

## Research - iron plate

Recently the activities in the research and development department of the PETROF company have been focused on **cooperation with universities and research centres**; the results gained from this cooperation are then applied and used **in practice**.

The most significant example of this successful cooperation with the scientific institutions is the **optimization of grand piano iron plate**. The iron plate used in the new generation of PETROF grand pianos was cast on the basis of results of topological optimization, FEM (finite element method) model of the construction. Thanks to this method, it is possible to find the points, which are loaded by the highest pressures, tensivity or deformation because of both static and dynamic pressures.

Some of the partial results of this research are shown in the following photo-gallery.

