DIN EN 14765:2006-09 (E)

Bicycles for young children - Safety requirements and test methods

Contents

Page

page Foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 Requirements and test methods 7
4.1 Brake tests and strength tests - special requirements 7
4.1.1 Definition of brake tests 7
4.1.2 Definition of strength tests 7
4.1.3 Numbers and condition of specimens for the strength tests 7
4.1.4 Accuracy tolerances of test conditions for brake tests and strength tests 8
4.2 Toxicity 8
4.3 Sharp edges 8
4.4 Security and strength of safety-related fasteners 8
4.4.1 Security of screws 8
4.4.2 Minimum failure torque 8
4.4.3 Quick-release devices 8
4.4.4 Foot location devices 8
4.5 Crack detection methods 9
4.6 Protrusions 9
4.6.1 Requirement 9
4.6.2 Test method 10
4.7 Brakes 11
4.7.1 Braking-systems 11
4.7.2 Hand-operated brakes 11
4.7.3 Attachment of brake assembly and cable requirements 14
4.7.4 Brake-block and brake-pad assemblies -- security test 14
4.7.5 Brake adjustment 14
4.7.6 Back-pedal brake 15
4.7.7 Braking-system -- strength tests 15
4.7.8 Braking performance 18
4.8 Steering 19
4.8.1 Handlebar -- dimensions and end fittings 19
4.8.2 Handlebar grips 19
4.8.3 Handlebar-stem -- insertion depth mark or positive stop 20
4.8.4 Steering stability 20
4.8.5 Steering assembly -- static strength and security tests 20
4.8.6 Handlebar and stem assembly - fatigue test 24
4.9 Frames 26
4.9.1 Frame and front fork assembly - impact test (falling mass) 26
4.9.2 Frame and front fork assembly - impact test (falling frame) 28
4.10 Front fork 29
4.10.1 General 29
4.10.2 Front fork - bending fatigue test 29
4.11 Wheels 29
4.11.1 Rotational accuracy 29
4.11.2 Wheel/tyre assembly - clearance 31

4.11.3 Wheel/tyre assembly - static strength test 31
4.11.4 Wheel retention 31
4.12 Rims, tyres and tubes 32
4.12.1 Tyre inflation pressure 32
4.12.2 Tyre and rim compatibility 32
4.13 Pedals and pedal/crank drive system 33
4.13.1 Pedal tread 33
4.13.2 Pedal clearance 33
4.13.3 Pedal-spindle impact test 34
4.13.4 Pedal/pedal-spindle --dynamic durability test 35
4.13.5 Drive system static strength test 36
4.13.6 Crank assembly -- fatigue tests 37
4.14 Saddles and seat-pillars 38
4.14.1 Limiting dimensions 38
4.14.2 Seat-pillar - insertion-depth mark or positive stop 38
4.14.3 Saddle and seat pillar - security test 39
4.14.4 Saddle -- static strength test 39
4.14.5 Seat-pillar -- fatigue test 40
4.15 Chain-guard 41
4.16 Stabilizers 42
4.16.1 Mounting and dismounting 42
4.16.2 Dimensions 42
4.16.3 Vertical load test 42
4.16.4 Longitudinal load test 43
4.17 Luggage carriers 44
4.18 Lighting systems and reflectors 44
4.18.1 Lighting and reflectors 44
4.18.2 Wiring harness 44
4.18.3 Warning device 44

5 Instructions 44

6 Marking 45
6.1 Requirement 45
6.2 Durability test 46
6.2.1 Requirement 46
6.2.2 Test method 46

Annex A (informative) Steering geometry 47

Bibliography 48