Equipment evolution: Sorting

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**Sulfiting reduced the need to sort out slightly rotten grapes**

Sulfiting before ferment was only introduced in the early 1900s. Vente (1929) reports that with modern sulfiting and yeasting practices, sorting is not as important as it once was.

**Sorting out damaged grapes is critical in Champagne if colourless juice is to be pressed from dark-skinned varieties**

Sorting to remove unripe or diseased grapes has likely been practised by high-end wine producers for as long as wine has been produced. The most well-known historical example is the story of the Benedictine monk Dom Pérignon in Champagne and his insistence on the removal of damaged grapes.

**Belt and vibrating tables**

These devices facilitate hand sorting by spreading material and presenting it to workers. Sorting may be performed before and/or after destemming. This contrasts with the automated technologies shown, which are only used after destemming.

**Harvesters prevent and perform some sorting**

Mechanical harvesters remove the ability for a person to perform hand sorting while picking. However, they feature some sorting in the form of cleaning fans to remove leaves. Commercially adopted from the early 1970s.

**Fast-belt fed air-jet**

To achieve higher throughputs, pre-drained materials are accelerated and spread using a fast-belt. Material is subjected to the air jet as it leaves the belt. The waste is blown to a different trajectory. Bucher-Vealix c. 2013.

**Roller sorting**

Grapes fall between rollers, while petioles and stem fragments travel across and fall off the last roller as waste. Initial tight-rollers on some models help to align petioles so they do not fall through with grapes, and also allow the removal of free seeds and small waste. Introduced by Pellenc c. 2008 as part of their new shaking destemmer but many stand-alone units are now available.

**Focused sorting after destemming**

With the advent of on-harvest destemming, sorting technologies able to remove contaminants other than just leaves were adopted. This included roller sorters from c. 2008 on Pellenc harvesters and air-jet sorting from c. 2013 on Braud harvesters.


**Other sources include:** de Casteilla (1911), Robinson (2006), www.matevil-france.com, and many equipment suppliers.