

Marnier Lapostolle

Well-controlled vibrations

To sort the orange zests used in the elaboration of its «Grand Marnier» drink, Marnier Lapostolle uses vibrating machines. The complete redesign of these machines in terms of vibration resulted in a reduction of the impact on the production environment by 20 to 60% and in improved personnel comfort.



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OUR CUSTOMER

Corporate name
Société des produits
Marnier Lapostolle

Turnover
EUR 110 million (among
which more than 90% on
the export market)

Workforce
300 people

Activities
Production of distilled
alcoholic drinks

Société des produits Marnier Lapostolle produces and sells wines and spirits, among which the famous « Grand Marnier » drink. The preparation of the orange zests used in this liqueur requires sorting on unbalance vibrating machines called « zesters ».

« Our two zesters were installed in 2012. They are highly effective but at the cost of a significant drawback: they vibrate the ground », explains Patrick Raguenaud, head of the company's production sites.

« These excessive vibrations are a real nuisance to our personnel and can be harmful

to the building ».

Immediate improvement

In a concern about improving its operators' comfort and protecting the building, Marnier Lapostolle asked Cetim to « assess the problem and propose simple solutions that would not reduce the effectiveness of the zesters ».

Cetim's experts went to the company's site and measured the vibrations with accelerometers installed on the machines and on the ground. Measurements performed with hammers also made it possible to detect resonances.

All these tests led to the conclusion that the vibrations of the concrete slab were caused by the poor vibration insulation of the machines. Cetim then calculated and proposed a corrective solution consisting in installing suitable rubber pads and inflatable membranes. « This modification resulted in a spectacular improvement as from the very moment the machines were restarted », says Mr Raguenaud.

Subsequent checks revealed that the vibration reduction achieved with the new suspensions led to a reduction of vibrations by 20 to 60%.

Cetim's asset

Cetim has a broad experience in vibration analysis and insulation: diagnosis of facilities, calculation and optimisation of



vibration insulation on any type of machines, check and validation of the effectiveness of new solutions.