











# Leader in conveyor belts for grape harvesting

**esbelt** has more than 20 years experience in the field of grape picking with harvesting machines.

Our Vine Growing range conveyor belts are well-known among the main OEM's as the strongest and most reliable in the market.

**esbelt** process and conveyor belts actively help in reducing maintenance and production costs during grape harveting.



## SELF-PROPELLED GRAPE HARVESTING MACHINES: PROCESS DESCRIPTION

#### 1. Working principle.

The need to facilitate harvest by reducing production costs and accelerating the grapes' transport to the vinery in order to keep their adequate temperature has extended the use of grape-harvesting machines. These machines consist of a propellant and of a collection unit where **conveyor belts** are found.



#### **COLLECTION UNITS**

Designed to oscillate and self-align automatically with the grapevine lines.



For optimum results mostgrape-harvesting machines choose to immobilise grapevines during the shaking process, avoiding risk of damage by friction between the grapevines and the grape-harvesting machine that take them directly to hoppers.

#### 2. Cleaning system:

It is common to find leaves that have mixed during the shaking process with the grapes. Extractors are used in order to discard them: leaves are drawn out due to weight difference with the grapes.



#### **Collection unit operation:**

#### 1. Shaking system:

It is common among most manufacturers to use polyurethane separator fingers fixed at both ends. From the control cabin, both free space width and shaking frequency of these fingers can be controlled, having a high capacity of adaptation to soil unevenness.

These controls ensure:

- A smooth manipulation of the grapevine.
- A perfect adaptation to grapevine's orogra phy and an increase in performance.

### 3. Reception system and grape-harvest conveyance:

In general, once collection (shaking and extraction) processes are carried out, grapes' reception and conveyance is made by means of **conveyor belts**.

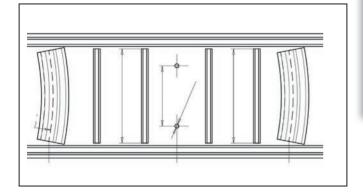


### 2. Conveyor belts and profiles.

Conveyor belts and profiles are specially designed - and conceived for this type of process.

#### **General characteristics:**

- Compact structure.
- Highly resistant to cuts, impact and tear.



- Easy tracking, excellent dimensional stability.
- Suitable for food processing (FDA and EU 1935/2004).
- Resistant to the grape juice.
- Available in blue and grey.





#### **PROFILES**

- Curved transversal profiles.
- Placed in pairs, to prevent leaves from adhering to the belt.
- The profiles are thermowelded to the belt using High Frequency, obtaining excellent adherence. During grape harvesting, it is common that grapevines hit against the belt, sometimes even tearing out or breaking them.

Thanks to their special structure (PVC layers and fabrics), **esbelt** belts allow the replacement and repair of old profiles by new ones, ensuring that the belt endures.



- Product range according to grape-harvesting machine (2, 3 and 4-ply belts).
- Most usual belt widths: 240,
  250, 310 and 320 mm.







#### **Advantages of ESBELT belts:**

#### Costs reduction.

Due to difficult working conditions (soil, loose branches, impact...), profiles end up breaking. The special structure of **esbelt** belts allows repeated repairs of single cleats with no need of full belt replacement.

#### Longer lasting than competitor's belts.

Compact belt with high transversal rigidity, it works totally flat and properly centred. Thermowelded profiles by High Frequency on the belt base offer great resistance to tear and impact.

#### **Quality assurance**

With more than 76.000 lineal meters produced in recent years, we are the most exprienced company in the market manufacturing belts for grape-harvesting machines.

#### **BELTS**

- 2/3-ply belts, highly resistant, greatly valued for its excellent performance and output, called "Main Belts".
- 4-ply belts, exceptional mechanical resistance, strongly recommended for high performance grape-harvesting machines.

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