

DIN EN 14034-1:2011-04 (E)

Determination of explosion characteristics of dust clouds - Part 1: Determination of the maximum explosion pressure p_{max} of dust clouds (includes Amendment A1:2011)

Contents		Page
Foreword		3
1 Scope		5
2 Normative references		5
3 Terms and definitions		5
4 Test apparatus		6
4.1 General		6
4.2 Explosion vessel		6
4.3 Dust dispersion system (dust container, fast acting valve, connecting tube, dust disperser)		8
4.4 Ignition source		11
4.5 Control unit		11
4.6 Pressure measuring system		11
5 Dust sample		11
6 Test procedure		12
7 Calibration and verification		14
7.1 Calibration		14
7.2 Verification		15
8 Safety precautions / instructions for use		15
9 Alternative test equipment / procedures		16
10 Test report		16
Annex A (normative) Electro pneumatic valve		17
Annex B (normative) Dust disperser with 5 mm holes		19
Annex C (normative) 20 l sphere		23
C.1 General		23
C.2 Test apparatus		23
C.3 Test conditions		23
C.4 Test procedure		24
C.5 Calculation and correction of p_{max}		25
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 94/9/EC		26
Bibliography		27
Introduction		4