

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 |