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DOBÓR KONSTRUKCJI I SPOSOBU WYKONANIA TAŚMY TRANSPORTEROWEJ W ZALEŻNOŚCI OD JEJ PRZEZNACZENIA

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CHOOSING CONSTRUCTION AND A WAY OF PRODUCING CONVEYOR BELT DEPENDING ON ITS DESTINY

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The aim of this work is to present basic information on conveyor belts and to explain the issue of the principles of their selection.

The basic concepts of conveyor belts are explained. It was presented, among others definition of a belt conveyor, construction of a conveyor belt and its types. The production process of the tape was discussed and the raw materials necessary for it were highlighted. In the following, the issues of tape selection, its most important aspects are presented. The exemplary test methods for conveyor belts are described. The analysis of factors that influence the durability of the tape was also presented and conclusions were made on its basis.

The conveyor belt is an extremely important element of the conveyor, it decides, among others, about the efficiency and safety of transport, that's why its proper selection is so important. Selection of the conveyor belt consists the proper selection of its parameters and physico-mechanical features that will be appropriate for a given conveyor, transported equipment, working environment (temperature, altitude, humidity, physical aggressiveness, chemical, noise reduction), but they will meet the requirements work safety (flame retardance, anti-static, special requirements for long-haul conveyors, planned shelf-life).

The selection of a tape is a multi-criteria issue. Belt conveyors with time reach increasingly significant lengths, slopes of many of them are variable, in addition they are equipped with a variety of start-up devices, and sometimes require special solutions, individual structures. All this makes the necessary calculations complicate, which is why it is so important that the tape selection is made by an experienced specialist, a constructor.

In the further part attention is paid only to the most important aspects, which can include selection of: the belt core design, material for covers and their thickness, tape, drum diameters, tape with steel cables.