The FASTSIM Method Modification to Speed up the Calculation of Tangential Contact Stresses between Wheel and Rail

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The articles deals with the way of calculation of tangential stresses over non-elliptical contact patch, where is possible to utilize with advantage the Kalker's simplified method FASTSIM. This method named FASTSTRIP is adapted for non-elliptical contact area calculated by means of the Strip method. This method is almost quick as FASTSIM and the results are similar to the CONTACT results. This method may be useful for rail vehicles in track dynamics computation.

Keywords: tangential contact, strip method, FASTSIM, contact patch, Kalker method, FASTSTRIP

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