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Nota di contenuto	Intro -- FIRE SAFETY -- FIRE SAFETY -- CONTENTS -- PREFACE -- SMOKE AND FIRE DYNAMICS IN ATRIA AND LARGE ENCLOSURES: AN OVERVIEW -- ABSTRACT -- 1. INTRODUCTION -- 2. ATRIUM DEFINITION -- 3. ATRIUM TYPOLOGY -- 4. ATRIUM FIRE DYNAMICS AND SAFETY PROBLEMS -- 5. FIRE STRATEGIES AND DESIGN -- 6. COMPUTER MODELLING -- 7. SPRINKLERS AND SMOKE DETECTORS -- 8. THE PROCESS OF SMOKE FILLING -- 9. NATURAL VENTING OF SMOKE -- 10. MECHANICAL VENTING OF SMOKE -- 11. SPILL PLUME DYNAMICS -- 12. CURRENT DESIGN TRENDS IN FIRE SAFETY -- ACKNOWLEDGMENTS -- REFERENCES -- A BRIEF REVIEW ON APPLYING COMPUTATIONAL FLUID DYNAMICS IN BUILDING FIRE HAZARD ASSESSMENT -- ABSTRACT -- 1. INTRODUCTION -- 2. LITERATURE REVIEW -- 3. TURBULENCE MODEL -- Reynolds Averaging of Navier-Stokes Equation (RANS) -- Large Eddy Simulation (LES) -- 4. DISCRETIZATION OF THE CONSERVATION EQUATIONS: FINITE VOLUME METHOD -- 5. VELOCITY-PRESSURE LINKED EQUATIONS -- 6. COMBUSTION AND MODELLING OF THE HEAT RELEASED -- 7. THE FIRE DYNAMICS SIMULATOR -- 8. VERIFICATION AND VALIDATION -- 9. APPLICATION TO FIRE SAFETY ENGINEERING -- 10. AN EXAMPLE -- 11. FUNCTIONAL ANALYSIS -- 12. FREE BOUNDARY CONDITIONS -- 13. CONCLUSIONS -- REFERENCES -- SIMPLIFIED ASSESSMENT OF

PROTECTIVE MEASURES TO PREVENT FIRE ESCALATION INVOLVING PRESSURIZED VESSELS -- ABSTRACT -- NOMENCLATURE -- 1. INTRODUCTION -- 2. FIREBALL AND BLEVE HAZARD FOR PRESSURIZED VESSELS -- 3. ESTIMATION OF DOMINO ESCALATION PROBABILITY -- 4. ESTIMATION OF VESSEL TIME TO FAILURE -- 4.1. Modeling Approach to Time to Failure Calculation -- 4.2. The Lumped Model -- 4.3. THE FINITE ELEMENT MODEL (FEM) -- 4.3. LUMPED MODEL VALIDATION -- 4.4. SIMPLIFIED CORRELATIONS FOR TTF ESTIMATION -- 5. ESCALATION THRESHOLDS AND ESCALATION PROBABILITY -- 5.1. Assessment of Escalation Thresholds and Probabilities -- 5.2. Effect of Passive Protection Systems.

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Sommario/riassunto

This volume discusses the first aim of fire safety - to provide the safety of occupants, and to avoid and/or reduce the number of fatalities (and/or the number of injuries). A broad overview of the current state-of-the-art of fires in atria is also discussed.
