DIN SPEC 30752-2:2018-08 (E)

Skip loader and roller contact tipper vehicles - Environmental efficiency - Part 2: Theoretical calculation of energy consumption for multi-bucket system vehicles

Contents

Page

Foreword ... 3

1 Scope ... 4

2 Normative references ... 4

3 Terms and definitions ... 4

4 Definition of work cycles ... 4
4.1 Work cycle of skip loader vehicle (AK) ... 5
4.2 Work cycle of roller contact tipper vehicle (RK) ... 5

5 Prerequisites for the cycle calculations ... 5
5.1 Skip loader vehicle (AK) ... 5
5.2 Roller contact tipper vehicle (RK) ... 5

6 Basic formulae for determining energy consumption ... 6
6.1 Calculation of the drive torque M ... 6
6.2 Calculation of the drive power P_{PTO} ... 6
6.3 Calculation of the energy consumption per cycle W ... 6

7 Specific values for vehicle design ... 7

Annex A (informative) **Calculation example with skip loader vehicle** ... 8

Bibliography ... 10