



## DESIGN OF WINDOWS OF ROLLING STOCKS FOR THE PASSENGER TRANSPORT

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**Abstract** – *The aim of the master thesis is the research the design and selection of the optimal glass for driver's cabin windows and passenger compartments, as well as their installation in the rail vehicle. The new windows should be designed and implemented in the "Avenio" trams. Choosing a new glass requires it to withstand normal operating loads, including environmental conditions, following EN 15152 and EN 50125-1 standard. In addition to selecting glass, it is necessary to choose the appropriate adhesive for mounting the window in the vehicle structure. In accordance with the Din 6701 standard, an analysis of the type and characteristics of the adhesive was described. The subject is to research and analyze the window load, as well as the thermal and acoustic characteristics of windows. Furthermore, the installation of windows in the vehicle structure and the design of windows for EMU (electric multiple units) were described.*

**Keywords** – *Trams, Windows, Glass, Adhesive, Rail Vehicles.*

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