ISO/TS 17929:2014-09 (E)

Biomechanical effects on amusement ride passengers

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Degrees of potential biomechanical risks for amusement rides 3

5 Measures for elimination or reduction of hazards due to biomechanical effects 5

6 Effects of accelerations on passengers 7

7 Zones of potential biomechanical risk in the reach envelope of passengers for motion risk analysis and unscheduled braking risk analysis 7

Annex A (informative) Body dimensions of passengers from 1,20 m up to 2,0 m tall for motion risk analysis and unexpected braking risk analysis 8

Annex B (informative) Recommended acceleration limits 13

Annex C (informative) Hazard of passengers being held in an upside-down position in emergency 20

Annex D (informative) Use of amusement rides considering the state of health or well-being of passengers -- Warning signs to advise passengers 21

Bibliography 23