

Objekttyp: **TableOfContent**

Zeitschrift: **IABSE reports = Rapports AIPC = IVBH Berichte**

Band (Jahr): **64 (1991)**

PDF erstellt am: **16.07.2024**

### **Nutzungsbedingungen**

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

### **Haftungsausschluss**

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.



<b>Table of Contents</b>	●	<b>Table des matières</b>	●	<b>Inhaltsverzeichnis</b>
Preface				3
Préface				4
Vorwort				5
<b>THEME A</b>				
<b>General Aspects</b>				
<b>Aspects généraux</b>				
<b>Allgemeine Aspekte</b>				13
<b>MAN-CHUNG TANG</b>				
Design and Construction: Recent North American Experience				15
<b>G.S. SHESTOPEROV</b>				
Bridges of Increased Seismic Stability				29
<b>ALAN BURDEN</b>				
Aesthetics and Construction of Bridges in Japan and in Great Britain				39
<b>HIROSHI SHINOHARA, SHUNICHI NAKAMURA, YUJI KAGAWA, EIJI SUZUKI</b>				
Design and Construction of Trans-Tokyo Bay Highway Bridge				45
<b>UMBERTO GUGLIELMETTI</b>				
Ponts sur le Rhône à Riddes, Suisse				51
<b>BRIAN PRITCHARD</b>				
Bridge Strengthening without Traffic Disruption				57
<b>JIAYING PAN, QINGGUO CHENG, LIANGMING WU</b>				
Cable-Stayed Railroad Bridges				63
<b>W. MICHAEL KAZAKEVITCH, ALEXANDER ZAKORA</b>				
Long-Span Bridge Stabilization under Balanced Cantilever Method				69
<b>AKSEL G. FRANDSEN, YAHEI FUJII, DAN F. OLSEN, SOEREN SPANGENBERG</b>				
Ship Collision Studies for the Great Belt East Bridge				75
<b>ARNE STEEN JACOBSEN, AXEL EMIL CHRISTENSEN, H. MØRUP-PETERSEN</b>				
Great Belt's East Bridge – Tender Design of the Approach Spans				81
<b>POSTERS THEME A</b>				
87				
<b>AZIZ BIN MUSTAFA</b>				
Reinforced Concrete Box-Section Bridges in Developing Country				88
<b>MARIO P. PETRANGELI, CARLO VILLATICO</b>				
Design Criteria for the New Italian High Speed Rail Bridges				90
<b>HERBERT SCHAMBECK</b>				
Das Prinzip «Voute»				92
<b>QINGGUO CHENG</b>				
Recent Achievements of Bridge Engineering in China				94
<b>M.M. KORNEEV, G.B. FUKS</b>				
Steel/Reinforced Concrete Structures in Cable-Stayed Bridges				96
<b>VLADIMIR ALEKSANDROV, VLADIMIR VORSA, LEV SHAPIRO</b>				
Road Bridge over the Severnaya Dvina River in Arkhangelsk				98



METE GERÇEK High Pier Long Span Viaduct in Highly Seismic Zone	100
B.P. DMITRIEVSKY, ZH.A. KHAREBAVA Foundations of Bridge Piers across the Volga and Buzan Rivers	102
V.Z. RONIN Testing for Seismic Stability using High Power Explosions	104
G.S. SHESTOPEROV, I.I. KAZEI, A.S. PLATONOV, A.V. KRUCHINKIN, L.L. LAPSHIN Inspection of Bridges after Recent Armenian Earthquake	106
JURIY KOZMIN, ALEXANDR SIMKIN, ALEXANDR UZDIN New Structures for Bridge Seismic Isolation	108
JURIY KOZMIN, ALEXANDR UZDIN Special Methods of Seismic Bridge Design in the USSR	110
YVES BOURNAND Modern Equipment for Precast Bridge Construction	112
<b>THEME B</b>	
<b>Influence of Construction Techniques on Steel Bridges</b> <b>Influence des techniques de construction sur les ponts métalliques</b> <b>Einfluss der Baumethoden auf die Stahlbrücken</b>	115
IGOR TSARIKOVSKY Unified All-Metal Structures Built According to Flexible Methods	117
PETER BUCKLAND Designing Steel for Ease of Construction	129
REINER SAUL, WILHELM ZELLNER Combined Highway-Railway Bridge with Double Composite Action	141
FUJIKAZU SAKAI, AKIRA ISOE, AKIRA UMEDA, YOSHIHIKO MIZUKAMI, CHIAKI MORIMOTO, MASATOSHI YAMADA Construction Control System for Cable-Stayed Bridges	147
VLADIMIR SOSNOVSKII, BORIS LEBEDEV Mechanized Welding of Erection Joints in Road Bridges	153
N.N. STRELETSKY, V.S. DANKOV, V.A. TARNARUTSKY Unification of Steel Highway Bridge Superstructures	159
YU CHENG ZHAO, QIN HAN FANG The Largest Steel Bridge across the Changjiang under Erection	165
W. VICTOR ANDERSON, FERDINAND TRENKLER Continuous Bridge Slides Laterally into Final Position	171
K. WADA, N. TOMITA, H. TAKANO, N. WATANABE Construction of the Yokohama Bay Bridge Superstructure	177
JEAN MULLER, SERGE MONTENS Un pont mixte innovant sur la Roize, France	183



<b>POSTERS THEME B</b>	189
HARALD EGGER Baubehelfsbrücken für die Österreichischen Bundesbahnen	190
BORIS ANDROIC, DARKO DUJMOVIC, IVAN DUMBOVIC Limaska Draga Viaduct – Fabrication and Erection of Orthotropic Plates	192
JOHN W. IVERING Connecting Short-Span Steel Girders for Continuity	194
S. D'AGOSTINO, T. ESPOSITO, L. CONDO, R. MAURO Constructional Problems in Bridges with Box-Girders	196
G.I. VOLODIN, E.M. GITMAN, B.N. MONOV Steel and Reinforced Concrete Railway Structures	198
JU.M. MITROFANOV, O.A. POPOV Combined Frame-Strut Earthquake Resistant Bridge	200
I.V. ASTAKHOVA, O.N. JRLYKOVA Combined Steel Superstructure	202
VLADIMIR VORSA Standardized Structures for Rapid Bridge Construction	204
R.P. NAZAROVA, S.M. RAZHBERG Bridge Superstructure with Environmental Protection	206
<b>THEME C</b>	
<b>Influence of Construction Techniques on Concrete Bridges</b> <b>Influences des techniques de construction sur les ponts en béton</b> <b>Einfluss der Baumethoden auf die Betonbrücken</b>	209
JACQUES COMBAULT Long Span Concrete Bridges: Influence of Construction Techniques	211
A.L. TSEJTLIN Prefabricated Reinforced Concrete Bridges for High Speed Construction	223
WALTER H. DILGER, GAMIL S. TADROS, ALAA SHERIF Design and Construction of a Multispan Cable-Stayed Bridge	235
PELLEGRINO C. GALLO, GABRIELE NATI Prefabrication of Concrete Box Girder Bridges	241
TORU KAZAMA, YOSHIAKI IMAI, MITSUMASA KOIZUMI, TOSHIO ICHIHASHI, SOUJI KANAI Design and Construction of Tomei-Ashigara Bridge	247
JEAN-YVES LAPIERRE, MICHEL PLACIDI, DANIEL SCHNEIDER, JEAN TONELLO Pont à haubans mis en place par rotation	253
RYOH EBANA, KUNIO HOSHINO, KEIJI KUTUZAWA, TAKESHI SUGIMOTO Prestressed Concrete Horizontal Arch Bridge	259
GÜNTER SEITZ, MANFRED CURBACH Unusual Applications of the Incremental Launching Method	265



TADAYOSHI ISHIBASHI, KAZUHITO FUJITA, SHIN-ICHI FUJIMORI, SHIGETAKA ISHIHARA, TAMOTSU SUEHIRO Design and Construction of Aomori Bay Bridge	271
JAMES M. BARKER Twenty Years Experience with Segmental Bridges	277
<b>POSTERS THEME C</b>	283
ROLF GRÜTER, GERHARD PROMMERSBERGER Externe Vorspannung: erste Anwendung bei der Deutschen Bundesbahn	284
FUMIO SEKI, SHIGEYOSHI TANAKA Construction Control System for Cable-Stayed Bridges	286
MITSUAKI IZUMI, KIYOSHI MIYACHI Construction of Short Prestressed Concrete Bridges in Japan	288
MOTOHIKO SUZUKI, TAKESHI TAJIMA, TSUTOMU YOKOTA Development of Bi-Prestressing System in Japan	290
SHINJI OYAMA, SADATOSHI YAGI, KENJI UEHIRA Large Mobile Scaffolding System for Tsukiyogawa Bridge	292
HIDEO KIMURA, TADASHI KUROIWA, TADAOMI HANADA, HIDEYUKI NAKAJIMA, HIROSHI SHINKAWA Design and Construction of Shinkawaotogawa Bridge	294
MICHAEL GLADSTONE, STUART DAVIS, ROBERT NAPHTINE Platform Overbridges for the Channel Tunnel Folkestone Terminal	296
YINCHENG HOU New Concept used in Construction of Concrete Cable-Stayed Bridges	298
A.J. REIS, A.P. PEREIRA, D. SOUSA Concrete Box Girder Bridges built by Balanced Cantilever	300
SERGEI TKACHENKO Prefabricated Reinforced Concrete Railway Bridges	302
A.I. LIKVERMAN Prestressed Concrete Bridge made of Precast Elements	304
BORIS I. KRISHMAN Prestressed Reinforced Cable-Stayed Bridge with Stiffening Slab	306
<b>THEME D</b>	
<b>Evolution of Materials</b>	
<b>Evolution des matériaux</b>	
<b>Entwicklung von Baustoffen</b>	309
URS MEIER Modern Materials in Bridge Engineering	311
FERDINAND S. ROSTÁSY Potentials and Developments of Materials for Structural Concrete	325
PETER BUERGI Recent Approaches to Corrosion Protection in Stay Cable Design	331
TAKEO ENDO, TAKEAKI IJIMA, HIROKI MATSUMOTO, MASAHIKO YASUDA Development and Investigation of High-Strength Galvanized Wire	337



ALEXANDER E. KOUZMAK, VICTOR A. TIMONIN Corrosion Protection of Bridges with Polymer Compound	343
PIERRE MEHUE Conception et mise en œuvre des platelages en dalle orthotrope	349
LUC TAERWE High Strength Concrete for Prestressed Concrete Girders	355
CARSTEN FRIES Prefabrication of Main Elements for Long Bridges	361
MICHEL VIRLOGEUX Combining Prestressed Concrete and Steel for Bridge Construction	367
<b>POSTERS THEME D</b>	375
HIDEHIKO ABE, KENJI SAKAMOTO Railway Bridges of Corrosion Resistant Steel in Japan	376
FRANZ FISCHLI, HANS RUDOLF GANZ Enhanced Durability of Post-Tensioning Tendons	378
CRESCENTINO BOSCO, PIER GIORGIO DEBERNARDI Influence of Steel Bars on Structural Behaviour of Reinforced Concrete	380
M. GUGGEMOS, M. LEVASSEUR, M. CHABERT, M. CONVAIN Précontrainte à l'aide de câbles en fibre de verre	382
I-KUANG FANG, MUH-TONG HORNG, SANG-CHUNG POUNG Shear Strength of High Strength Concrete Beams	384
L.I. KOROTKOV External Reinforcement Beams for Road Bridges	386
AFTAB A. MUFTI, BAIDAR BAKHT, LESLIE G. JAEGER Fibre RC Deck Slabs with Diminished Steel Reinforcement	388
<b>THEME E</b>	
<b>Long Span Bridges</b>	
<b>Ponts de grande portée</b>	
<b>Weitgespannte Brücken</b>	391
CHRISTIAN TOLSTRUP, ARNE S. JACOBSEN Suspension Bridge over the Eastern Channel of the Great Belt	393
MANABU ITO Long Span Steel Bridges in Japan	405
BERTRAND DEROUBAIX, MICHEL VIRLOGEUX Design and Construction of the Normandie Bridge	417
H. WENZEL Cable-Stayed Bridge in a Typhoon Area	425
EDWARD KOTLYARSKY, EUGENE TRACHTENBERG East River Bridge Rehabilitation in New York	431
E.G. GAPONTZEV, M.S. SHLJAKOV, N.D. SENTJURIN Bridge on the Volga River, in Ulianovsk	437
KOICHI SATO, HIDEO ARAI Construction Technology of Long Span Concrete Arch Bridges	443



MARCOS P. LOIZIAS, RAYMOND J. McCABE The Dame Point Concrete Cable-Stayed Bridge	449
JEAN MULLER, JAMES LOCKWOOD The Bi-Stayed Bridge	455
ALAN SIMPSON, ANDREW BEARD, JEFFREY YOUNG Design Evolution of the Tsing Ma Bridge	461
<b>WORKSHOP 1</b>	
<b>High Speed Rail Bridges</b>	
<b>Ponts pour les trains à grande vitesse</b>	
<b>Eisenbahnbrücken für hohe Geschwindigkeiten</b>	467
THEODOR BAUMANN, DIETER HILLIGES Elevated Guideways of Systems for Tracked Transport	469
YVES TAILLE Ouvrages d'art pour un réseau ferré à très grande vitesse	475
JACQUES GANDIL, PHILIPPE RAMONDENC Comportement dynamique des ponts-rails sous lignes à grande vitesse	481
HAJIME WAKUI, SEIICHI TOTTORI, NOBUYUKI MATSUMOTO Dynamic Problems on MAGLEV Guideway Structures	489
LUBIN GAO, QINGGUO CHENG Fatigue and Life Prediction for High-Speed Railway Bridges	495
WILHELM ZELLNER, REINER SAUL Long Span Bridges of the New Railroad Lines in Germany	501
<b>POSTERS WORKSHOP 1</b>	507
LÁSZLÓ HEGEDÜS, MIKLÓS IVÁNYI, MIKLÓS KÁLLÓ, PÁL TOMKA Tests on Steel Railway Bridges over the River Tisza	508
WILHELM ZELLNER, REINER SAUL Veitshöchheim-Viaduct: a Concrete Arch Bridge with 162 m Main Span	510
WILHELM ZELLNER, REINER SAUL Enz-Viaduct: a 1044 m Long Prestressed Concrete Box Girder Bridge	512
REINER SAUL, WILHELM ZELLNER Railway Bridge with Double Composite Action across River Main	514
V. KONDRATOV Vibration Amplitudes of Steel Railway Bridges	516
<b>WORKSHOP 2</b>	
<b>Movable Bridges</b>	
<b>Ponts mobiles</b>	
<b>Bewegliche Brücken</b>	519
PETER SLUSZKA, MARTIN KENDALL Design and Construction of a Bascule Bridge	521
PIERRE MEHUE Particularités et évolution des ponts mobiles	527



LEIF JONSEN Structural and Mechanical Rehabilitation of Old Bascule Bridges	533
ARIE W.F. REIJ Wind Loads on Movable Bridges	539
GEORGY STEPANOV Designing of the Draw Bridge	545
CHARLES M. MINERVINO Revitalizing 100 Year Old Movable Railroad Bridges	551
REINER SAUL, WILHELM ZELLNER The New Galata Bascule Bridge at Istanbul	557
D.C.C. DAVIS, Myton Bridge, Hull, UK	563
<b>IABSE Reports Rapports AIPC IVBH Reports</b>	569
<b>List of Authors Symposium Leningrad</b>	577