

## R&D – SCIENTIFIC STUDY

# EuroCave reveals the results of a comparative study on vibrations in wine cabinets

EuroCave, the inventor of the wine cabinet, cultivates excellence by investing in research and development. To continually improve its products, the company tests them for effectiveness using scientific methods. It was with this purpose in mind that EuroCave commissioned a group of experts from INSA\* to conduct a comparative study of vibrations in wine cabinets. The results are conclusive: EuroCave cabinets generate 6 times fewer vibrations than rival products – conclusions that provide a little more information to help consumers make the right choice of wine cabinet.

*\*The Electrical Engineering and Ferro-electricity Laboratory of the National Institute of Applied Science in Lyon.*



## Results of the study A phase of scientific testing

Four scientific experts from INSA carried out four months of tests on EuroCave wine cabinets and on comparable equipment from competitors. Vibration measurements were conducted with the aid of a high-precision laser vibrometer at different key points on the structures, directly on the equipment or on the bottles: smart sensors were installed on the trays, the compressor and the top of the bottles, for example. The test were conducted on full and empty cabinets to allow comparisons to be made, as the fuller the cabinet, the more muted the vibrations.

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## ENOLOGY INSIGHT

To allow the wine to age in the best possible conditions, a wine cabinet must comply with a number of criteria. Among other things, to attain its peak wine must be protected against any vibration.

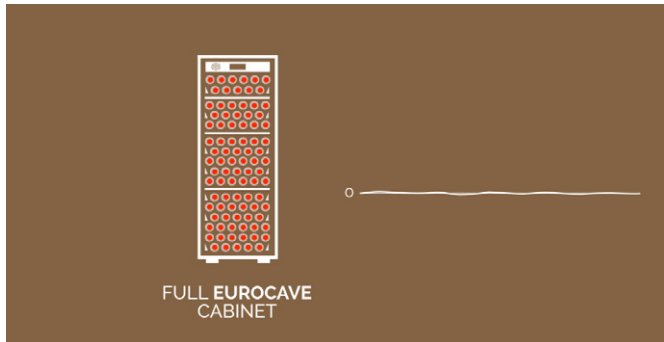


Figure 1: Amplitude of vibrations measured on a full EuroCave Cabinet

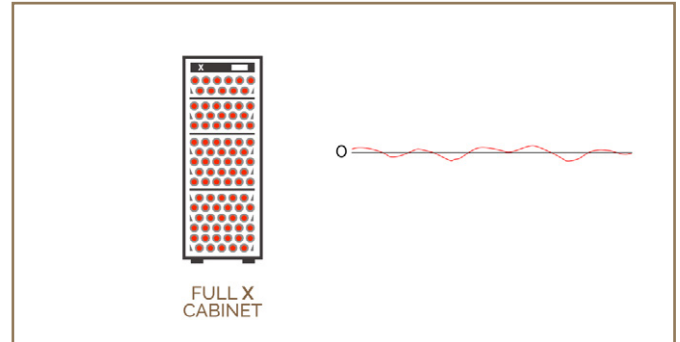


Figure 2: Amplitude of vibrations measured on a full X Cabinet

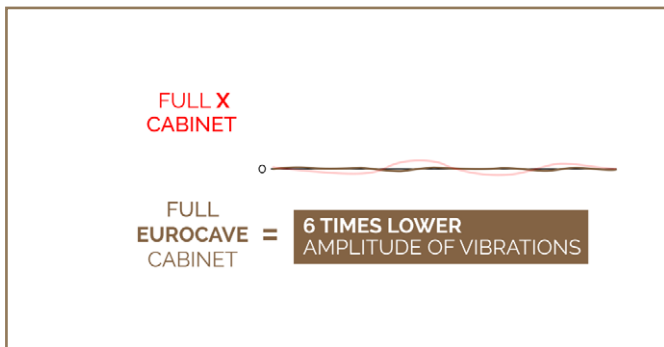


Figure 3: Amplitude of vibrations measured on a full EuroCave Cabinet

*“We are committed to respecting wine and the wine maker’s intention. We are alone in scientifically measuring the effects of our equipment to continually improve our performance and keep a masterly hand on the passing of time. The results of this comparative study on vibrations confirm our expert status and demonstrate the excellence of our R&D department.”*

Pascal Marchand, President and CEO EuroCave



Figure 4: Main du Sommelier

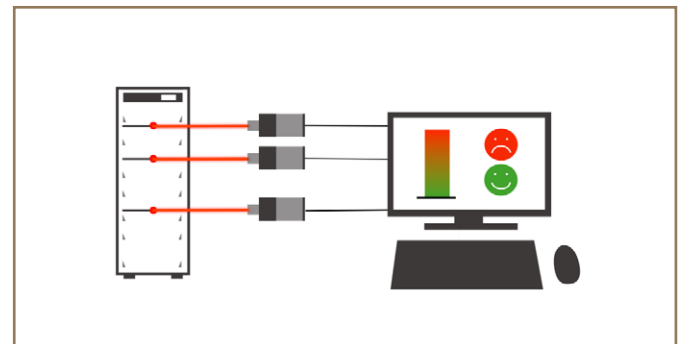


Figure 5: Measuring vibration with a high-precision laser vibrometer.

## Results of the study

The amplitude of the vibration measured in EuroCave products (figure 1) is lower than that in comparable equipment from competitors (figure 2). Measured on the bottles, this amplitude was 5 to 6 times lower in EuroCave products (figure 3). Measured on the shelves in a cabinet devoid of bottles, the amplitude was 20 times lower in EuroCave products.

The vibrations recorded on the bottles, which were virtually nil in the EuroCave systems, can be explained by the efficiency

of the equipment deployed (figure 4), such as the ‘Main du Sommelier’ (a patented bottle support system), shelf structure and a unique cabinet design (EuroCave’s own).

These results reveal the work conducted by EuroCave’s R&D department (figure 5) in its continuous quest for excellence to develop products that are increasingly efficient, easy to use and beautiful to see.

<http://tinyurl.com/protection-vin-vibrations>

## R&D EUROCAVE – SEVERAL STUDIES TO CERTIFY EFFICIENCY

This study on vibrations is the second commissioned by EuroCave. Last year, the company unveiled the results of a scientific study on the evolution of wine after the bottle is opened. After eight months of experiments, the *Institut Universitaire de la Vigne et du Vin* in Burgundy confirmed the effectiveness of the Wine Art system from EuroCave. A panel of expert tasters confirmed these results, finding no difference between a wine from a bottle which had just been opened and wines opened for ten days and kept in the Wine Art.