

Longitudinal distance criteria in railway turnouts in different standards and choose the best in practice

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Abstract

Different criteria are used for designing and locating railway turnouts in different standards in the world, and one of them is the criteria for selecting the longitudinal distance in the turnouts of the railway stations, In this article, I have tried to compare this criteria in different standards, and finally providing the best criteria based on experience.

Key words: Railway, Turnouts, Geometric Design, Railway Station, Standards, Switches, Kompsax, EBO, UIC

1. Introduction

Different standards have been proposed in different geometric design standards of railway turnouts and their placement. In this article, I have tried to compare the basic parameter (the longitudinal distance in the turnouts of the railway stations) in different standards and finally to select the best criteria based on my own experiences.

The standards that are compared are:

- 1- Kompsax
- 2- EBO
- 3- UIC

Each of these standards has different methods for calculating the appropriate longitudinal distance between successive turnouts, which are described below.

Certainly other standards, such as AASHTO, AREMA, UIC, TCRP, VDV, RSSB, EN, GOST and ..., may be the subject of this article, but this article has attempted to address the three most commonly used designers in this particular topic, certainly in the near future, I am interested in to provide a comprehensive comparison of all regulations and in all areas of railroad design