

JPCEA NEWSLETTER

No.1, October 2008



Japan Prestressed Concrete Engineering Association

Message from President



*Taketo Uomoto, President of JPCEA,
Professor, Shibaura Institute of Technology*

Japan Prestressed Concrete Engineering Association (here after JPCEA) was established in 1958. Since that, JPCEA has act to investigate, research and spread their fruit related to prestressed concrete (here after PC) technologies in Japan for a half century. Numbers of publications have been published, and plenty of seminars and symposiums have been held up to now. As written on the articles of an association, JPCEA has “contributed to provide and expand infrastructures by means of spreading and promoting prestressed concrete technologies on every matter”. Also, in order to “make contact and offer opinions to related domestic and abroad organizations”, JPCEA, representing Japan, joined Fédération Internationale de la Précontrainte (FIP, now reorganized as *fédération internationale du béton (fib)*), an important international organization in this field. JPCEA, as you may know, hosted the first fib congress in Osaka, and has taken the leadership in Japan. Also in 2008, we will organize “8th International Symposium on Utilization of High-Strength and High-Performance Concrete” in Tokyo co-organized by Japan Concrete Institute and fib.

Meanwhile, we have started the for “the Authorized Prestressed Concrete Engineer” certificate system to attempt improving the quality of engineers who are engaged in planning, designing, construction, and management of PC technology, and for ensuring the quality of PC structures from 1993. We have already certified people

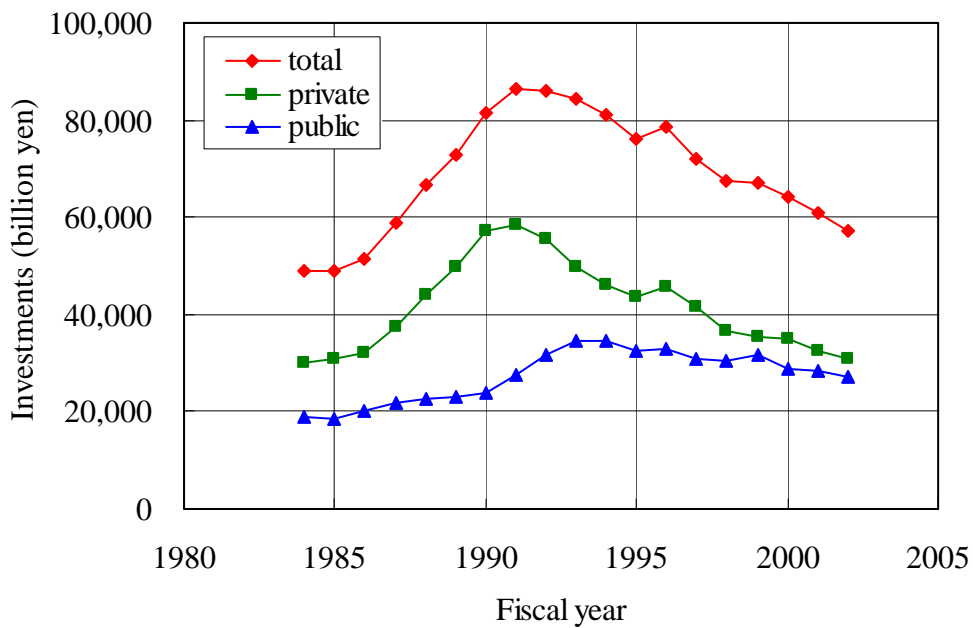


Figure-1 Changes in investment of construction in Japan

as qualified personnel. However, our construction projects have been reduced significantly nowadays, and also the investment of construction has been decreased until almost as same as 1980th (figure-1). Consequently, not only we certify qualified engineers for construction of new structural buildings, but also started “the Professional Engineer for Concrete Structural Diagnosis and Maintenance” for maintenance of the existing PC structures and/or reinforced concrete structures in 2007 to adjust ourselves to this changing environment.

As stated above, we plan to take up not only the issue of PC technology, but also the constructive issue of concrete structures for contribution to society through various activities. Responding to the declining birthrate and aging society in Japan, we are opening up our activities such as annual symposium, “Symposium on Developments in Prestressed Concrete”, and “PC Seminar” to younger engineers and researchers. We wish that more people would be interested in participation our future activities.



WHAT'S NEW

English Web Site

English version of JPCEA web site has just opened. Please visit our web site and get information concerning prestressed concrete in Japan.

<http://www.jpcea.or.jp/>

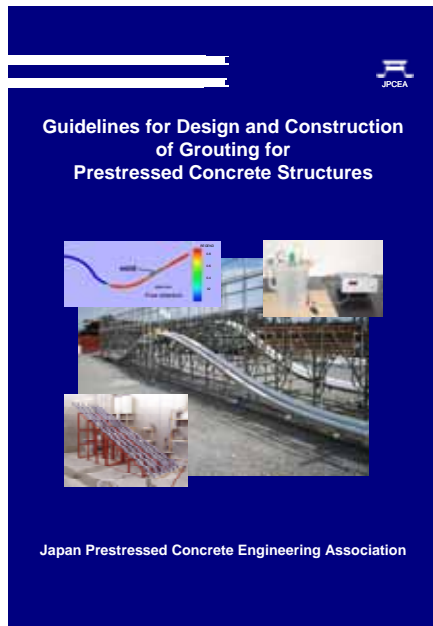
New JPCEA Board Members

Annual general meeting was held on 28 May 2008, and new JPCEA board members were approved.

- President: *Taketo Uomoto*, Shibaura Institute of Technology,
Professor emeritus, University of Tokyo
- Vice-president: *Yoshiteru Ono*, Osaka University
Shinichiro Kumagai, Sumitomo Mitsui Construction Co., Ltd.
- Managing director: *Junichiro Niwa*, Tokyo Institute of Technology
- Director: *Michitsugu Ikuma*, Japan Railway Construction, Transport
and Technology Agency
Kimihiko Izumi, Metropolitan Expressway Co., Ltd.
Makoto Kitagawa, Honshu-Shikoku Bridge Expressway Co., Ltd.
Yukikazu Tsuji, Gunma University
Minehiro Nishiyama, Kyoto University
Sadahiro Nomura, P. S. Mitsubishi Construction Co., Ltd.
Yoshihiro Hatta, Oriental Shiraishi Corporation
Toyoaki Miyagawa, Kyoto University
Jun Yamazaki, Nihon University
Masato Yamada, Sumitomo (SEI) Steel Wire Corporation
Masa-aki Yamamoto, Kajima Corporation
Yoshiyuki Yamamoto, Highway Environment Research Institute
Hiroshi Yoshikoshi, Tokyo Electric Power Company
Akira Yoshida, Taisei Corporation
- Executive director: *Masaru Wakimoto*, Japan Prestressed Concrete Engineering Association
- Inspector: *Noritaka Sugano*, Fuji p.s Corporation
Rokuro Tomita, Taiheiyo Cement Corporation
Toshikazu Minami, Shinko Wire Co., Ltd.
- Advisor: *Shoji Ikeda*, Hybrid Research Institute Inc.,
Professor emeritus, Yokohama National University

PUBLICATIONS

Guidelines for Design and Construction of Grouting for Prestressed Concrete Structures



Recently, the importance of the grouting has become a priority item. Hence, it became evident to review the importance of grouting in prestressed concrete structures. Major revisions of overseas standards, advancements in the grouting materials and development of new products, innovative construction technologies etc., demanded the need for standardization of grout for prestressed concrete structures. As a result, the “Standards Committee for Grouting” was established by JPCEA in July 2003, aiming at producing a performance based standard which is the current trend worldwide. This publication titled “*Guidelines for Design and Construction of Grouting for Prestressed Concrete Structures*” was a result of the activities of this standards committee.

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Chapter 1 General

- 1.1 Scope
- 1.2 Structure
- 1.3 Definitions of terms

Chapter 2 Performance Requirements for Prestressed Concrete Bridges

- 2.1 General
- 2.2 Design Service Life
- 2.3 Verification of Durability Performance
- 2.4 Verification of Structural Performance

Chapter 3 Performance Requirements for Grout

- 3.1 General
- 3.2 Performance to Protect Prestressing Steel from Corrosion
- 3.3 Performance to Integrate Concrete and Prestressing Steel

Chapter 4 Performance Verification of Grout

4.1 General

4.2 Verification for Corrosive Materials Existing in Grout

4.3 Verification for Strength of Grout

4.4 Verification for Detrimental Residual Air Voids

Chapter 5 Execution of Work

Chapter 6 Inspection

6.1 General

6.2 Inspection for Corrosive Materials Existing in the Grout

6.3 Inspection for Grout Strength

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Chapter 7 Records

7.1 General

7.2 Record-keeping

Chapter 8 Training

EVENTS

Annual Symposium

17th Symposium on Developments in Prestressed Concrete

November 20th – 21st, 2008

Takamatsu, Japan

<http://www.jpcea.or.jp/>

The above JPCEA Annual Symposium is coming soon. Please participate in the symposium, and shear state-of-the-art prestressed concrete technologies. Details of the symposium are on the web site.

The last symposium, “16th Symposium on Developments in Prestressed Concrete”, was held on 18-19, October, 2007, in Tsukuba. Mr. Kazuhiro Nishikawa of the National Institute for Land and Infrastructure Management and Dr. Yasuhiko Yamamoto, professor emeritus, the University of Tsukuba, were invited and gave special lectures. Mr. Kazuhiro Nishikawa presented “Prestressed Concrete Technology under Comprehensive Evaluation Bidding Systems”. Contractors are required a total skill concerning cost and quality control of structures and construction techniques. Dr. Yasuhiko Yamamoto presented “Risk Management for Quality and Performance of Concrete Structures”. Engineers tend to manage concrete structures by their experience. However, concrete structures should be managed objectively and rationally, and risk management helps that.

In the last symposium, the number of contributed paper was 89, and 50 papers were presented in 9 sessions. The participants were about 320.



Special lecture, 16th Annual Symposium



Parallel session, 16th Annual Symposium

International Conferences

8th International Conference on Creep, Shrinkage and Durability of Concrete And Concrete Structures (CONCREEP8)

September 30th – October 2nd, 2008

Ise-Shima, Japan

<http://concrete-lab.civil.nagoya-u.ac.jp/concreep8/>

JPCEA supports the conference.

8th International Symposium on Utilization of High-Strength and High-Performance Concrete

Tokyo, Japan

October 27th – 29th, 2008

<http://jci-web.jp/8HSC-HPC/>

JPCEA organizes the symposium.

This newsletter contains current information on the activities
and topics of JPCEA.

If you have any comments and suggestions, please contact us
by sending e-mail to: knitani@orsc.co.jp.

Internationalization Subcommittee

International Committee

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