World Academy of Science, Engineering and Technology
International Journal of Civil and Architectural Engineering
Vol:8, No:05, 2014

Features of Rail Strength Analysis in Conditions of Increased Force Loading

Authors : G. Guramishvili, M. Moistsrapishvili, L. Andghuladze

Abstract : In the article are considered the problems arising at increasing of transferring from rolling stock axles on rail loading from 210 KN up to 270 KN and is offered for rail strength analysis definition of rail force loading complex integral characteristic with taking into account all affecting force factors that is characterizing specific operation condition of rail structure and defines the working capability of structure. As result of analysis due mentioned method is obtained that in the conditions of 270 KN loading the rail meets the working assessment criteria of rail and rail structures: Strength, rail track stability, rail links stability and its transverse stability, traffic safety condition that is rather important for post-Soviet countries railways.

Keywords : axial loading, rail force loading, rail structure, rail strength analysis, rail track stability
Conference Title : ICCBE 2014 : International Conference on Civil and Building Engineering
Conference Location : London, United Kingdom
Conference Dates : May 26-27, 2014