

# DIN EN 14052:2013-04 (E)

## High performance industrial helmets (includes Amendment A1:2012)

---

<b>Contents</b>		<b>Page</b>
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 .....	8
5.2.1	Shock absorption .....	8
5.2.2	Resistance to penetration .....	8
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 .....	9
5.3.4	Electrical properties .....	10
5.3.5	Molten metal splash .....	10
6	Testing .....	10
6.1	Samples .....	10
6.2	Conditions and conditioning for testing .....	11
6.2.1	General .....	11
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 .....	14
6.5	Resistance to penetration .....	15
6.6	Retention system release .....	16
6.7	Retention system effectiveness .....	16
6.8	Resistance to flame .....	16
6.9	Resistance to radiant heat .....	16

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 .....	17
7.1	Markings on the helmet .....	17
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 .....	18
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 .....		25