

ISO 14722:1998-12 (E)

Moped and moped-rider kinematics - Vocabulary

Contents	Page
1 Scope	1
2 Normative references	1
3 Steering system	1
3.1 Axis and angles of the steering assembly	1
3.2 Dynamic quantities of the steering assembly	2
3.3 Steering characteristics of the steering assembly	3
4 Suspension system	3
4.1 Suspension geometry	3
4.2 Suspension dynamic rates	4
5 Tyres and wheels	5
5.1 Tyre axis system and variables	5
5.2 Forces applied to tyres and their coefficients	6
5.3 Moments applied to tyres	8
5.4 Phenomena related with tyres	8
6 Basic principles of axis systems and kinematics	8
6.1 Axis systems	8
6.2 Horizontal axis systems	9
6.3 Component and assembly axis systems	9
6.4 Ground contact axes	9
6.5 Moped masses and weight distribution	11
6.6 Moments of inertia	11
6.7 Motion variables	11
6.8 Forces	15
6.9 Moments	15
7 Directional dynamics	16
7.1 Controls	16
7.2 Control modes	16
7.3 Moped response	17
7.4 Steer properties	18
7.5 Stability	19
8 Moped motion characteristics	19
9 Aerodynamic characteristics of the moped-rider combination	21
9.1 Winds	21
9.2 Aerodynamic variables	21
9.3 Aerodynamic forces, moments and coefficients	22
10 Riding postures and behaviours	23
11 Tests	24
11.1 Constant environment influence	24
11.2 Changeable environment influence	25
11.3 Other tests	26
Bibliography	31