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Nota di contenuto	Front Cover; Electrical Installations in Hazardous Areas; Copyright Page; Contents; Preface; Chapter 1. Introduction; 1.1 Examples of historic incidents; 1.2 Technological approach; 1.3 History of development; 1.4 UK legislation; 1.5 European legislation; 1.6 Certification; 1.7 Certificate and labelling information; 1.8 The future of certification; Chapter 2. Area classification; Philosophy objectives and procedures; 2.1 Basic properties of flammable and combustible materials; 2.2 Basis of area classification; 2.3 General approach to area classification 2.4 Classification of sources of release2.5 Hazardous zonal classification; 2.6 Collection of information; 2.7 Procedures; 2.8 Personnel involved; 2.9 Results of area classification and frequency of repeats; Chapter 3. Area classification practice for gases, vapours and mists in freely ventilated situations; Introduction; 3.1 Containment of flammable materials; 3.2 Generalized method of area classification; 3.3 The source of hazard method of area classification; 3.4 Other practical well-ventilated situations; Chapter 4. Calculation of release rates and the extents of hazardous areas 4.1 Releases of gas and vapour4.2 Release of liquid below its

atmospheric boiling point; 4.3 Release of liquid above its atmospheric boiling point; 4.4 Summary of use of equations; 4.5 Releases in areas which are not well ventilated; 4.6 Conclusion; Chapter 5. Area classification practice for gases, vapours and mists in areas which are not freely ventilated; 5.1 Typical areas of restricted ventilation; 5.2 Effect of walls on hazardous areas; 5.3 Roofs without walls or associated with one, two or three walls; 5.4 Rooms above ground; 5.5 Rooms below ground  
5.6 Rooms without any internal release but which abut external hazardous areas; 5.7 Particular circumstances; Chapter 6. Area classification practice for dusts; 6.1 Properties of dusts; 6.2 Area classification for dust releases; 6.3 Practical situations; Chapter 7. Design philosophy for electrical apparatus for explosive atmospheres; General approach and applicable standards; 7.1 History; 7.2 Protection of electrical apparatus for gas, vapour and mist risks; 7.3 Situation in respect of Zone 2 apparatus; 7.4 Protection of electrical apparatus for dust risks; 7.5 Apparatus construction Standards  
Chapter 8. General requirements for explosion protected apparatus (gas, vapour and mist risks) Apparatus to European Standards; 8.1 BS/EN 50014 (1993) (including amendment 1 (1994)); Chapter 9. Apparatus using protection concepts encapsulation 'm', oil immersion 'o' and powder filling 'q'; 9.1 Encapsulation 'm'; 9.2 Oil immersion 'o'; 9.3 Powder filling 'q'; Chapter 10. Apparatus using protection concept flameproof enclosure 'd'; 10.1 Standards for flameproof apparatus; 10.2 Construction and testing requirements for flameproof apparatus; 10.3 Construction of flameproof enclosures, entry facilities and component parts

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## Sommario/riassunto

The Health and Safety at Work Act, together with current and impending EU Directives, obliges those responsible for hazardous areas, those who work in such areas and those who supply equipment for use in such areas to demonstrate that they have taken all necessary and reasonable steps to prevent fires and explosions. This book addresses these issues, seeks to explain the ever increasing complexity of standards and codes pertaining to this field and describes their method of application and the application of other procedures to assist those involved. The only book which prov

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