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**PROBLEMS IN DESIGN AND REBUILDING OF CONCERT HALLS WITH ORGANS**

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*Main parts of organ structure and problems connected with a quality of the organ sound are discussed: acoustic characteristics of concert halls with organs, design criteria for organ performance spaces, spatial schemes of an organ, some problems of siting and planning of organs, the organ front and case, placing of the swell-box, bellows and blower, etc. Organ builders and organ experts commonly specify a long reverberation time for a room for an organ. But the Russian norms for the "optimum" reverberation time in spaces with organs lead to comparatively dry acoustics. Most of the famous concert halls and churches with organs have the reverberation time that is rather long compared with the Russian norms. The specific volume per one listener in the famous concert halls and churches with organs is more than the corresponding Russian norms too. The spatial scheme and the interior layout of the organ are discussed: e.g. the organ should not be too wide or too deep. It should be placed near the orchestra and the choir. Different methods of an arrangement of organ stops are discussed. It is emphasized that the room acoustics is very important for the stop-list composition and the scaling of the stops. The influence of organ case and organ front (prospect) on the room acoustics and on the sound of the organ is discussed. Some trends and problems in the contemporary tonal design are considered in their connection with the process of the globalization of the organ culture.*