ISO/TR 24666:2023-09 (E)

Sports and recreational facilities - Probes for entrapment/entanglement on playground equipment - Collection of data

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Rationale for anthropometrics and scoping of intended user groups in developing safety standards to reduce serious injury **1**

4.1 ASTM F1487-21 (US) standard consumer safety performance specification for playground equipment for public use 1

4.1.1 Reference document for anthropometry 1

4.1.2 Defined age groups 2

4.2 ASTM F2373-11(2017) (US) standard consumer safety performance specification for public use play equipment for children 6 months to 23 months 2

4.2.1 Reference document for anthropometry 2

4.2.2 Defined age groups 2

4.3 U. S. consumer product safety commission handbook for public playground 2010 (US) 2

4.3.1 Reference document for anthropometry 2

4.3.2 Defined age groups 2

4.4 EN 1176-1:2017 (European Union) Playground equipment and surfacing 3

4.4.1 Reference document for anthropometry 3

4.4.2 Defined age groups 3

4.5 AS 4685.1:2021 (Australia) Playground equipment and surfacing 3

4.6 CSA Z614-20 (Canada) Children's playspaces and equipment 3

4.6.1 Reference document for anthropometry 3

4.6.2 Defined age groups 3

4.7 JPFA-SP-S: 2014 (JAPAN) standard on playground equipment safety and its annex 2: playground equipment for toddlers aged under 3 3

4.7.1 Reference document for anthropometry 3

4.7.2 Range of age and size 3

4.8 SS 457:2017 (Singapore) Specification for playground equipment for public use 4

4.8.1 Reference document for anthropometry 4

4.8.2 Defined age groups 4

4.9 MS 966:2017 (Malaysia) Playground equipment – Safety performance for public use – Specification 4

4.9.1 Reference document for anthropometry 4

4.9.2 Defined age groups 4

5 International inventory of probes/gauges and test method procedures used to identify specific playground equipment safety hazards **4**

5.1 International inventory of probes/gauges and test method procedures 4

5.2 Probes and gauges figures 7

6 Summary **7**

Annex A (informative) **Completely bound opening head entrapment** **8**

Annex B (informative) **Partially bounded opening head/neck entrapment** **13**

Annex C (informative) **Protrusion hazard impalement** **15**

Annex D (informative) **Impalement from projections on suspended components** **17**
Annex E (informative) **Common crush and shear hazard (between one or more moving accessible components)** **18**
Annex F (informative) **Finger entrapment (gaps, opening and holes)** **19**
Annex G (informative) **Entanglement hazards** **20**
Annex H (informative) **Hazard Test for Toddlers** **23**
Annex I (informative) **Finger entrapment (gaps, opening, hinged objects, and holes)** **26**
Bibliography **27**