DIN EN 1570-2:2017-03 (E)

Safety requirements for lifting tables - Part 2: Lifting tables serving more t han 2 fixed landings of a building, for lifting goods with a vertical travel speed not exceeding 0,15 m/s

Contents

Page

European foreword 4

Introduction 5

1 Scope 6

2 Normative references 7

3 Terms and definitions 8

4 List of hazards 10

5 Safety requirements and/or protective measures 10
5.1 General 10
5.2 Calculations 10
5.2.1 Stresses 10

Table 1 -- Load factors for lifting tables 11
5.2.2 Platform deflection 11

Figure 1 -- Deflection of platform 12
5.2.3 Strength of the load-bearing structure 12
5.2.4 Stability 12
5.3 General requirements 13
5.3.1 Safety distances 13
5.3.2 High temperatures 13
5.3.3 Speed 13
5.4 Protection for the travel zone and for the platform 14
5.4.1 General requirements 14
5.4.2 Protection of the travel zone 14
5.4.3 Protection for the area underneath the platform 14
5.4.4 Protection for the platform 15
5.4.5 Guard-rails 15

Figure 2a -- Horizontal guard-rail 16

Figure 2b -- Clear space between two guard-rail segments 16
5.4.6 Gates 17

Figure 3 -- Performance level depending on the fall risk 18
5.4.7 Flexible guards 20
5.4.8 Screens 20
5.5 Design of the platform 20
5.6 Levels and clearances of fixed landings 20
5.7 Driving system 21
5.7.1 Mechanical chains driving system 21
5.7.2 Hydraulic system 21

Table 2 -- Hydraulic pipe rupture protection device 22

5.8 Controls 25
5.9 Electrical system 26
5.9.1 General requirements 26
5.9.2 Protection rating 26
5.10 Safety devices 26
5.10.1 General requirements 26
5.10.2 Trip devices 26
Figure 5 — Configuration of a trip device 27
5.10.3 Safety devices for maintenance 27
6 Verification of the safety requirements and/or measures 27
6.1 General requirements 27
Table 3 — Means of verification of the safety requirements and measures 28
6.2 Design check 29
6.3 Manufacturing check 29
6.4 Visual inspection 29
6.5 Electrical tests 29
6.6 Individual final verification before putting into service (fitness for purpose) 29
7 Marking 29
8 Instructions for the user 30
8.1 General requirements 30
8.2 Instructions for use 31
8.3 Instructions for installation 32
8.4 Instructions for maintenance and inspection 32
Annex A (normative) Test procedures 34
Annex B (informative) Safety signs 36
Annex C (informative) Table with the list of hazards 38
Table C.1 — List of hazards 38
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC 41
Bibliography 42