

# JPCI Award 2015

## 【JPCI Award for Outstanding Structures】



### ● Tsubasa Bridge

- Location** : Neak Loeng, Kandal, Cambodia  
**Structural Type** : 3-span PC cable stayed bridge (main),  
5-span PC compo-bridge (approach)  
**Bridge Length** : 900m+640m+675m  
**Span** : 20@45m+(155m+330m+155m)+15@45m  
**Width** : 13.5m (effective width)  
**Design** : Chodai Co., Ltd. Oriental Consultants Global  
Co., Ltd. JV  
**Construction** : Sumitomo Mitsui Construction Co., Ltd.



### ● Suita City Football Stadium

- Location** : Suita City, Osaka  
**Structural Type** : RC+PC+S  
**Number of Stories** : 6 stories  
**Building use** : Football Stadium  
**Floor Space** : 24,717.59m<sup>2</sup>  
**Total floor space** : 66,509.36m<sup>2</sup>  
**Design** : Takenaka Corporation  
**Construction** : Takenaka Corporation



### ● Shiroganenooka Gakuen

- Location** : Tokyo  
**Structural Type** : Low-rise building :  
Reinforced concrete (RC) structure  
In part precast prestressed concrete  
structure (PCaPC)  
Medium-rise building :  
Reinforced concrete (RC) structure  
**Number of Stories** : 1 basement level, 6 stories above ground,  
1 penthouse level  
**Building use** : school facility  
**Floor Space** : 7,519.5m<sup>2</sup>  
**Total floor space** : 17,967.66 m<sup>2</sup>  
**Design** : NIKKEN SEKKEI  
**Construction** : TAISEI CORPORATION

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### ● Futakotamagawa Rise II - a

Location	: Tokyo
Structural Type	: RC(Precast-Prestressed concrete), with base isolation system
Number of Stories	: penthouse 2 stories + 2 stories basement and 30 stories above ground
Building use	: Office and Hotel
Floor Space	: 22,466 m <sup>2</sup>
Total floor space	: 156,422m <sup>2</sup> (101,210m <sup>2</sup> for High-rise building)
Design	: NIKKEN SEKKEI / RIA / TOKYU ARCHITECTS & ENGINEERS JV
Construction	: KAJIMA CORPORATION



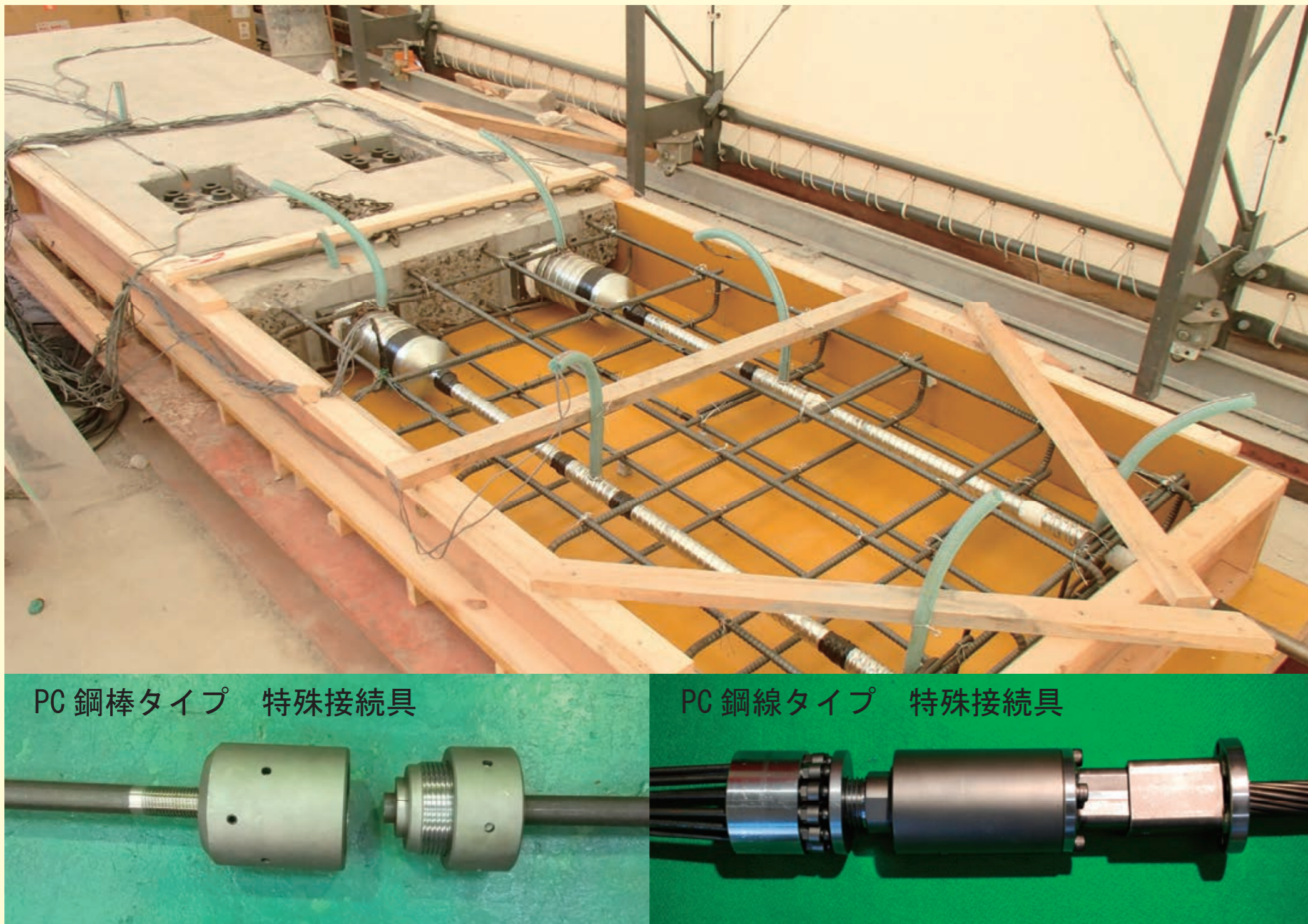
### ● The Main Stand of the Todoroki Athletics Stadium

Location	: Kanagawa Prefecture
Structural Type	: RC+S+Precast concrete
Number of Stories	: 6 stories
Building use	: Stadium
Floor Space	: 10,154.02m <sup>2</sup>
Total floor space	: 21,853.86m <sup>2</sup>
Design	: NIHON SEKKEI +TAISEI DESIGN PAE
Construction	: TAISEI・TOBISHIMA・OGAWA・NUMATA NIHON SEKKEI



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## 【JPCI Award for Outstanding Engineering Innovations】



### ● Development of the widening method for PC bridge

#### Summary :

We developed widening construction method for the improvement of the function of PC bridge. Our results of research include.

- Development of intermediate anchorage device for connecting transverse PC tendon.
- Development of special connection device for connecting transverse PC tendon.
- Confirmation of construction method.
- Confirmation of performance of widening slab using these device.

#### Development :

- Metropolitan Expressway Co., Ltd.
- Sumitomo Mitsui Construction Co., Ltd.

## 【JPCI Award for Outstanding Accomplishments of Constructions】



### ● Development of the Construction Period Shortening Method for Prestressed Concrete LNG Storage Tank using precast concrete form (Dual PC Speed Erection Method)

Location	: Ishikari, Hokkaido
Structure	: LNG Storage Tank
Gross Capacity	: 200,000kl
Structural Type	: Full Containment LNG Tank
Outer wall type	: Prestressed Concrete outer wall
Inner Dim. of wall	: 83.2m
Height of wall	: 43.1m
Design	: Tasei Corporation
Construction	: Tasei Corporation



### ● Reinforcement work of Chuo-Expressway Kaminagafusa Bridge(up line)

Location	: Tokyo
Structural Type	: 3 span continuous non-synthetic steel girder bridge×2 series
Bridge Length	: 161.9m
Span	: 3@26.7m×2
Width	: 11.1m(effective width)
Design	: Central Nippon Highway Engineering Tokyo Company Limited Oriental Shiraishi Corporation
Construction	: Oriental Shiraishi Corporation
Summary	: Replacement of the slab by cross-section division(20.0m), Increasing the thickness of the upper surface of the slab by cross-section division(141,9m), Replacement of the expansion Metal spray of the bearing, Repainting of the pier.