DIN EN 14052:2012-07 (E)

High performance industrial helmets

Contents

Page

Foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 Physical requirements 7
4.1 General 7
4.2 Materials and construction 7
4.2.2 Visual inspection 8
4.3 Chin strap 8

5 Performance requirements 8
5.1 General 8
5.2 Mandatory requirements 9
5.2.1 Shock absorption 9
5.2.2 Resistance to penetration 9
5.2.3 Retention system release 9
5.2.4 Retention system effectiveness 9
5.2.5 Flame resistance 9
5.2.6 Label 9
5.3 Optional requirements 9
5.3.1 Performance at lower temperatures 9
5.3.2 Performance at higher temperature 9
5.3.3 Resistance to radiant heat 10
5.3.4 Electrical properties 10
5.3.5 Molten metal splash 10

6 Testing 11
6.1 Samples 11
6.2 Conditions and conditioning for testing 12
6.2.1 General 12
6.2.2 Low temperature 12
6.2.3 High temperature 12
6.2.4 Water immersion 12
6.2.5 Artificial ageing 12
6.2.6 Lower temperature 12
6.2.7 Higher temperature 12
6.2.8 Radiant heat 14
6.3 Headforms 14
6.3.1 Construction 14
6.3.2 Selection of size 14
6.4 Shock absorption 15
6.5 Resistance to penetration 16
6.6 Retention system release 16
6.7 Retention system effectiveness 16
6.8 Resistance to flame 17
6.9 Resistance to radiant heat 17

6.10 Electrical properties 17
6.11 Molten metal splash 17
6.11.1 Principle 17
6.11.2 Apparatus 17
6.11.3 Procedure 17

7 Marking and information to be supplied by the manufacturer 18
7.1 Markings on the helmet 18
7.2 Additional information supplied by the manufacturer 18
7.2.1 Information to be supplied on a label 18
7.2.2 Additional information 19

Annex A (informative) Comfort 20

Annex B (informative) Test results, uncertainty of measurement 21

B.1 Uncertainty of measurement 21
B.2 Interpretation of results 21
B.3 Calculation of uncertainty of measurement 22

Annex C (informative) Significant technical changes between this European Standard and Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC Personal Protective Equipment 24

Bibliography 26