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| 1. Record Nr.           | UNIORUON00490708  |
| Autore                  | LOWELL, Robert  |
| Titolo                  | Life studies / by Robert Lowell   |
| Pubbl/distr/stampa      | London, : Faber and Faber, 1959   |
| Descrizione fisica      | 104 p. ; 22 cm  |
| Disciplina              | 811.52  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| 2. Record Nr.           | UNISA996205825003316  |
| Autore                  | Svensson Holger <1945->   |
| Titolo                  | Cable-stayed bridges : 40 years of experience worldwide // Holger Svensson  |
| Pubbl/distr/stampa      | Berlin : , : Ernst & Sohn, , 2012   |
| ISBN                    | 3-433-60104-6<br>3-433-60229-8  |
| Edizione                | [1st ed.]   |
| Descrizione fisica      | 1 online resource (456 pages) : illustrations   |
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| Soggetti                | Cable-stayed bridges - Design and construction  |
| Lingua di pubblicazione | Tedesco   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | Description based upon print version of record.   |
| Nota di bibliografia    | Includes bibliographical references and index.  |
| Nota di contenuto       | Cover; Half title page; Title page; Copyright page; Dedication; Introduction; Acknowledgement; The Author; Table of contents; 1 Introduction; 1.1 Design fundamentals; 1.1.1 General; 1.1.2 Overall system; 1.1.2.1 Cable arrangement; 1.1.2.2 Cable stiffness; 1.1.2.3 Geometry; 1.1.2.4 Support conditions; 1.1.3 Tower shapes; 1.1.3.1 Two outer cable planes; 1.1.3.2 One central cable plane; 1.1.3.3 Spread central cable planes; 1.1.4 Beam cross-sections; 1.1.4.1 Steel cross- |

sections; 1.1.4.2 Concrete cross-sections; 1.1.4.3 Composite cross-sections; 1.1.4.4 Hybrid beams (steel/concrete)  
 1.1.4.5 Double deck cross-section  
 1.1.5 Stay cables; 1.1.5.1 Systems; 1.1.5.2 Cable anchorages; 1.2 Aesthetic guidelines for bridge design; 1.2.1 Introduction; 1.2.2 Aesthetic guidelines; 1.2.2.1 Guideline 1: Clear structural system; 1.2.2.2 Guideline 2: Good proportions; 1.2.2.3 Guideline 3: Good order; 1.2.2.4 Guideline 4: Integration into the environment; 1.2.2.5 Guideline 5: Choice of material; 1.2.2.6 Guideline 6: Coloring; 1.2.2.7 Guideline 7: Space above the bridge; 1.2.2.8 Guideline 8: Recognizable flow of forces; 1.2.2.9 Guideline 9: Lighting; 1.2.2.10 Guideline 10: Simplicity  
 1.2.3 Collaboration  
 2 The development of cable-stayed bridges; 2.1 The precursors of cable-stayed bridges; 2.1.1 Introduction; 2.1.2 Historical development; 2.1.2.1 Historical designs; 2.1.2.2 First examples and failures; 2.1.2.3 John Roebling and stiffened suspension bridges; 2.1.2.4 Transporter bridges; 2.1.2.5 Approaching the modern form; 2.2 Steel cable-stayed bridges; 2.2.1 Introduction; 2.2.2 Beginnings; 2.2.3 The Dusseldorf Bridge Family; 2.2.4 Further Rhine river bridges; 2.2.5 Special steel cable-stayed bridges; 2.2.6 Cable-stayed bridges with record spans  
 2.3 Concrete cable-stayed bridges 2.3.1 General; 2.3.2 Development of concrete cable-stayed bridges; 2.3.3 Bridges with concrete stays; 2.3.3.1 Riccardo Morandi's bridges; 2.3.3.2 Later examples; 2.3.3.3 Bridges with concrete walls; 2.3.4 Cable-stayed bridges with thin concrete beams; 2.3.5 Record spans; 2.4 Composite cable-stayed bridges; 2.4.1 General; 2.4.2 Cross-sections; 2.4.3 Special details; 2.4.4 Economic span lengths; 2.4.5 Beginnings; 2.4.6 Record spans; 2.4.7 Latest examples; 2.5 Special systems of cable-stayed bridges; 2.5.1 Series of cable-stayed bridges; 2.5.1.1 Load transfer 2.5.1.2 Intermediate piers 2.5.1.3 Stiff towers; 2.5.1.4 Stayed towers; 2.5.1.5 Frames; 2.5.1.6 Accommodation of longitudinal deformations; 2.5.1.7 Examples; 2.5.2 Stayed beams; 2.5.2.1 Stayed from underneath; 2.5.2.2 Stayed from above (extradosed); 2.5.3 Cable-stayed pedestrian bridges; 3 Stay cables; 3.1 General; 3.2 Locked coil ropes; 3.2.1 System; 3.2.2 Fabrication; 3.2.3 Modern corrosion protection systems; 3.2.3.1 General; 3.2.3.2 Galvanizing of the wires; 3.2.3.3 Filling; 3.2.3.4 Paint; 3.2.4 Inspection and maintenance; 3.2.5 Damage; 3.2.5.1 Kohlbrand Bridge; 3.2.5.2 Maracaibo Bridge, Venezuela

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## Sommario/riassunto

The need for large-scale bridges is constantly growing due to the enormous infrastructure development around the world. Since the 1970's many of them have been cable-stayed bridges. In 1975 the largest span length was 404 m, in 1995 it increased to 856 m, and today it is 1088 m. Thus the economically efficient range of cable-stayed bridges is tending to move towards even larger spans, and cable-stayed bridges are increasingly the focus of interest worldwide. This book describes the fundamentals of design analysis, fabrication and construction, in which the author refers to 250 built examples

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