Mechanics in Railway Transport

Topics

1. Ideal train and ideal track.
2. Derivation of basic equations of train movement and their modification.
3. Track line resistance to vehicle movements.
4. Vehicle resistances - analysis and calculation.
5. Tractive forces - expression. Adhesion, coefficient of adhesion.
6. Traction characteristics.
7. Rolling stock brakes. Air brake pressure diagram.
8. Shunting movement.
9. Inertial inclination. Diagram so / V.
10. Determination of basic locomotive parameters for the designated train.
11. Technical normative of transport weight. Koreff´s nommogram.
12. Tachogram. Static method. Numerical method. Graphical method.
13. Energy consumption when the train is running.
14. Shunting movement calculations.
15. Shunting on marshalling yards.