

Zeitschrift: IABSE reports = Rapports AIPC = IVBH Berichte
Band: 75 (1996)

Inhaltsverzeichnis

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 01.04.2026

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

**Table of Contents ● Table des matières ● Inhaltsverzeichnis**

Preface	5
Keynote Speaker	
A. COLSON Research on Connections in Europe The COST C1 Action	13
Session 1	
Experimental Results on Joint Characteristics	
H. BODE, W. RAMM, S. ELZ, H.-J. KRONENBERGER Composite Connections - Experimental Results	31
N. YARDIMCI, C. YORGUN, T.S. ARDA, G. BAYRAMOĞLU, O. EYREKCI Bolted Beam - to - Column Steel Connections	43
D. VANDEGANS Use of Threaded Studs in Joints between I-Beam and R.H.S. Column	53
J. E. FRANCE, P. A. KIRBY, B. DAVISON Testing of Simple Flowdrill Connections	63
Session 2	
Effects of Joint Action on Frames 1	
N. KISHI, R. HASAN, Y. GOTO, M. KOMURO Investigation on the Validity of Connection Classification System	73
F. M. MAZZOLANI, G. DE MATTEIS, A. MANDARA Classification System for Aluminium Alloy Connections	83
Y. GOTO, S. MIYASHITA New Classification System for Semi - Rigid Connections Considering Overall Behavior of Frames	95
F. BENUSSI, C. BERNUZZI, S. NOÉ, R. ZANDONINI Experimental Analysis of Semi-Rigid Composite Frames	105
N. GEBBEKEN A Consistent Formulation of the Yield-Hinge Theory for 3-D Frames Considering the Deformations of Connections	115

**Session 3****Effects of Joint Action on Frames 2**

- A.S. ELNASHAI, A.Y. ELGHAZOULI
Seismic Resistance of Semi-Rigid Steel Frames 127
- S. ZDRAVKOVIC, M. MILIĆEVIĆ, D. DRENIĆ, D. ZLATKOV
Static and Dynamic Testing of Structures with Semi - Rigid Connections 137
- M. MILIĆEVIĆ, S. ZDRAVKOVIĆ, D. ZLATKOV, B. KOSTADINOV
Static and Dynamic Design of Structures with Semi - Rigid Connections 145
- D. BASIC, E. MESIC, D. STOJIC
Flexible Connections as the Discrete Dampers 153
- P. FAJFAR, D. DROBNIĆ
Nonlinear Seismic Analysis of a Semi - Rigid Frame Building 161

Keynote Speaker

- D. ANDERSON
European Rules for the Design of Composite Joints 171

Session 4**Tests and Analysis of Connections**

- M. CRISINEL, P. REN, A. CARRETERO
Practical Design Method for Semi - Rigid Composite Joints
with Double Web Cleat Connections 185
- Y. YUVA, G.A. AŞKAR
The Effect of Plain Bars in R/C Beam - Column Joints
under Cyclic Loading 197
- L. C. NEVES, F. GOMES
Semi-Rigid Behaviour of Beam-to-Column Minor-Axis Joints 207

**Session 5****Modelling of Connection Behaviour 1**

- J.-P. JASPART, D. VANDEGANS
Modelling of Semi-Rigid Connections: Column Bases 219
- V. FRENKEL, V. KALENOV, A. PAVLOV
Endplate and Web Plate Joints: Moment - Rotation Behaviour 229
- K.B. HANOĞLU, G. A. AŞKAR
Effect of Bolt Modeling on Initial Stiffness of Cleated Connections 237
- C. A. CASTIGLIONI, L. CALADO
Low-Cycle Fatigue Behaviour and Damage Assessment of
Semi-Rigid Beam-to-Column Connections in Steel 247

Session 6**Modelling of Connection Behaviour 2**

- E. BOENDER, J. STARK, M. STEENHUIS
The Required Rotation Capacity of Joints in Braced Steel Frames 259
- N. NEMATI, D. LE HOUEDÉC
A Survey on Finite Element Modelling of Steel End - Plate Connections 269
- O. BURSI, J.-P. JASPART
Finite Element-Based Models for the Analysis of Bolted Beam-to-Column
Steel Connections 279
- G. GOSPODINOV, S. KINAREV
Three Dimensional Nonlinear Finite Element Simulation of R/C Joints 289

Session 7**Design of Connections**

- K. S ELLIOTT, G. DAVIES, H. GÖRGÜN
Component Method Validation Tests in Precast Concrete
Semi-Rigid Connections 299



C. FAELLA, V. PILUSO, G. RIZZANO Prediction of the Flexural Resistance of Bolted Connections with Angles	309
F. GOMES, J.-P. JASPART, R. MAQUOI Moment Capacity of Beam-to-Column Minor-Axis Joints	319
M. STEENHUIS, H. EVERS, N. GRESNIGT Conceptual Design of Joints in Braced Steel Frames	327
Session 8 Design of Frames	
C. FAELLA, V. PILUSO, G. RIZZANO A New Design Approach for Braced Frames with Extended End Plate Connections	339
K. S. ELLIOTT, G. DAVIES, H. GÖRGÜN Effective Length Factors in Precast Concrete Frames	349
F. M. MAZZOLANI, V. PILUSO Plastic Design of Semirigid Frames for Failure Mode Control	359
J.-P. JASPART, R. MAQUOI Design Handbook for Frame Design Including Joint Behaviour	371
IABSE REPORTS RAPPORTS AIPC IVBH REPORTS	379