

# Bottle wrapping machines **VEL SERIES**

The solution for automatic wrapping giving your bottle an absolute touch of class

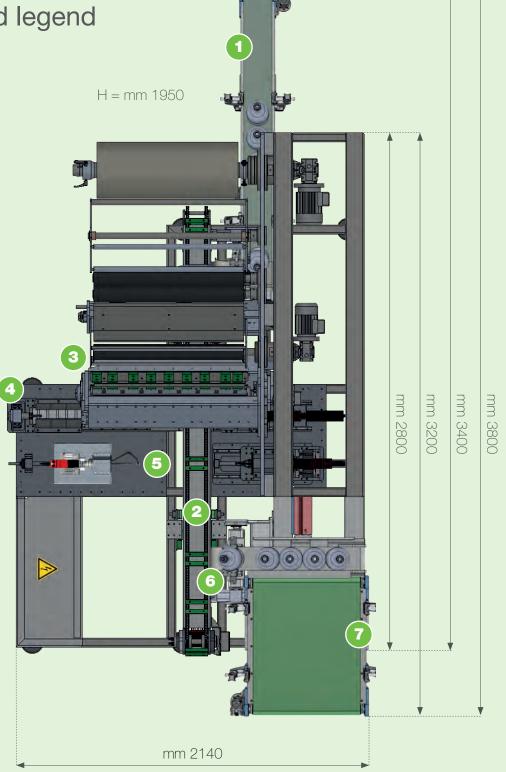
### SEKIES VEL SEKIES

# Bottle wrapping machines

### **VEL SERIES**



- 1 Inlet bottle conveyor belt and tipping station
- 2 Longitudinal advancement station
- 3 Tissue paper unrolling and cutting station
- 4 Bottle wrapping station
- 5 Bottle ends wrapping station
- 6 Output tipping station
- 7 Output accumulation station



**DSSTech srl**No reproduction, even partial

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## VEL SERIES VEL SER

The **VEL** is an excellent solution for those who want to automate the wrapping of bottles or for those who want to reward their production by enriching it with a touch of elegance, but above all by ensuring proper protection from light sources, the cause of oxidation and aging of the product.

The **VEL** automatic wrapping machine for glass bottles has been designed for the automatic wrapping of bottles with tissue paper starting from a roll. The width, as well as the weight of the roll paper, can vary according to the customer's needs.

The **VEL** can work both with manual bottle loading and with automatic loading if placed in line with a label machine: in this case it is essential to set its operation based on the hourly production of the same.

- **DSSTech** produces innovative automatic machines for wrapping glass bottles for wine, beer, oil and other alimentary liquids.
- Our prerogative is to provide our customers with an "ad hoc solution" that adapts to their marketing choices.
- Each machine has its own standard configuration both in terms of accessories and layout; on request, customer-specific solutions can be introduced.
- Machine designed exclusively for the use of tissue paper in reels, white or customized; weight of tissue paper equal to 22-25 g / m<sup>2</sup> \*; different weights must be evaluated in the offer phase.
- Machine designed for 4.0 industry.

#### Optionals

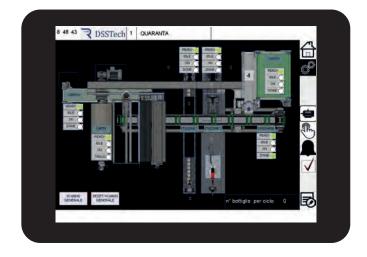
- 1) Inlet conveyor belt
- 2) Bottle format change
- 3) Overlapping flap bottle orientation
- 4) Outgoing accumulation warehouse
- 5) Industry 4.0 adjustment
- The machine is equipped with fixed and swiveling wheels for easy positioning in the environment of use.
- In compliance with current safety regulations, the machine is equipped with fixed and mobile interlocked guards.

Series	Model	Bottles/hour **
VEL	1.500	Up to 600
VEL	1.800	Up to 800
VEL	1.1000	under development

- \* The weight of the paper used to wrap the bottle can affect the performance of the **VEL**.
- \*\* The number of bottles / hour depends on the format and shape of the bottle, as well as on the type of paper used for the wrapping and the accessories and services supplied with the **VEL**. Different types of bottle format must be evaluated in the offer phase.

#### **TECHNICAL FEATURES**

- Brushless motors on the main axes with Profinet communication.
- Conveyor belts and tissue paper unwinding station motors driven by inverters.
- Pneumatic devices controlled by a single valve island.
- Siemens S7-1200 PLC.
- 10" colors Touch screen
- Remote Support.



#### **PATENT** n° 102018000007600

The **VEL** packaging machine is subject to a patent for invention registered by DSSTech srl.

#### **FORMAT CHANGE**

It is possible, even if at the expense of productivity, to equip the **VEL** with the mechanisms for the format change and then prepare it to wrap up to a maximum of two formats (standard 0.75L bottles and 1.5L Magnum bottles).

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### CONVEYOR BELT FOR BOTTLE FEEDING IN ENTRANCE AND TIPPING STATION

VEL can be equipped on request with a conveyor belt at the machine inlet that picks up in line directly from the conveyor belt exiting the label machine; once in position the bottle is pushed by means of a pneumatic actuator towards the overturning station which, with a 90 degree movement, overturns the bottle to rest it on the longitudinal advancement station of the bottle.



#### 2 LONGITUDINAL ADVANCEMENT STATION

The mechanism that allows the advancement of the bottles is equipped with a chain driven by a brushless motor and on which plastic strips or rollers are fixed at a predetermined distance that act as a support for the bottle once loaded; these strips or rollers are built specifically according to the bottle shape and are easily replaceable if necessary.



### TISSUE PAPER UNROLLING AND CUTTING STATION

It is made up of a reel holder of suitable dimensions placed on the upper part at the machine entrance, which is easy to access to guarantee the reel change without the need to use lifting means. The height of the sheet is dictated by the size of the reel while the size to be cut is a parameter to be entered in the reference page using the touch-screen panel where it is possible to prepare different recipes depending on the format of the bottle to be wrapped.



#### 4 BOTTLE WRAPPING STATION

It consists of a structure suitably folded and assembled by means of special tie rods in order to give it the necessary rigidity to ensure the correct housing of the two heads for gripping, lifting and rotating the bottle. It also has a pneumatic lifting and lowering movement to free the bottle during the winding phase from the plastic supports on which the bottle is housed. The adhesion of the tissue paper on the bottle is guaranteed by a special device, the heart of the patent, which allows the tissue paper preview from the entrance of the station, ensuring perfect wrapping.



#### 5 BOTTLE ENDS WRAPPING STATION

It is composed of two structures in 304 stainless steel suitably folded to give appropriate rigidity to the two wrapping groups: neck side and bottle bottom side. The bottle neck side wrapping unit makes sure that a simple latch closure can be obtained but also the special flake closure. The bottle bottom wrapping unit consists of a special gripper whose closing, opening and rotation movement allows wrapping. Subsequently, a special piston cylinder presses the tissue paper inside the concave part of the bottle bottom.

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### 6 OUTPUT TIPPING STATION

It is made up of a group of pliers of our own construction, mounted on a pneumatic actuator for the bottle grip tightening; an additional pneumatic actuator with 90-degree movement performs the bottle vertical straightening to place it on a small conveyor belt with accumulation, maximum 6 bottles of 0.75L.

#### 7 OUTPUT ACCUMULATION STATION

VEL can be equipped on request with an accumulation station at the machine output in order to make it as independent as possible with respect to the machinery placed downstream of the same. The outgoing accumulation station consists of a special conveyor belt in addition to the one mounted on the overturning station, in order to obtain the bottles accumulation (approximately 36 of 0.75L).



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### "My today's quality guarantees my tomorrow's work"









