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Sommario/riassunto

No pyrometallurgical smelter can operate without some form of tapping system. It is the one thing all smelters have in common. This collection discusses this meeting point of the science, technology, and skill involved in this process. The tap-hole design process includes a set of design criteria, which need to be revised as the results of laboratory, computational fluid dynamics (CFD), and time-and-motion studies become available. The tap-hole life cycle is considered in this volume, with authors addressing the requirements for installation and operability as well as for maintenance. Matters such as online monitoring of the tap-hole wear, handling of liquid products, and extraction of fumes are all discussed. Although much has been done to make the tapping process as automatic as possible, tapping of smelters cannot be done without labor. Tap floor operators work in harsh environments where safety is of utmost importance. Selection of suitable personnel and intensive training is required and is discussed in this collection.