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Edizione	[First edition]
Descrizione fisica	1 online resource (495 pages)
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Soggetti	Offshore wind power plants - Design and construction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Overview of a wind farm and wind turbine structure -- Loads on the foundations -- Consideration for foundation design and the calculations necessary -- Geotechnical site investigation and soil behaviour under cyclic loading -- Soil structure interaction (SSI) -- Simplified hand calculations.
Sommario/riassunto	Comprehensive reference covering the design of foundations for offshore wind turbines As the demand for “green” energy increases the offshore wind power industry is expanding at a rapid pace around the world. Design of Foundations for Offshore Wind Turbines is a comprehensive reference which covers the design of foundations for offshore wind turbines, and includes examples and case studies. It provides an overview of a wind farm and a wind turbine structure, and examines the different types of loads on the offshore wind turbine structure. Foundation design considerations and the necessary calculations are also covered. The geotechnical site investigation and soil behavior/soil structure interaction are discussed, and the final chapter takes a case study of a wind turbine and demonstrates how to carry out step by step calculations. Key features: New, important subject to the industry. Includes calculations and case studies. Accompanied by a website hosting software and data files. Design of

Foundations for Offshore Wind Turbines is a must have reference for engineers within the renewable energy industry and is also a useful guide for graduate students in this area.

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