

DIN EN 13355:2010-06 (E)

Coating plants - Combined booths - Safety requirements (includes Amendment A1:2009)

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	7
3	Terms and definitions	9
4	List of significant hazards	11
4.1	General	11
4.2	Mechanical hazards	11
4.3	Electrical hazards	12
4.4	Thermal hazards	12
4.5	Hazards generated by noise	12
4.6	Hazards generated by radiation	13
4.7	Hazards resulting from dangerous substances	13
4.8	Fire and explosion hazards	13
4.9	Hazards caused by failure of the energy supply and malfunction of the control system	14
4.10	Hazards caused by emergency stop devices	14
5	Safety requirements and/or measures	14
5.1	General	14
5.2	Mechanical	15
5.3	Electrical	16
5.4	Thermal	16
5.5	Noise	16
5.6	Radiation	17
5.7	Safety requirements against dangerous substances	17
5.8	Fire and explosion prevention and protection	19
5.9	Failure of energy supply and malfunction of the control system	23
5.10	Emergency stop devices	24
6	Verification of the safety measure and/or measures	24
6.1	General	24
6.2	Mechanical	24
6.3	Electrical	24
6.4	Thermal	24
6.5	Noise	24
6.6	Radiation	24
6.7	Dangerous substances	24
6.8	Fire and explosion	25
6.9	Failure of energy supply	26
6.10	Emergency stop devices	26
7	Information for use	26
7.1	General	26
7.2	Instruction handbook	27
7.3	Marking	29

Annex A (normative) Determination of concentration of flammable solvents in terms of LEL (spraying mode)	31
A.1 Equations	31
A.2 Examples of calculation	32
Annex B (normative) Measurement of air velocities	34
B.1 Instrumentation	34
B.2 Measurement conditions	34
Annex C (informative) Classification of material's reaction to the fire - National standards	41
Annex D (informative) References to national exposure limit values	42
Annex E (informative) Equivalence between zone description and categories of ignition protection	43
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC !, amended by 98/79/EC"	44
Annex ZB (informative) !Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC"	45
Bibliography	46