

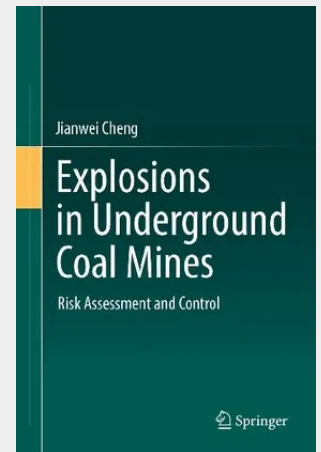
Explosions in Underground Coal Mines

Risk Assessment and Control

This book addresses the hazard of gas explosions in sealed underground coal mines, and how the risk of explosion can be assessed, modeled, and mitigated. With this text, coal mine operators and managers will be able to identify the risks that lead to underground mine gas explosions, and implement practical strategies to optimize mining safety for workers. In six chapters, the book offers a framework for understanding the sealed coal mine atmosphere, the safety characteristics that are currently in place, and the guidelines to be followed by engineers to improve upon these characteristics.

The first part of the book describes the importance and characteristics of underground gas mine explosions in a historical context with data showing the high number of fatalities from explosion incidents, and how risk has been mitigated in the past. Chapters also detail mathematical models and explosibility diagrams for determining and understanding the risk factors involved in mine explosions. Readers will also learn about safety operations, and assessments for the sealed mine atmosphere. With descriptions of chapter case studies, mining engineers and researchers will learn how to apply safety measures in underground coal mines to improve mining atmospheres and save lives.

This book addresses the hazard of gas explosions in sealed underground coal mines, and how the risk of explosion can be assessed, modeled, and mitigated. With this text, coal mine operators and managers will be able to identify the risks that lead to underground mine gas explosions, and implement practical strategies to optimize mining safety for workers. In six chapters, the book offers a framework for understanding the sealed coal mine atmosphere, the safety characteristics that are currently in place, and the guidelines to be followed by engineers to improve upon these characteristics. The first part of the book describes the importance and characteristics of underground gas mine explosions in a historical context with data showing the high number of fatalities from explosion incidents, and how risk has been mitigated in the past. Chapters also detail mathematical models and explosibility diagrams for determining and understanding the risk factors involved in mine explosions. Readers will also learn about safety operations, and assessments for the sealed mine atmosphere. With descriptions of chapter case studies, mining engineers and researchers will learn how to apply safety measures in underground coal mines to improve mining atmospheres and save lives.



106,99 €

99,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783319748924

Medium: Buch

ISBN: 978-3-319-74892-4

Verlag: Springer

Erscheinungstermin: 05.04.2018

Sprache(n): Englisch

Auflage: 1. Auflage 2018

Produktform: Gebunden

Gewicht: 512 g

Seiten: 208

Format (B x H): 160 x 241 mm

