Record Nr. UNINA9910853994403321 Autore Kaltchev Roumen **Titolo** Dissolved Air Flotation [[electronic resource]]: Equipment, Best Practice and Applications / / by Roumen Kaltchev Pubbl/distr/stampa Springer Nature Switzerland, 2024 Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 **ISBN** 3-031-51869-1 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (314 pages) Collana Springer Water, , 2364-8198 Disciplina 551.48 Soggetti Water Hydrology Refuse and refuse disposal **Pollution** Environmental engineering Biotechnology Bioremediation Earth sciences Geography Waste Management/Waste Technology Environmental Engineering/Biotechnology Earth and Environmental Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1. Fundamentals of Dissolved Air Flotation -- Chapter 2. The Main Equipment of a Dissolved Air Flotation Plant -- Chapter 3. Circular DAF Clariers -- Chapter 4.Rectangular DAF Clarifiers with Nonassisted Clarification -- Chapter 5. Rectangular Clarifiers with Assisted Clarification -- Chapter 6. High Hydraulic Loading Rectangular Clariers with Non-assisted Clarication -- Chapter 7.DAF Clariers with Built-in Sand Filter -- Chapter 8. The Main Applications of Dissolved Air

Flotation.-Chapter 9.Conclusions.

Sommario/riassunto

This book provides an overview of the dissolved air flotation

clarification technology. It brings together the three strands of

knowledge and experience accumulated in this field - the analysis of the main phenomena involved and the interactions between them, the equipment for its implementation and its main applications in water treatment. The author draws attention to the design and operation of the different equipment used in practice, their advantages, and disadvantages in the different fields of application of this technology. The book is intended for: •Engineers and technicians working on the design of equipment and its integration into the overall water treatment plant as well as in the operation of flotation plants. •Consultants and engineering offices, hoping that it will help them to make the most appropriate choices regarding the applications of this process, as well as in the equipment selections. •Wastewater treatment plants operators, in the hope that it will help them to optimise the operation of their plants and improve their understanding and analysis of some problems they may encounter. •Purchasers and contractors, who have to make sometime difficult choices for reducing costs and, at the same time, ensure and guarantee the long-term performance and reliability of the plant. The book is oriented towards the practical side of implementing the technology. It contains a lot of information about the equipment (much more than in all other available publications on the same subject) as well as practical comments and recommendations that are very rarely found in this kind of book, written mostly by researchers. It will appeal to specialists who are comfortable with water chemistry, but it may also be of interest to water professionals who are more interested in the equipment, design and operation of water treatment plants.