<br>562 mm (with right-hand drive)   |
| <b>Height (C)</b>  | 666 mm  |

## 4.7 Main components

The partly completed machinery consists of the following main parts:

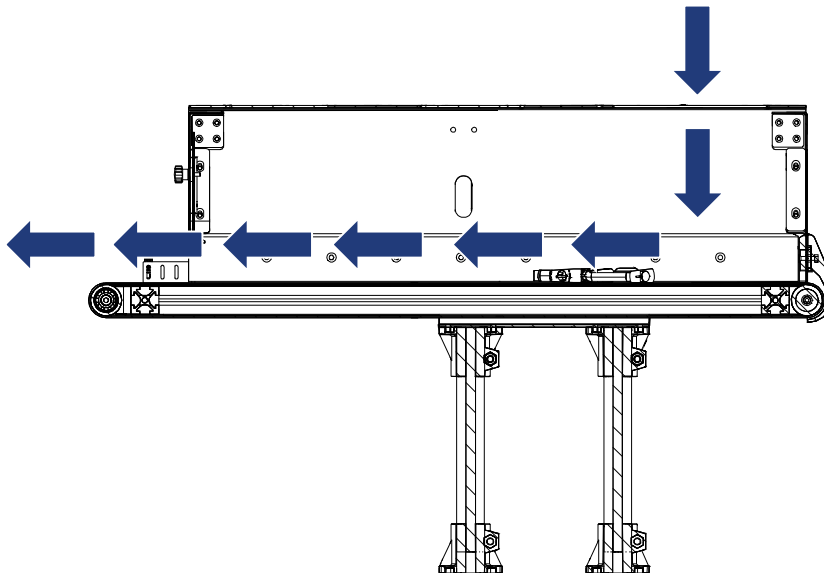
| POS. | DESCRIPTION   |
|------|---|
| 1    | HOPPER TANK   |
| 2    | BELT CONVEYOR                                       |
| 3    | DRIVE UNIT  |
| 4    | SUPPORT FOOT  |
| 5    | HOPPER COVER  |
| 6    | MATERIAL INFEED COMPARTMENT                         |
| 7    | REAR DOOR   |
| 8    | FRONT DOOR  |
| 9    | MATERIAL PRESENCE SENSOR                            |
| 10   | MOTORISED BRUSH<br><b>Note:</b> optional component. |



## 4.8 Work cycle description

The following is a simplified description of the work cycle of the partly completed machinery:

| STEP | DESCRIPTION  |
|------|--|
| 1    | The material, coming from the upstream system, is fed into the hopper via the loading chamber and falls onto the belt. |
| 2    | The belt conveys the material to the exit area.  |
| 3    | The material is discharged to the downstream system according to production requirements.                              |



### IMPORTANT!



The sensors present have the function of verifying the presence or absence of product above the belt, in the entry and exit zones.

In the incorporation phase, they must be appropriately connected so as to allow communication of the partly completed machinery with the systems upstream and downstream of it (not included in the delivery).

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## 5 TRANSPORT AND INCORPORATION

### 5.1 Packaging

The partly completed machinery is shipped by the Manufacturer from the production plant to the Customer's premises.

Based on the distance it needs to be transported, on the specific requests from the Customer, and on how long the load will remain in the packaging, the partly completed machinery will be shipped in the following ways:

- normal protective packaging for short and medium distances;
- special protective packaging for long distances.

It must be shipped using closed or curtain-sided vehicles depending on the type of load.

When the partly completed machinery is received, it is mandatory for the customer to check that there is no damage caused by the mode of transport or by the personnel in charge of the specific operations.

- **If any damage is discovered**, leave the packaging in question as it was found and immediately ask the competent shipping company to assess the damage; afterwards, send a damage report to inform the transport company's insurance company and the point of sale of the discovered damage.
- **If the partly completed machinery is delivered in a crate on a pallet or on wooden planks** protected by heat-shrink cellophane, first remove the packaging or the cover. To completely free the partly completed machinery, remove the screws and the metal strapping. Then lift the partly completed machinery with a crane or forklift truck as described in the table and remove the pallet used for transport.

#### 5.1.1 Removing the packaging

Proceed as follows to **remove the packaging**:

| STEP | ACTION   |
|------|--|
| 1    | Put the partly completed machinery in its intended place.  |
| 2    | Unpack the parts of the partly completed machinery <b>delivered with crate</b> , as follows: <ul style="list-style-type: none"> <li>• remove the heat-shrinkable cellophane;</li> <li>• remove the strapping;</li> <li>• remove the crate;</li> <li>• remove any fastening systems to the wooden floor.</li> </ul> |
| 3    | Unpack the partly completed machinery parts <b>delivered on pallets</b> , as follows: <ul style="list-style-type: none"> <li>• remove the strapping;</li> <li>• remove the heat-shrinkable cellophane;</li> <li>• remove any fastening systems to the wooden floor.</li> </ul>                                     |

To handle the partly completed machinery and/or its parts, see the "**Handling**" section.

#### 5.1.2 Disposing of the packaging

The packaging is an integral part of the supply and is not collected, hence it must be disposed of by the buyer. Any disposal or destruction must be carried out in compliance with the regulations in force in the user's country, taking into account the nature of the materials.

## 5.2 Handling



**IMPORTANT!**

The handling activities described in this section must be carried out by personnel who are qualified for these operations and duly trained to safely perform the loading, unloading and handling operations with lifting equipment.

**CAUTION!**

The Manufacturer:



- shall not be held liable for damage, to property or to people, due to accidents caused by failure to follow the instructions in this manual;
- accepts no liability for any damage to the partly completed machinery resulting from failure to comply with the instructions provided.

### 5.2.1 Table of units and weights

The following table lists the groups into which the partly completed machinery is normally divided and transported:

| UNIT               | WEIGHT                             |
|--------------------|------------------------------------|
| HOPPER BODY + BELT | <i>Refer to transport document</i> |
| SUPPORT FEET       | <i>Refer to transport document</i> |

In some cases, the partly completed machinery could even be transported whole:

| UNIT  | WEIGHT |
|---|--------|
| ENTIRE PARTLY COMPLETED MACHINERY (WITHOUT OPTIONAL EXTRAS) | 45 kg  |

The packaging used for shipping the partly completed machinery has the following characteristics:

| PACKAGING CHARACTERISTICS                        |                     |
|--|---------------------|
| TYPE OF PACKAGING                                | Wooden crate        |
| WOODEN CRATE DIMENSIONS                          | 1200 x 800 x 650 mm |
| PARTLY COMPLETED MACHINERY WEIGHT WITH PACKAGING | 80 kg               |

### 5.2.2 Handling operations



**IMPORTANT!**

Personnel involved in lifting and handling operations must be authorised and trained in the use of lifting equipment and means and must comply with the regulations in force for personal protection.

| PARTLY COMPLETED MACHINERY HANDLING (WITH PACKAGING) BY FORKLIFT TRUCK |  |
|--|--|
| <b>Operator qualification</b>  | Lifting vehicle driver                 |
| <b>PPE required</b>  |  |
| <b>Lifting vehicle</b>   | Forklift truck                         |
| <b>Tools required</b>  | Ropes, clamps or similar (if required) |




**DANGER!**

- Only use suitable and approved lifting equipment compatible with the dimensions and weight of the partly completed machinery.
- Make sure that no one is standing within the operating range of the lifting equipment.

To correctly **lift the packaged partly completed machinery by forklift truck**, proceed as described below:

| STEP | ACTION   |
|------|--|
| 1    | Position the forks of the forklift under the base of the load to be transported.   |
| 2    | Make sure the forks come out of the front of the load far enough to eliminate any risk of the transported part from overturning.                                 |
| 3    | Lift the forks until they touch the load.<br><b>Note:</b> if necessary, fasten the load to the forks with ropes, clamps or similar devices.                      |
| 4    | Slowly lift the load ten centimetres or so off the floor and check its stability, making sure that the centre of the load is in the middle of the lifting forks. |
| 5    | Adjust the transport speed according to the floor and type of load, avoiding sudden manoeuvres.  |



| PARTLY COMPLETED MACHINERY HANDLING (WITHOUT PACKAGING) BY FORKLIFT TRUCK |   |
|---|---|
| Operator qualification  | Lifting vehicle driver  |
| PPE required  |  |
| Lifting vehicle   | Forklift truck  |
| Tools required  | Ropes, clamps or similar (if required)  |

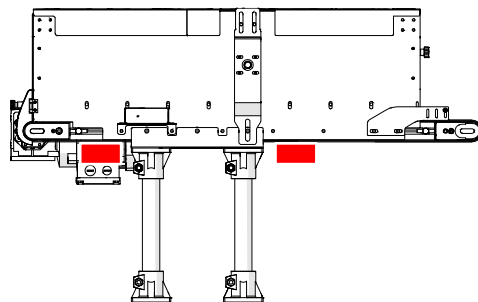


**DANGER!**

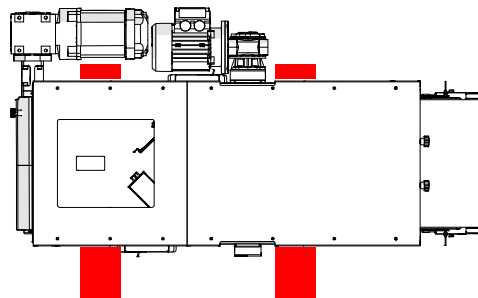
- Only use suitable and approved lifting equipment compatible with the dimensions and weight of the partly completed machinery.
- Make sure that no one is standing within the operating range of the lifting equipment.

To correctly lift the partly completed machinery, without packaging, by forklift truck, proceed as described below:

| STEP | ACTION   |
|------|--|
| 1    | Position the forks of the forklift under the work surface of the partly completed machinery.   |
| 2    | Make sure the forks come out of the front of the load far enough to eliminate any risk of the transported part from overturning.                                 |
| 3    | Lift the forks until they touch the load.<br><b>Note:</b> if necessary, fasten the load to the forks with ropes, clamps or similar devices.                      |
| 4    | Slowly lift the load ten centimetres or so off the floor and check its stability, making sure that the centre of the load is in the middle of the lifting forks. |
| 5    | Adjust the transport speed according to the floor and type of load, avoiding sudden manoeuvres.  |



 FORKLIFT FORKS





## 5.3 Incorporation

### 5.3.1 Arrangements

It is normally the responsibility of the user to set up:

- **rooms** (including masonry, such as foundations or ducts that may be required, lighting);
- **electrical installations** of the partly completed machinery, in accordance with the standards in force in the country of use and depending on the operating logic of the line, in which the partly completed machinery will be incorporated;
- the **power supply for the partly completed machinery**, including the earthing conductor;
- **auxiliary services** suitable to the partly completed machinery's requirements;
- **tools and consumables** needed for incorporation;
- **lubricants** that may be required for commissioning the partly completed machine;
- **suitable lifting** and handling equipment;

### 5.3.2 Permitted environmental conditions

The environment where the partly completed machinery must be used is indoors, protected from atmospheric agents such as: rain, hail, snow, fog, suspended dust, combustible dust, protected from aggressive agents such as corrosive vapours or sources of excessive heat and **it must not be ATEX classified**.

It is not permitted to use the partly completed machinery, associated control systems and drive equipment under conditions other than those listed.

Namely, the environment of use must not be:

- Exposed to corrosive fumes;
- Exposed to excessive humidity (above 85%) and rapid changes in relative humidity (above 0.005 p.u./h);
- Exposed to excessive dust;
- Exposed to abrasive dust;
- Exposed to oily vapours;
- Exposed to explosive mixtures of dust or gas;
- Exposed to salty air;
- Exposed to abnormal vibrations, impact or shock;
- Exposed to adverse weather outside the permitted range or dripping;
- Exposed to unusual transport or storage conditions;
- Exposed to high or quick temperature variations (above 5 K/h);
- Exposure to nuclear radiation.

The partly completed machinery is designed and built to work safely in the following environmental conditions:

|                                  |  |
|----------------------------------|--|
| <b>Environmental temperature</b> | min. + 5°C / max + 40°C  |
| <b>Relative humidity</b>         | min. 5% / max. 90% (without condensation)  |
| <b>Installation site</b>         | Industrial warehouse   |
| <b>Support surface</b>           | Cement industrial floor.   |
| <b>Lighting</b>                  | Light around the partly completed machinery >100 lux.<br>Neon light available to the operator ≥ 400 lux. |

**CAUTION!**



Different environmental conditions to those specified can cause serious damage to the partly completed machinery.

Positioning the partly completed machinery in environments not observing the above will void the warranty for the parts to be replaced.



**IMPORTANT!**

The work surface must be sufficiently lit.

If there are shady or uneven zones in the workplace, it is up to the user to provide suitable lighting devices.

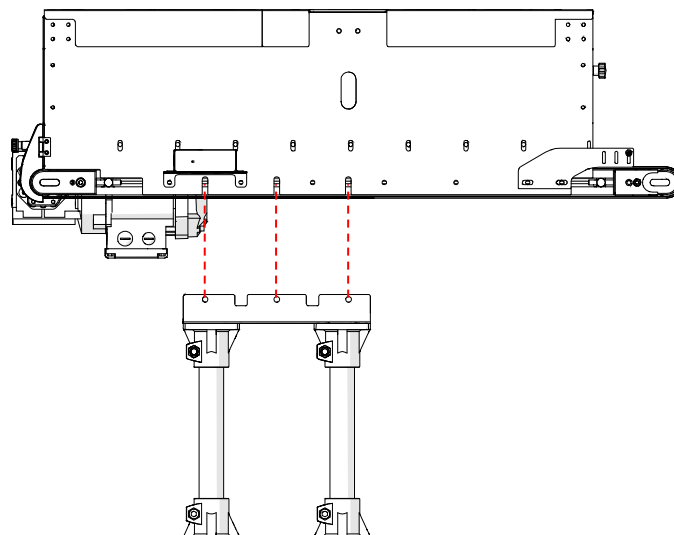
If these requirements are not met, the Manufacturer disclaims all liability.

**5.3.3 Assembly**

In the event that the partly completed machinery arrives divided into groups, they must be assembled.

To mount the partly completed machinery, proceed as described below:

| STEP     | ACTION  |
|----------|---|
| <b>1</b> | Position the support plate of the parking feet at the holes in the base of the hopper body. |
| <b>2</b> | Secure the two assemblies by means of suitable fixing screws.                               |



### 5.3.4 Positioning

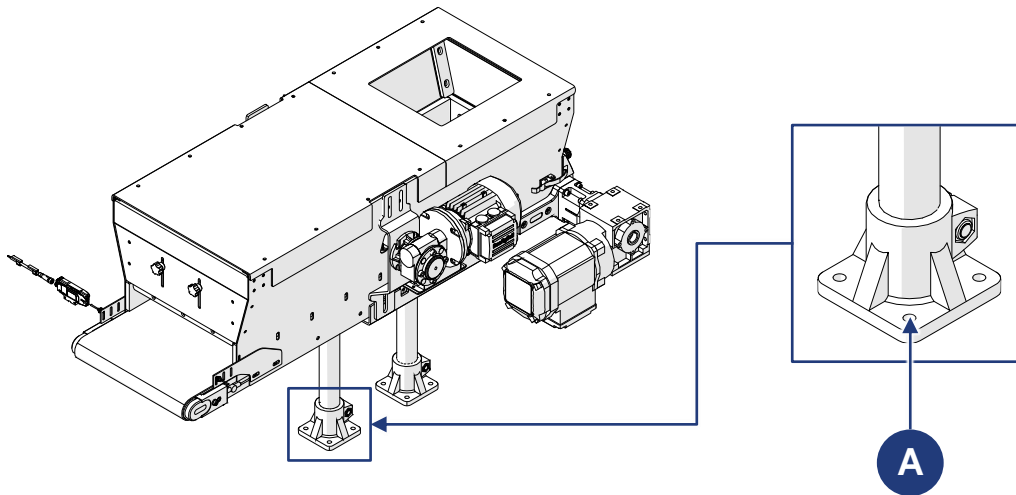
**IMPORTANT!**

The positioning of the partly completed machinery within the final destination line must take place according to the layout agreed with the manufacturer.

For the positioning and subsequent connections, prepare an area suitable for the dimensions of the machine and lifting vehicles, paying attention to any obstacles (other machines, walls or similar) along the path of the handling vehicles.

**IMPORTANT!**

Once the optimal position of the partly completed machinery within the workplace has been determined, it must be fixed to the ground using suitable plugs to be positioned in the appropriate holes (A) on the support feet.



## 5.4 Connections

To start the partly completed machinery, it must be properly connected to the local networks:

- **electrical** connection (including earth connection) in accordance with the regulations in force in the country of installation.

It is the user's responsibility to guarantee the requested connection characteristics.



**CAUTION!**

**The connections requested must be set up by qualified and authorised personnel.**

### 5.4.1 Electrical connection



**CAUTION!**

**Before doing any electrical connections, it is important to ensure that the partly completed machinery is turned off.**



**CAUTION!**

**Make sure the electrical power supply has already been disconnected.**



**CAUTION!**

**The operation must only be carried out by specialised and authorised personnel (electrical maintenance technician).**

Before proceeding with the **electrical connection**, ensure that:


- the maintenance technician is fully aware of the regulations in force in the country of installation;
- the frequency and supply voltage values of the partly completed machinery match the mains values;
- the cross-section of the electric cables is adequate for the power consumption;
- the power line can withstand the maximum partly completed machinery power consumptions;
- earthing of the circuit complies with **EN 60204-1**;
- the materials used in the earthing system have adequate strength or adequate mechanical protection.



**CAUTION!**

**Do not work with wet hands or objects.**

**In case of fire, do not use water on the electrical components.**

| ELECTRICAL CONNECTION         |   |
|-------------------------------|---|
| <b>Operator qualification</b> | Electrical Maintenance Technician   |
| <b>PPE required</b>           |  |
| <b>Tools to be used</b>       | Screwing tools  |



**IMPORTANT!**

The user of the partly completed machinery must provide for the connection of the partly completed machinery to a supply line equipped with an appropriate main switch for disconnecting the energy supply to the partly completed machinery.

Proceed as described below for **connection to the electrical mains**:

| STEP | ACTION   |
|------|--|
| 1    | Insert cables <b>R, S and T</b> into their respective slots inside the motor terminal box.<br><b>Note:</b> Ensure that the plastic sheath has been removed from the initial part of the cable.   |
| 2    | Tighten the screws to secure the cables to their terminals.  |
| 3    | Fasten the earth cable terminal to the earth cable plate by tightening the appropriate bolt.<br><b>Note:</b> Ensure that the plastic sheath has been removed from the initial part of the cable. |
| 4    | Check with a tester that the expected voltages and the presence of the three phases are present at the terminals.  |

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## 6 USE

### 6.1 Operating procedures

During operation, the machine does not need to be continuously manned by an operator.

The operator's sole function is to check that the partly completed machinery is operating correctly and that its work cycle is running smoothly.



**IMPORTANT!**

**The partly completed machinery has no specific commands for starting and stopping it.  
The operating logic of the partly completed machinery must be integrated by the user into the final destination line.**

#### 6.1.1 Preliminary inspections

Before starting the partly completed machinery, the following checks need to be carried out.

- Check that the partly completed machinery has been correctly incorporated into the final destination line.
- Make sure the safety devices are working properly and efficiently.
- Check that there are no unauthorised persons within the danger zones.
- Check that the space around the partly completed machinery is clear of obstacles and/or obstructions.
- Check that the partly completed machinery has been correctly connected to the mains.
- Check that the safety functions of the target line have been correctly integrated into the partly completed machinery.
- Check that the upstream power supply system is correctly positioned and connected to the operating logic of the partly completed machinery.
- Check that the downstream unload system is correctly positioned and connected to the operating logic of the partly completed machinery.
- Check that the partly completed machinery is not under **“Maintenance”**.

#### 6.1.2 Operating procedures



**IMPORTANT!**

**For all information concerning the use of the partly completed machinery, please refer to the manual of the line into which it is incorporated.**

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## 7 MAINTENANCE



**CAUTION!**

**Maintenance work should only be carried out with the partly completed machinery switched off and de-energised (main switch of the power supply cabinet in the '0-OFF' position).**

**Place the “MACHINE UNDER MAINTENANCE - DO NOT SWITCH ON” sign on the main switch of the power supply panel.**



**CAUTION!**

**Maintenance operations must be carried out by qualified and authorised personnel.**

Partly completed machinery maintenance includes the operations (inspections, checks, adjustments and replacements) that become necessary following normal use.

For good maintenance:

- only use original spare parts and tools that are suitable for the purpose and in good condition.
- comply with the intervention frequencies indicated in this manual for scheduled maintenance (preventive and periodic); the distance (indicated in time or work cycles) between one intervention and the next is to be understood as the maximum acceptable; therefore it must not be exceeded but may instead be shortened.

Good preventive maintenance requires constant attention and continuous monitoring of the partly completed machinery.

Immediately check the cause of any anomalies, such as excessive noise, overheating, fluid leaks, etc., and fix it.

Timely removal of any causes of anomaly or malfunction prevents further damage to the equipment and ensures operator safety.

Partly completed machinery maintenance personnel must be well trained and have thorough knowledge of the accident prevention regulations; unauthorised personnel must stay outside the work area during the operations.

Partly completed machinery cleaning and adjustments must also be carried out **only and exclusively** during maintenance and with the partly completed machinery stopped and disconnected from the electrical panel, as shown in this manual.



**CAUTION!**

**Any repairs or maintenance work not indicated herein can only be carried out following authorisation from the Manufacturer.**

**The Manufacturer shall not be held liable for any damage to people or property for operations other than those described or carried out in ways different than indicated.**

Partly completed machinery maintenance operations, in terms of operation, are divided into two main categories:

|                                |  |
|--------------------------------|--|
| <b>Routine maintenance</b>     | All those operations that the maintenance technician must perform preventively to ensure smooth operation of the partly completed machinery over time; routine maintenance includes inspections, checks, adjustments, cleaning and lubrication.                        |
| <b>Unscheduled maintenance</b> | All those operations that the maintenance technician must perform when required by the partly completed machinery. Unscheduled maintenance includes inspections, repairs, restoration of nominal operating conditions or replacement of a broken, faulty or worn unit. |

## 7.1 Routine maintenance

**Routine maintenance** includes inspections, checks and interventions that, to prevent breakdowns, keep the following under control:

- the mechanical conditions of the partly completed machinery;
- lubrication of the partly completed machinery;
- the cleaning of the partly completed machinery;
- the electrical power supply system of the partly completed machinery.

The frequency of the routine maintenance operations indicated refers to normal operating conditions, i.e. that meet the intended conditions of use.

### 7.1.1 Checks and inspections

| OPERATION  | FREQUENCY |        |         |             |        |
|--|-----------|--------|---------|-------------|--------|
|  | Daily     | Weekly | Monthly | Six-monthly | Yearly |
| Visually check the integrity of all protection and safety devices of the partly completed machinery. | ▣         |        |         |             |        |
| Visually check the wear condition and cleanliness of the partly completed machinery.                 | ▣         |        |         |             |        |
| Check the correct functioning of the sensors (if used).  |           | ▣      |         |             |        |
| Check that the drives work properly.   |           |        | ▣       |             |        |
| Check the wear condition of the insulation of the connecting cables and electrical connectors.       |           |        | ▣       |             |        |
| Check the correct tensioning of the belt fabric.   |           |        | ▣       |             |        |
| Check the wear condition of the belt fabric and replace if necessary.                                |           |        |         | ▣           |        |



#### IMPORTANT!

**For a description of the maintenance procedures for the belt integrated in the partly completed machinery, please refer to the belt supplier's manual attached to this document.**

### 7.1.2 Cleaning



**CAUTION!**

Cleaning operations must be carried out by qualified and authorised personnel.



**CAUTION!**

Observe the regulations in force in the country of installation with regard to the treatment of any wash water.

#### 7.1.2.1 Cleaning table

| OPERATION         | FREQUENCY |        |         |             |        |
|-------------------|-----------|--------|---------|-------------|--------|
|                   | Daily     | Weekly | Monthly | Six-monthly | Yearly |
| General cleaning. |           | ■      |         |             |        |



**IMPORTANT!**

General cleaning of the partly completed machinery must be carried out each time material is fed into it, in order to remove any processing residue from the previous process.



**CAUTION!**

Never direct jets of water or liquids at electrical parts of the partly completed machinery.



**CAUTION!**

Do not use acids, solvents, flammable substances and abrasive tools to clean the partly completed machinery.

#### 7.1.2.2 General cleaning

Proceed as described below to **perform general cleaning of the partly completed machinery:**

| STEP | ACTION   |
|------|--|
| 1    | Disconnect the power supply to the partly completed machinery.<br><b>Note:</b> Please refer to the manual of the line into which the partly completed machinery is incorporated.   |
| 2    | Using compressed air or a soft cloth soaked in non-aggressive detergent, remove machining residues and dirt accumulated on the surfaces of the partly completed machinery.<br><b>Note:</b> Access to the belt via the rear door for ease of operation. |
| 3    | Remove any grease and/or oil residues on the surfaces with a soft cloth soaked in non-aggressive detergent.  |
| 4    | Wait for the partly completed machinery to dry completely before putting it back into operation.   |

### 7.1.3 Lubrication



**IMPORTANT!**

All drives in the partly completed machinery do not require lubrication.

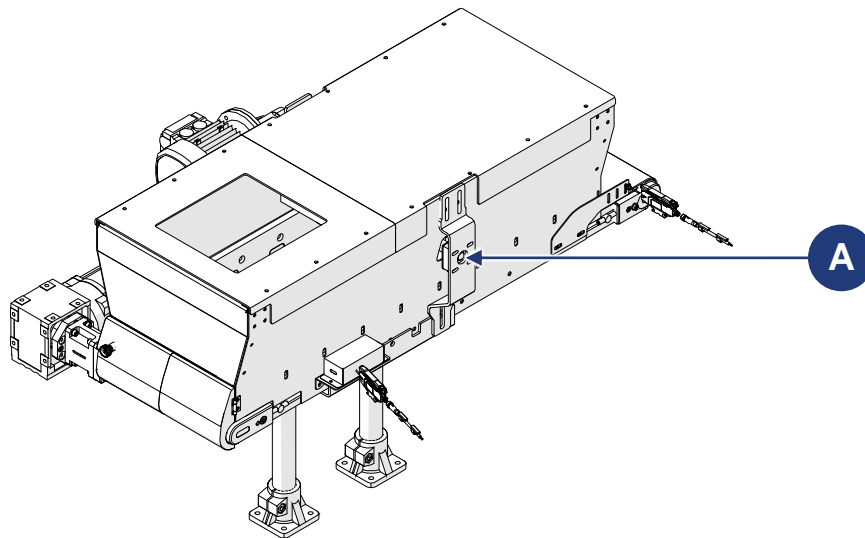


**IMPORTANT!**

Use a manual grease gun to carry out lubrication operations.

#### 7.1.3.1 Lubrication table

| OPERATION  | FREQUENCY |        |         |             |        |
|--|-----------|--------|---------|-------------|--------|
|  | Daily     | Weekly | Monthly | Six-monthly | Yearly |
| Greasing support (A) motorised brush (optional). |           |        | ■       |             |        |



## 7.2 Unscheduled maintenance

### CAUTION!



Unscheduled partly completed machinery maintenance and repairs shall only be carried out by qualified, trained and authorised technicians, employed by the Manufacturer or by the authorised service centre.

These interventions require thorough and specialised knowledge of the machine, of the operations required, of the risks involved and of the correct procedures to work safely.

If exceptional events occur, which require unscheduled maintenance work to be carried out, the user's routine maintenance technicians must follow these procedures:

- check the condition of the damaged or out-of-phase units;
- perform the operations described in this section;
- if the operations to be carried out are not indicated in this manual, send the report of what occurred, the result of the inspection and any observations to the Manufacturer.

The manufacturer or the authorised service centre will assess the situation on a case-by-case basis, then agree with the regular maintenance personnel on the type of work to be carried out, choosing the most suitable solution from those listed below:

- the Manufacturer will send an authorised, trained and qualified technician to carry out the necessary work;
- or the Manufacturer will authorise the user's routine maintenance technicians to carry out the work and send any additional instructions.

### CAUTION!

**Replacement spare parts must be ordered by the Manufacturer.**



**If the customer does not use spare parts that are original or authorised in writing by the Manufacturer, the latter shall be deemed free from any liability concerning partly completed machinery operation and operator safety.**

**Authorisation and/or instructions must always be provided in writing.**


**In the absence of written authorisation, it is forbidden to operate and the Manufacturer disclaims all liability.**



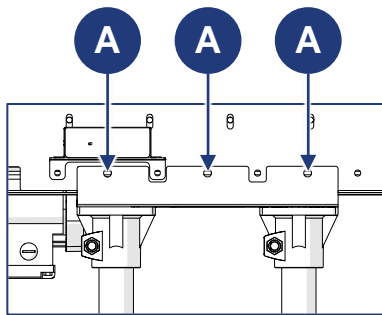
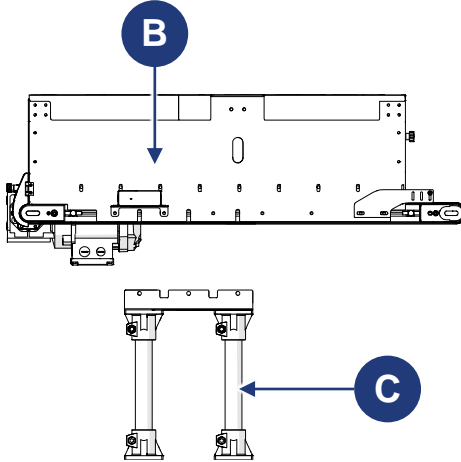
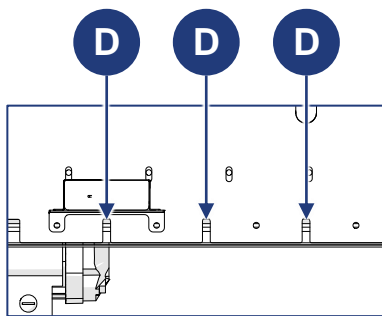
### IMPORTANT!

**If it is necessary to carry out procedures not listed in this manual, or in case of doubt, it is forbidden to operate.**

**Contact the Manufacturer for any explanations.**

| BELT FABRIC REPLACEMENT       |   |
|-------------------------------|---|
| <b>Operator qualification</b> | Electrical Maintenance Technician   |
| <b>PPE required</b>           |  |
| <b>Tools to be used</b>       | Screwing tools  |

Proceed as follows to **replace the belt fabric**:

| STEP | ACTION   | PICTURE  |
|------|--|--|
| 1    | Unscrew the fastening screws(A) of the hopper body to the mounting plate of the support feet, on both sides of the structure.  |    |
| 2    | Separate the hopper body(B) from the support feet(C): <ul style="list-style-type: none"> <li>manually, by means of two operators;</li> <li>with the aid of a forklift truck (see handling information in “Chapter 5” of this manual).</li> </ul> |   |
| 3    | Bring the hopper body to the bench.  |  |
| 4    | Remove the fixing screws(D) of the belt to the hopper, on both sides of the structure.   |  |

| STEP | ACTION   | PICTURE |
|------|--|---------|
| 5    | Separate the belt(E) from the hopper(F).<br><b>Note:</b> This can be done manually by an operator.   |         |
| 6    | Follow the instructions in the belt supplier's manual when replacing the fabric.<br><b>Note:</b> belt tape supplier's manual is attached to this document. |         |
| 7    | Proceed in the opposite direction to reassemble the partly completed machinery.  |         |

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## 8 DECOMMISSIONING AND DISPOSAL

### CAUTION!



Decommissioning and dismantling operations must be assigned to personnel specialised in such activities. Namely, only the person in charge of dismantling and disposal at the end of the service life can:

- disconnect the parts mechanically and electrically following the disassembly instructions and blueprints.
- transport the parts from the work site to the disposal centre for sorting the parts.



### CAUTION!

The partly completed machinery does not contain any components or hazardous substances that require special removal procedures.

### 8.1 Decommissioning

To **decommission the partly completed machinery**, proceed as described below:

| STEP | ACTION   |
|------|--|
| 1    | Disconnect the partly completed machinery's power supply sources.                        |
| 2    | Store the partly completed machinery in a covered, dry place protected from the weather. |
| 3    | Cover the partly completed machinery with a breathable cloth.                            |

## 8.2 Disposal

Before scrapping, it is mandatory to remove and dispose of (in accordance with applicable laws and local regulations), all parts that may harm the environment.

| MATERIAL                           | ACTION  |
|------------------------------------|---|
| Plastic                            | It must be dismantled and disposed of separately.   |
| Lubricants and oils                | They must be collected and handed over to specialised and authorised collection and disposal centres.                               |
| Iron                               | Dismantle and collect separately.<br>It must be recycled through the appropriate collection centres.                                |
| Steel                              | Dismantle and collect separately.<br>It must be recycled through the appropriate collection centres.                                |
| Aluminium                          | Dismantle and collect separately.<br>It must be recycled through the appropriate collection centres.                                |
| Pneumatic or electrical components | They will have to be dismantled in order to be reused if they are still in good condition or, if possible, overhauled and recycled. |

To **dispose of the partly completed machinery**, proceed as described below:

| STEP | ACTION  |
|------|---|
| 1    | Prepare a large, clutter-free work area on a smooth, level floor in order to be able to carry out the dismantling operations of the partly completed machinery safely.          |
| 2    | Disconnect the partly completed machinery from the mains, disconnecting the power cables and all electrical components after taking the safety measures required for such work. |
| 3    | Proceed to disassembly, separating the components of the partly completed machinery into groups (as shown in the table above) for separate disposal.                            |



### CAUTION!

**For disassembly of trade parts or subcontracted material that are part of the partly completed machinery supplied by the manufacturer, please refer to the relevant manuals of the suppliers of such parts.**



Pursuant to the **“WEEE” Directive 2012/19/EU**, if the component/equipment purchased is marked with the following crossed-out wheeled bin, it means that at the end of its service life the product must be collected separately from other waste.



### CAUTION!

**It is mandatory to comply with the laws in force regarding disposal in the country of partly completed machinery installation.**

## 9 ATTACHMENTS

### 9.1 List of attachments

The following table lists the attachments that form an integral part of this manual:

| REF.                                     | ATTACHMENT           |
|--|----------------------|
| <b>GM000852.00</b><br><b>GM000853.00</b> | GENERAL LAYOUT       |
| <b>GM000859.00</b><br><b>GM000860.00</b> | OPTIONAL LAYOUT      |
| -  | WIRING DIAGRAM       |
| -  | SUB-SUPPLIER MANUALS |

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**ARS S.r.l.**

Via P. Gobetti, 19 - 52100 Arezzo (AR) Italy  
Tel. +39 0575 398611 - Fax +39 0575 398620  
[info@arsautomation.com](mailto:info@arsautomation.com) - [www.arsautomation.com](http://www.arsautomation.com)