

1. Record Nr.	UNINA9910484662303321
Autore	Liu Yuncai
Titolo	The operation of contemporary blast furnaces / / Yuncai Liu
Pubbl/distr/stampa	Singapore : , : Springer, , [2021] ©2021
ISBN	981-15-7074-4
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XXVIII, 455 p. 282 illus.)
Disciplina	669.1413
Soggetti	Blast furnaces
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Operation of Contemporary Blast Furnace -- The Activation of the Hearth -- The Structure of Stock Column and the Control of Gas Distribution -- The Stabilization Furnace Temperature -- The Control of Slag Composition -- Tapping of Iron and Slag -- Basic Operation of Blast Furnace -- Precaution and Disposition of Furnace Breakage -- Scaffolding -- Blast Furnace Blowing on -- Blowing out, Banking and Blowing off -- The Explosion of Blast Furnace.
Sommario/riassunto	This book focuses on how to keep blast furnaces running stably and smoothly with low consumption and long operating life spans. Assessing and adjusting blast furnace performance are key to operation. The book describes in detail cases of both successful and failed blast furnace operation. It also demonstrates various phenomena and "symptoms" in the smelting process that have rarely been studied before, e.g. abnormal gas distribution, bending loss of tuyere, slag crust fall-off, blast furnace thickening, and hearth accumulation. As such, it will help readers understand internal phenomena in blast furnaces, providing a basis for developing intelligent control and management systems. .