

Projekt-/Bachelor-/Masterarbeit

Thema:

Cable car railways - Track guidance by means of steel wheel or guide rollers

Cable Cars are established as economic and comfortable People Mover Systems, especially at airports. The most well known system is the Cable Car in San Francisco. Here the guidance is realized by the classic steel wheel/steel rail contact including the support function. Newer systems like the Doppelmayr Cable Car (DCC) use separate support and guiding wheels either with solid rubber or pneumatic tires.

Roller guided systems have either the disadvantage of a digital guiding function, when the running gear is only guided while touching the vertical guide rail because of the gauge clearance or they have a high abrasive wear of the wheels when these are fixed on both sides to the running edges of the rail.

A further disadvantage of the roller guided system is the „bumpy“ track which allows only low speeds with moderate vibration comfort. The steel wheel/steel rail guided systems however allow higher operating speeds. A possible disadvantage for the steel wheel/steel rail system might be the noise.

The task is to make a detailed study of the technology of the running gears of cable cars and compare them with each other. It should be examined furthermore which might be the advantages of a DCC-similar construction with a tramway running gear in comparison with the two existing systems described above. The economic aspects (positive/negative) should also be considered.

Amount and complexity of the subject will be adjusted to the kind of student's thesis!



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By DCC Doppelmayr Cable Car - www.dcc.at, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=4382583>

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