

Condition Management of Harbour Structures

RIL 236 - 2006

Guidelines for condition assessment and control, maintenance, repair and design of harbour structures.

More information of the publication can be obtained from
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Price 59 € + postage costs.

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Harbour marine structures are demanding and expensive structures, with a long working life, usually 50 to 100 years. The structures work in very harsh conditions and are subjected to heavy, static, dynamic and environmental loads (air, salty sea water, waves, ice, thermal changes) and movements in the water caused by ships. Assuring the functionality and structural safety of harbour structures demands systematical condition management methods, spanning from design to use and maintenance.

The condition of harbour structures is worldwide declining and new ship types require better durability properties of the structures. The Russian version of the Finnish publication RIL 236-2006 Condition Management of Harbour Structures published by the Finnish Association of Civil Engineers RIL proves that the interest and need for systematical condition management of harbor structures is growing rapidly in many countries. The information exchange concerning maintenance practices, knowledge and know-how between different countries helps harbour experts to develop their skill and in that way assures the functionality and safety of harbour structures. The Russian version of the publication has been compiled in co-operation between GT Corporation and RIL.

The RIL 236-2006 guide is one of the few publications in Europe and even worldwide that deals with condition management from a life cycle point of view. A successful condition management requires not only systematical methods in the life cycle but also condition assessment methods and technical solutions, which are described in the book. The aim of the guide is to describe a management concept for harbor structures, which contains general principles, the overall management system and contents and procedures of the design, construction, maintenance and repair process.



The book can not only be applied for quay, pier and waterfront wall etc. structures but also for other marine structures, eg. light houses. The book is aimed for maintenance; repair, renewal etc. of existing structures, but can also be used in design and construction of new structures. Also other structures and buildings in the harbour area can be managed with principles of the guide.

The book is a tool for all taking part in maintenance of harbour structures, i.e. owners, management personnel, structural designers, condition evaluators, contractors, material suppliers and authorities. The harbour organisation usually acts as the client and the publication is very useful for that purpose.

An important target group is also education, where no such publication has been available. Now educational institutions have good opportunities to educate maintenance and condition control mastering experts. The knowledge of theories and practical skills concerning condition management are become more and more important, when harbour structures all around the world are repaired and renewed.