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The Refurbishment of Tonhalle St. Gallen

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Abstract

In this paper we describe one case of acoustic of refurbishment design. It is the refurbishment of Concert Hall of "Tonhalle St. Gallen. The centennial St. Gallen Concert Hall in Switzerland was a hall with many issues relating to the stage. High levels of sound, focusing, flutter echoes, and so on; the problem was never solved. The Director of the Orchestra and his musicians were generally very unhappy with this hall. In the last paper we analyse the St. Gallen Concert hall before refurbishment. In the Tonhalle St. Gallen the diffuser occupies only of stage area, but RT, EDT and G all are increased in audience zone, but in stage the G is decreased 3dB. The response by musicians, audience, and critics has been overwhelmingly favorable. Further research is needed to elucidate the mechanisms by which the labyrinth achieves these improvements, but the results in these venues suggest that this type of structure has an important role to play in acoustic design, particularly in smaller venues.

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