VENUSAutomatic Palletizer





INFEED STATION



The pallet of products is positioned on a motorized conveyor where the height of the pallet is checked. The conveyor is made of chain planes that guarantee stability while the pallet is transported inside the **VENUS**.

PALLET DELIVERY



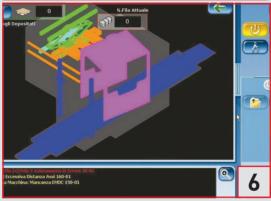
The empty pallet is put down from the elevator on the motorized chain conveyor and conveyed in the pallet delivery area to be easily removed by hand or by means of a pallet lifter.

LIFTING AND ROTATING



The pallet is lifted until the off-loading position is reached enabling the moveable roller's conveyor to come close to the top layer of the pallet and to clamp the slip-sheet transferring it with the products on its gravity conveyors. The complete pallet is then rotated of 180° to reach the proper product orientation before repeating the off-loading process with the next layer.

OPERATOR INTERFACE



The user interface program is loaded on a Windows based PC with touch screen. The software enables the machine set-up for new jobs, their storage in the memory and allows also to check and set up all the machine's functions.

Thanks to its patented system of de-palletization, venus can de-palletize semi finished products like sewed and / or glued book blocks, feeding them automatically into perfect binders and hard cover lines. venus allows to eliminate the heavy workload and physical effort of the operators, improving the production capacity of the lines thanks to an improved continuity and increased speed in the product's feeding.

The machine is build to work with Euro-Pallets (1200 x 800 mm) and the product has to be positioned on them manually or automatically in horizontal rows and mirrored layers to guarantee the maximum stability.

To ensure the best result of continuity during the de-palletizing process, it is necessary that VENUS is fed with pallets built with a slip-sheet that is suitable for the application.

Such slip-sheet must be with a size of $1200 \times 900 \text{ mm}$ or $1200 \times 800 \text{ mm}$ and made with a rigid material that allows its manipulation. Suggested for the application for its characteristics of rigidity and resistance (the slip-sheets can be reused continuously) is a plastic material having 1 mm thickness. During the de-palletizing process, after the layers are emptied out, venus gather tidily the slip-sheet on a pallet in order to avoid them any damage or that they get dirty. This guarantee the possibility of their repetitive use.

Depending on the space available and on the production needs, the machine can have different configurations. VENUS is endowed with a touch screen panel to control the machine and load the product's data. It is also equipped with a modem and an ethernet slave for its connection in-line enabling assistance from remote.

PILE'S OFF-LOADING

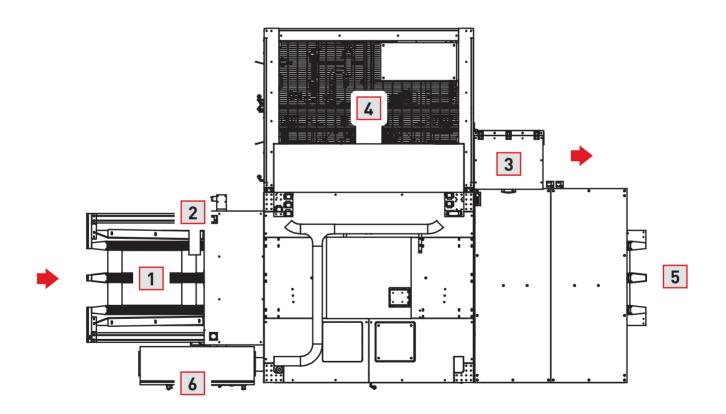


The layer of products that has been moved on the gravity roller plane is then divided in rows by pushing them one by one on the delivery conveyor. In order to prevent damages or markings to the products, the row pushing station is endowed with a blowing system to create an "air cushion" underneath the product.

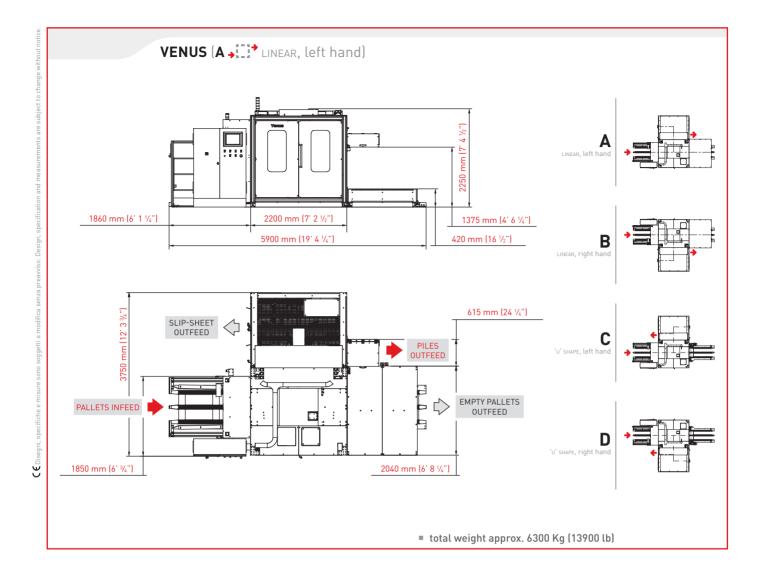
SLIP-SHEET MAGAZINE



Once the complete layer have been off-loaded, the slip-sheet is automatically stored into a high capacity magazine which is easily accessible to the operator. The magazine is endowed with side joggers to ensure a perfect stacking of the slip-sheets. This guarantees the possibility to reuse the slip-sheets.







TECHNICAL DETAILS

SPEED OF THE MACHINE

max. 4 rows/minute

SIZE OF THE PRODUCTS (lenght × width × height)

- min. 120 × 100 × 4 mm (4 3/4 × 3 15/16 × 3/16")
- max. 520 × 330 × 80 mm (20 ½ × 13 × 3 ⅓")

SIZE OF THE PALLETS (lenght × width × height)

■ 1200 × 800 × 144 mm (47 ¼ × 31 ½ × 5 1½,6") Europallet

PILE'S HEIGHT

- min. 80 mm (3 1/8")
- max. 200 mm (7 1/8")

LOADED PALLET'S HEIGHT

max. 1400 mm (55 1/8)

LOADED PALLET'S WEIGHT

max. 900 kg (1984 lb)

STANDARD PALLET'S DELIVERY CONVEYOR

motorized chain conveyor holding 1 pallet
Chain delivery height approx. 110 mm [4 5/16"]; please verify transpallet lifting capability

SLIP SHEET MAGAZINE HEIGHT

■ max. 500 mm [19 ¹¹/₁6″] we suggest the use of slip-sheet made of plastic material having 1 mm [۶/128″) thickness with dimensions 1200 × 900 mm (47 ½ × 35 ¾6″) — slip sheets can be supplied from solema

SIZE-CHANGE

automatic

OPERATOR INTERFACE

- touch screen for products size loading, memory available for standard pallet's configuration saving
- analogic modem and/or ethernet connectivity

ELECTRICAL REQUIREMENTS

- electrical power supply: 3 × 400 V PNE 50 Hz
- controls voltage: 24 V DC

PNEUMATIC SYSTEM

pressure: 6 bar

MACHINE CONFIGURATION







OPTIONAL AVAILABLE

- Stacking station for empty pallets
- Additional pallet's feeding station

> PERFORMANCES DEPEND ON PRODUCT'S SIZES, PRODUCT'S QUALITY AND OPERATING CONDITIONS

