

Chemical Analysis and Mechanical Properties of Selected Safety Components of Lifts

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This paper deals with materials of selected safety components of lifts and it describes their mechanical and chemical testing. It particularly concerns with chemical analysis of two basic types of pulleys from gray and ductile cast iron, and subsequently with the measurement of the hardness and the strength of these materials. The aim of the research was to prove if these types of pulleys, widely used as safety components in the lift industry, meet the current law requirements. Finally, the results of the research are briefly discussed as well as their application in the university education.

Keywords: Lifts, Pulleys, Cast iron, Chemical analysis, Mechanical testing

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