



International Press-in Association

www.press-in.org

INSIDE THIS ISSUE

1. Message from the Founding Chairman
2. Message from the New Chairman
3. Case History
 - Restoration and Reconstruction of Kyu-Kitakami River
 - Construction in Okitagawa Discharge Channel
4. Report
5. Announcement
6. Event Diary
7. Corporate Members
8. Editorial Remarks

EDITORIAL BOARD

Osamu Kusakabe
Tadahiko Okumura
Limin Zhang
Andrew McNamara
Yukihiro Ishihara
Kazuyoshi Ishii
Mutsumi Minami
Hongjuan He

News Letter

Volume 1, Issue 1 _September 2016

Message from the Founding Chairman

Dr. Malcolm Bolton



I have the honour to send this message as the founding chairman of the IPA, having retired from the post this year. And I welcome as my successor the very distinguished geotechnical engineer, Dr Osamu Kusakabe. His exciting plans for the IPA include this Newsletter which is an excellent way to keep us all connected.

The most salient feature of my 10 years with the IPA was equally the highlight of my previous 23 years collaborating with the Giken company – the ongoing development of press-in technology to serve the changing requirements of the construction industry as it responds to new priorities set by society.

When the IPA was founded the main emphasis was on efficient and socially responsible urban reconstruction, exploiting the precision and speed of the Giken technology of silent piling and, in appropriate installations, the ingenuity of the Reaction Base System to establish a footprint-free production line. Early IPA Seminars in Kochi focussed on identifying fundamental soil-pile interactions and predicting press-in performance, capitalising on the research collaboration between Cambridge University and Giken. This fundamental research continues, in the hands of Dr Stuart Haig and Mr Yukihiro Ishihara. Both installation issues and the performance of finished implant structures have been addressed.

More recently, and especially after the terrible 2011 Tohoku earthquake and tsunami, the theme of disaster prevention became important, with particular emphasis on flood mitigation. The political will to improve tsunami disaster resilience in the southwest of Japan was very clearly expressed in a presentation to the 7th IPA Press-in Seminar in July 2014 by the Governor of Kochi Prefecture, Mr Masanao Ozaki. Meanwhile, the massive effort that had been devoted by Giken to the development of the Gyropiler, which is capable of coring through old foundations and hard ground to embed large diameter steel tubes to form an interconnected sea wall, was coming to fruition in new coastal defences to mitigate any future Nankai mega-earthquake and tsunami. The imperative to protect coastal communities against such threats has, no doubt, been mainly responsible for the attendance at the annual Kochi Seminars increasing significantly. And the same imperative led Giken to support a further PhD student at Cambridge, Mr Srikanth Madabhushi, who has been testing physical models of implant wall systems under lateral load in the large Cambridge beam centrifuge. Very interesting results are emerging which will add confidence in designing such structures in future.

An initiative has also been taken to deliver the “I” in IPA, making both research and application more relevant internationally. A series of biennial International Workshops was inaugurated in Cambridge in 2007, followed by New Orleans in 2008, Shanghai in 2010, Singapore in 2012 and Ho Chi Minh City in 2014. Following a call for proposals, IPA Research Awards were allotted at each Workshop, and the findings presented at the succeeding Workshop. Each International Workshop also featured lectures and visits relevant to their location, as well as presentations on the state of the art of Press-in technology and its recent applications. A field visit in New Orleans, to look at the urgent raising of flood defences after the catastrophic flooding caused

by hurricane Katrina, remains in my mind. We saw, in real time, the haphazard rate of construction of a traditional hammered sheet pile wall, in comparison with a second contract just a few hundred metres away where press-in piles were being installed smoothly and much more rapidly.

Each of the International Workshops has generated proceedings that have been published as a Press-in Engineering volume. All this research and practice has now been amalgamated into the Press-in Manual, currently in Japanese but shortly to be released also in an English language version. The international dissemination of press-in technology will remain a key feature of the IPA mission in the years ahead. I look forward to assisting where I can.

I feel I should finish by referring to the recent decision of the UK electorate to force a separation from the European Union, something with which I personally disagreed and which was opposed by all the main political parties, every independent agency such as the IMF, and every ally. Nevertheless, democracy must be respected. I can assure you, however, that this withdrawal does not indicate any reduced enthusiasm in the UK for international collaboration – quite the opposite. Even those who advocated the split emphasise the need for increasing commercial cooperation, not less. And I am sure that the UK scientific community will work even harder to maintain its European links. I would be very surprised if the UK does not continue to subscribe to the Eurocodes, for example. So I hope to continue working with EU committees to improve and update the Eurocodes by making them address real performance, and take account of up-to-date scientific information. Such improvements are necessary if society is to fully capitalise on new construction processes, such as offered by press-in technology.

May the IPA continue to flourish!

Message from the New Chairman

Dr. Osamu Kusakabe



It is a great honor and privilege for me to succeed Prof. Malcolm Bolton, the Founding Chairman of the International Press-in Association (IPA). Prof. Bolton has been a long-time good friend of mine as well as a great teacher on soil mechanics since I was a PhD student at Cambridge University.

Engineers are looking at the same thing from different angles depending on their specialty. Shield tunneling, for example. Mechanical engineers are interesting in designing and manufacturing a robust and efficient shield machine, whereas geotechnical engineers are focusing on ground deformation associated with tail void formation due to shield tunneling. Similarly, sheet piling. Mechanical engineers make an effort to design and manufacture a piling machine for efficient installation of sheet pile, such as Silent Piler, whereas geotechnical engineers ensure the stability of the retaining structure installed as a system. IPA is a unique organization with challenging aims of fusion among various engineering disciplines, such as between mechanical engineers and geotechnical engineers, and of fusion between theory and practice.

Prof. Bolton has served as Chairman for a decade since IPA was established in 2007. Under his strong leadership, he has accomplished a number of achievements: Formation of IPA international community, International dissemination of Press-in Technology through seminars and workshops, Advances of our understanding of behavior and performance of press-in piles from the view of geotechnical engineering.

What should we do for the next decade? As the second Chairman, I would like to foster IPA towards a mature organization with more efficient operational functions, for example, by launching quarterly Newsletter as a media integrating IPA members, and by holding a regular meeting of the Board of Directors. I would also like to have some activities towards the fusion between mechanical engineers and geotechnical engineers, and the fusion between researchers and operators. Of course, we should continue to make a further effort to international dissemination of Press-in Technology, by publishing “Press-in retaining structures: a hand book”, an easy reading introductory book on press-in technology and a series of case history volume, together with Kochi seminar and IPA workshops.

Your kind cooperation and understanding would be highly appreciated.

Case History-1

Restoration and Reconstruction of Kyu-Kitakami River

Mr. Hiroho Takada

Ministry of Land, Infrastructure, Transport and Tourism
Tohoku Regional Bureau, Kitakamigawa-Karyu River Office

The estuary area of Kyu-Kitakami River was significantly damaged due to the earthquake and tsunami in the Great East Japan Earthquake in 2011. Picture 1 was taken from the Hiyoriyama Mountain in Ishinomaki City in Miyagi Prefecture, one month after the disaster. This Hiyoriyama Mountain is famous for the cherry blossoms and is usually very crowded with the visitors. However, in 2011, it was very quiet spring with few visitors. The city was destroyed by tsunami, and the disposal of the disaster wastes and the search for the missing continued, with the support from inside and outside of Japan. On the other hand, the cherry blossoms were blooming beautifully and the poem monument was standing still saying 'May peace prevail on earth'.



Picture 1

In the estuary of Kyu-Kitakami River, there is a city called Ishinomaki City, Miyagi Prefecture. The city lies along the river. The river and the lives of people in this city are closely connected with each other. In addition, there are ports and factories near the river estuary, with industries such as papermaking and wood processing, taking advantage of the plentiness of water from Kyu-Kitakami River.

In the Great East Japan Earthquake, tsunami went upstream through the river, destroying buildings and houses. When the tsunami hit this district, there was a staff working in 'Ishinomaki Comic Book Hall', and some residents nearby escaped into the hall. The water level of the tsunami rose up just beneath the window of the Hall, but the Hall survived. The staff is still working in the Hall now, and is devoted to the restoration and reconstruction of Ishinomaki.

The basic concept of the restoration plan for the central district of Ishinomaki is shown in Figure 1. The first defence is the coastal levee and the river levee, to protect the city from the tsunami with relatively high frequency of occurrence. The second defence is the multi-defence structure, such as the levees with high road banks and disaster-prevention green parks, to minimize the damage. The district between the first and the second defence will be designated as the uninhabitable area.

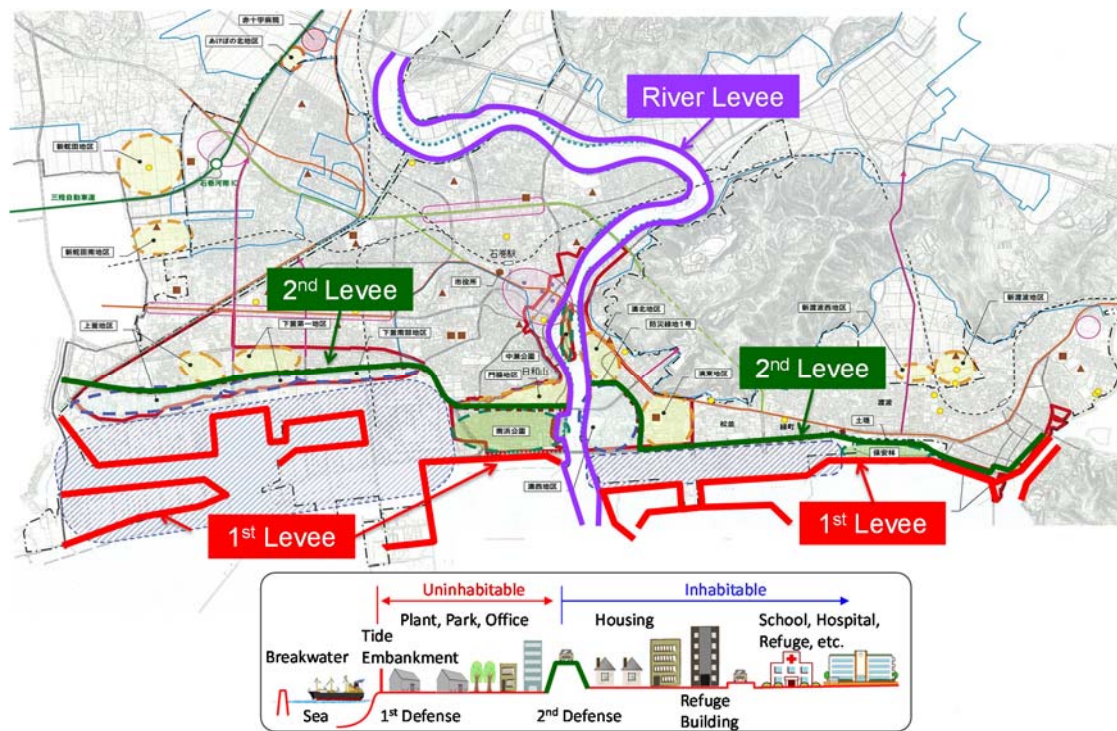


Figure 1

The height of the river levee in the estuary should harmonize with the height of the coastal levee, and cover the required height for flood, high tide and tsunami. The height of the levee in the estuary is determined by the high tide and will be T.P. 7.2m up to 1.6km from the estuary. Then it will then be decreased to T.P. 4.5m up to 1.9km from the estuary, and be fixed at T.P. 4.5m. The revetment will be constructed to prevent the ground subsidence and the succeeding inundation. The river levee will be constructed behind the revetment. Between the revetment and the river levee will be designated as the inspection passage where the citizens can enjoy walking.

The river side was significantly eroded by tsunami. Because of this erosion, only small room was left between the river and the houses. As this area is also influenced by the tide, an immediate action was required to prevent the erosion. The noise and vibration due to the construction process should be as small as possible, taking into consideration the lives of the residents. In addition, the space for the construction was limited, as shown in Picture 2.

The first example is the construction at the right bank in Kadowaki district. 450 SPU-2W type sheet piles and 170 SPU-4W type sheet piles were used in this revetment. As there were a lot of stones on the river bed, Hard Ground Press-in Method was adopted.



Picture 2

The second example is the construction in Kadowaki and Chuo district at the right bank, as shown in Picture 3. 600 tubular piles with the diameter of 800mm and 1000mm were used in this revetment. As the ground condition was very hard, Gyropress Method was adopted. The number of teeth on the pile base was varied depending on the hardness of the ground.

The third example is the construction in Sumiyoshi district at the right bank, as shown in Picture 4. 100 SPU-2W type sheet piles and 850 SPU-4W type sheet piles were used in this revetment. As there was little space for supplying the sheet piles to the piling machine, GRB Non-staging System was adopted. Sheet piles were transported on top of the installed piles from the upstream side of the site.



Picture 3

The final example of the revetment construction, as shown in Picture 5. This is the construction at the left bank in Hachiman and Fudocho district. 370 SPU-3W type sheet piles and 200 SPU-4W type sheet piles were used in this revetment. Here, the existing revetment was adjacent to the planned line for the sheet pile installation. In addition, there was rubble near the existing revetment. To cope with these difficulties, Hard Ground Press-in Method was adopted.



Picture 4



Picture 5

Case History-2

Construction in Okitagawa Discharge Channel

Mr. Mikiya Kubo

Toyama Prefecture, Toyama Civil Engineering Center

Figure 1 is the outline of the improvement construction of Okitagawa Discharge Channel. By 2014, 87% of the whole length of the channel has already been finished, as shown in black. The procedure of the construction was that firstly sheet pile were installed, then chemical grouting was conducted, and finally the box culvert was positioned. At present, the red parts in the river mouth are under construction.

The height of the existing coastal levee is as high as 3.8m. Initially it was around 1.0m, but was raised every time it experienced the wave overtopping. When we construct the mouth of the discharge channel, we need to break this existing coastal levee. There were mainly three points to consider as the design conditions. The first point was the hardness of the ground. The ground contained dense sand and gravel and boulders. SPT N values were more than 50. In addition, we worried about how to deal with the possible underground obstacles such as the wave dissipating concrete blocks. The second point was the narrow space. There were wave dissipating concrete blocks and the sea water itself in the sea side and there was a public road in the land side. The third point was the short construction period. The construction was not able to be carried out in winter or in the season of fishing. We had only four months for construction, from July to October. Other condition to consider was to leave the existing levee as it was as much as possible. This was because there is a risk of the overtopping of the storm wave, if the existing levee was removed all at once.

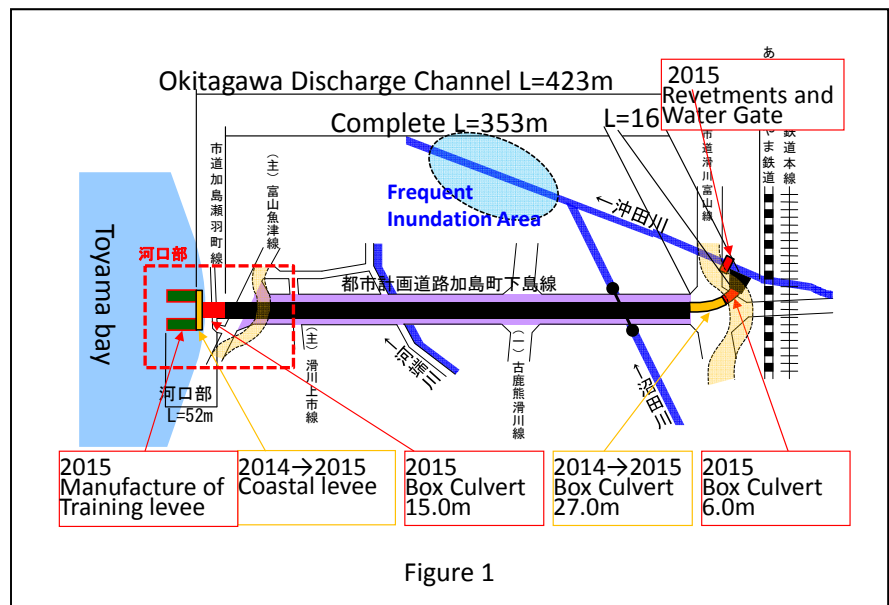
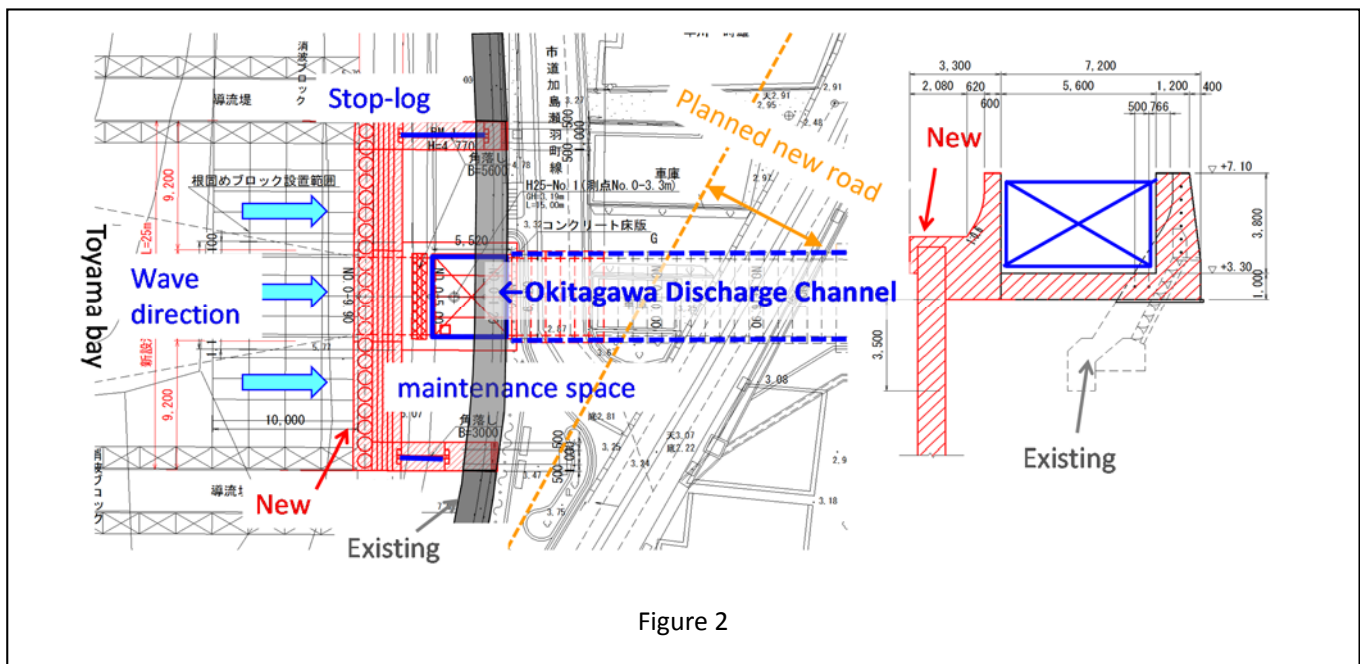


Figure 1



	① Gravity-type revetment	② Counterfort retaining wall	③ Cantilever wall (Tubular sheet pile)	④ Cantilever wall (Tubular pile)
Plan				
Overview	<ul style="list-style-type: none"> • Square concrete blocks • Requires temporary wall 	<ul style="list-style-type: none"> • Hard Ground Press-in Method • Not requires temporary wall 	<ul style="list-style-type: none"> • Tubular sheet pile • Not requires temporary wall 	<ul style="list-style-type: none"> • Tubular pile • Not requires temporary wall
Work-ability	Long construction period due to the temporary retaining wall, high risk of winter construction ×	<ul style="list-style-type: none"> • Not possible if wave dissipating blocks exist • Long construction period due to tie rod and counterfort △	<ul style="list-style-type: none"> • Not possible if wave dissipating blocks exist △	<ul style="list-style-type: none"> • Possible even if wave dissipating blocks exist • Higher construction speed than ③ ○
Economic efficiency	△	○	×	◎
TOTAL	×	△	×	○

Figure 3

As summarized in Figure 2, at the cross point of the coastal levee and the discharge channel, the levee normal was determined to be shifted towards the sea side, for the following three reasons. The first reason was to ensure the maintenance space for the discharge channel. This required the gates for heavy equipments to go into the space. Secondly, it was necessary to ensure the strength of the new levee to be higher than the existing levee, according to the agenda with the coast administrator. If the new levee normal was the same as that of the existing one, we had to construct the gates on the normal, which deteriorates the strength of the levee. The third reason was a new road just behind the existing levee, which was planned to be constructed in the future. It was necessary to plan the construction not to block the planned road. Therefore, it was not possible to shift the levee normal towards the land side.

There were 4 alternatives for the new coastal levee. A gravity-type revetment, a counterfort retaining wall, a cantilever wall (Tubular sheet pile, Hard Ground Press-in Method) and a cantilever wall (Tubular pile, Gyopress Method). These alternatives were compared in terms of workability, economical efficiency, flexibility to problems (such as obstacles) and the impact on surroundings (noise and vibration). As a result, Gyopress Method was adopted.

The comparison of the 4 alternatives is shown in Figure 3. The first alternative is the gravity-type revetment. This plan uses square concrete blocks and temporary earth retaining walls. As it requires the temporary retaining walls and the chemical injection as the countermeasure against the ground water, the construction period is the longest of the four and the cost is not reasonable. The second alternative is the counterfort retaining wall. Although it can save

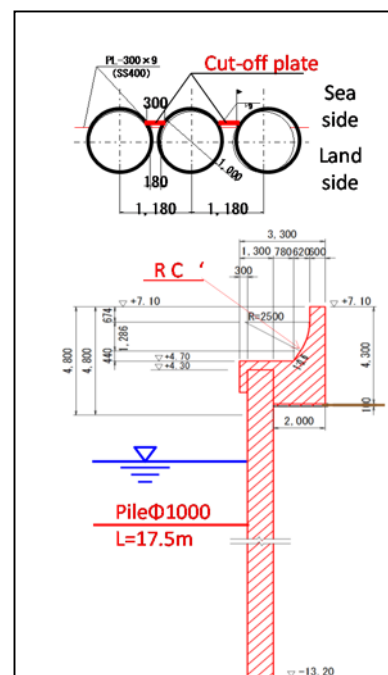


Figure 4

the temporary retaining walls, it requires the counterfort pile walls and tie rods, and the construction period will not be short enough. The third alternative is the cantilever wall with steel tubular sheet piles, constructed by Hard Ground Press-in Method, where the piles themselves are used as the coastal levee. Although it has a high performance in water cut-off, the workability under the existence of the obstacles and the economic efficiency is low. The fourth alternative is the cantilever wall with steel tubular piles, constructed by Gyropress Method. The piles themselves are used as the coastal levee. As it is better than others both in terms of the workability and the economic efficiency, we determined to adopt it.

Figure 4 is the detail of the structure of the coastal levee, designed on condition that the construction method is the Gyropress Method. The length of construction is 25m in the direction of crossing the discharge channel. The diameter of the pile was determined to be 1000mm, considering the economic efficiency and the availability of the press-in machine. The weak point of this construction method is the cut-off work between the piles. There is 18cm gap between two piles. If nothing is done to close this gap, sand outflow will be caused by the effect of the wave in the future. Therefore, cut-off steel plates were welded onto the piles, and in addition, grout injection was conducted behind the piles by using boring machines.

Figure 5 shows the progress of the construction of the discharge channel. The yellow sections are the construction work of the coastal levee, which were completed in March this year. The red sections are the box culverts and were completed in June this year. The green sections are the training levees to prevent the estuary closing. The construction have just started in July. The situation of piling construction by Gyropress Method in the yellow section is shown in Picture 1.

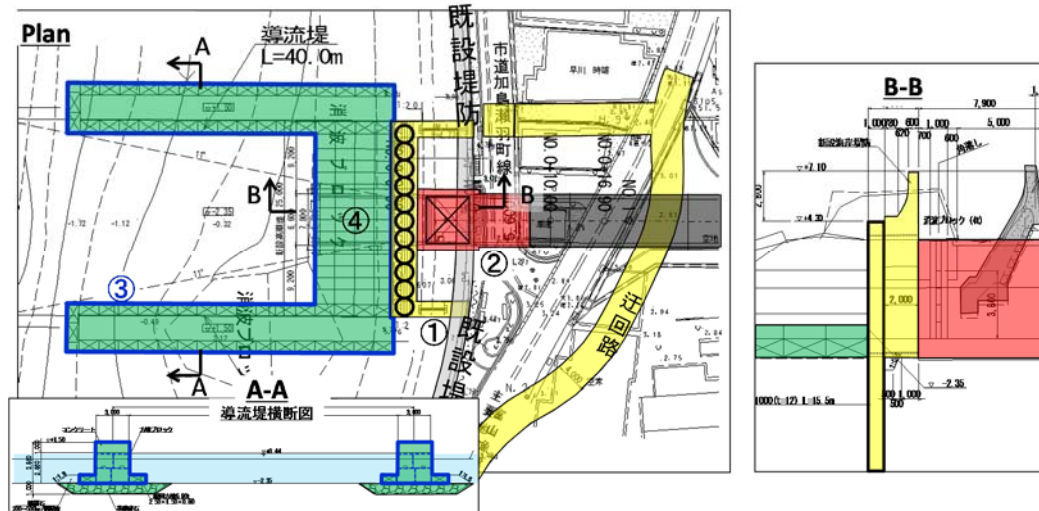


Figure 5

Coastal levee with steel tubular piles was the optimal option for this site with unfavorable conditions. The method will be adopted more in the future, especially where speed and certainty is required. Demand for Gyropress Method will be increased, if the construction productivity is standardized and the economic efficiency is improved further.



Picture 1

Report

Damage survey after The 2016 Kumamoto Earthquake

-Confirmation of tough Implant structure-

Dr. Tadahiko Okumura

Engineering Advancement Association of Japan
Director of Geo-space Engineering Center

[The 2016 Kumamoto Earthquake]

The great earthquakes more than seismic intensity-Magnitude- 7 by Japan Meteorological Agency occurred twice in Kumamoto Prefecture in Kyushu Island in this April and severe damages were induced. For example, there were a lot of collapses of wooden houses, cracks in levees, large-scale slope falls, collapse of Aso bridge and etc. (See left photo).

It was the first case that two great earthquakes more than Magnitude 7 within few days occurred in Japan.

[Damage observation by survey team]

The field damage survey team investigated earthquake damages induced by The 2016 Kumamoto Earthquake in this April, especially of Implant structures (See Reference) constructed in Kumamoto Prefecture, for 3 days from May 23 to 25, because a lot of Implant structures were constructed in Kumamoto Prefecture. Dr. Kusakabe, Chairman of IPA led the team and 10 members including IPA and JPA (Japan Press-in Association) joined. Comprehensive investigation was done by the IPA and JPA joint team in order to investigate from the point of design, construction and maintenance.

Source: Ministry of Land, Infrastructure, Transport and Tourism, Kyushu Regional Development Bureau

[Reference / Implant structure]

The Implant structure consists of a structural member that is combined with a frame and foundation that are embedded into the ground where they are securely supported by the ground. The structure carries horizontal and vertical loads, using “the scale of the allowable structural member” and “the depth of penetration into the ground”.





The typical example of earthquake damages is a viaduct construction site of local railway and Kyushu Shinkansen (Bullet train) between Fukuoka Prefecture and Kagoshima Prefecture near Kumamoto station of JR Kyushu Railway Company. The slight cracks on the ground surface in access railway line were investigated at the site of continuous steel pipe walls of diameter 800 mm. However main body of Implant structures had no damage, though levee walls and soils adjacent to main railway line deformed largely laterally (See photo 1).

At the discharge channel sites in east area in Kumamoto Prefecture, there were no damage at the levees reinforced by concrete sheet piles and embankment levees have some damages (See photo 2).

Dr. Kusakabe pointed out that “We confirmed expected results against earthquake occurrence for steel sheet piles and steel piles. In case of levees and dikes reinforced by steel sheet piles, etc., collapse mechanism was concentrated in no reinforced portions and total collapse was avoided. In order to expand the above mentioned effectiveness, we like to examine scientifically structure types, depth of penetration into the ground and etc. and proceed to specify in design method.”



The team will summarize in survey report and disclose in Web site and etc. in near future and include this survey results in Technical seminars or workshops organized by JPA and IPA in order to demonstrate the advantages of Implant structures.

Report

Kochi Seminar 2016 held in July

Dr. Osamu Kusakabe

Chairman of International Press-in Association



IPA Press-in Engineering Seminar in Kochi is an annual event organized by IPA Research Committee starting from 2008. The 9th Press-in Engineering Seminar in Kochi (in short, Kochi Seminar) was held on July 12 and 13, 2016, cosponsored by Kochi Prefectural Government, Kochi Institute of Technology, and other 13 organizations.

On the first day, there were 340 participants from eight countries, attending the Seminar. Interesting four case histories using Press-in Technology were presented. The main contents of the two presentations out of the four are reproduced in this issue of IPA Newsletter. In addition, a presentation was also given by the President of Japan Bosai (meaning Disaster Protection) Platform. Welcome reception in the evening was well attended.



Site visit was arranged on the second days to observe an on-going project of the reinforcement of coastal levee against tsunami by installing a series of tubular steel piles in the levee using Silent Piler. Discussion sessions were also organized in three groups with different themes, including Group – 1: Cambridge - Giken Research Collaboration, Group – 2: Discussion on Press-in Essentials, and Group – 3: State of the Art and Future on Press-in Technology in Asian region. Some of the outcomes from the Discussion Session may be presented in the future issue of IPA Newsletter.

Report

IPA and Giken activity in Odessa, Ukraine

Prof., Dr. Michael Doubrovsky

Head of Department "Sea, River Ports and Waterways"
Odessa National Maritime University.



On 1-3 of June 2016 there was annual International Exhibition/Conference INTERTRANSPORT 2016 in one of the largest Ukrainian city and sea port – Odessa (population is more than 1 mln). One of the directions of activity of this event was, as usual, coastal and port construction and reconstruction. Leading Ukrainian and European companies in this sphere (contractors, designers, consultants) as well as their potential customers (ports authorities, local administrations, etc.) were presented at the Exhibition/Conference.

Among new comers of INTERTRANSPORT we should note International Press-In Association and Giken Ltd; they contributed to both Exhibition and Conference. At the exhibition booth of Giken Ltd one could find not only booklets of Giken describing practical applications of Press-In technologies and equipment but also IPA brochures "Implant Structure" devoted to principles of Construction Revolution and philosophy of Press-In approach. These brochures "Implant Structure" were published not only in English but also in Ukrainian and Russian languages and were in good demand and in great favour among attendees. Interest of academician and researchers was attracted also by scientific publications of IPA (proceedings of IPA international workshops and others).

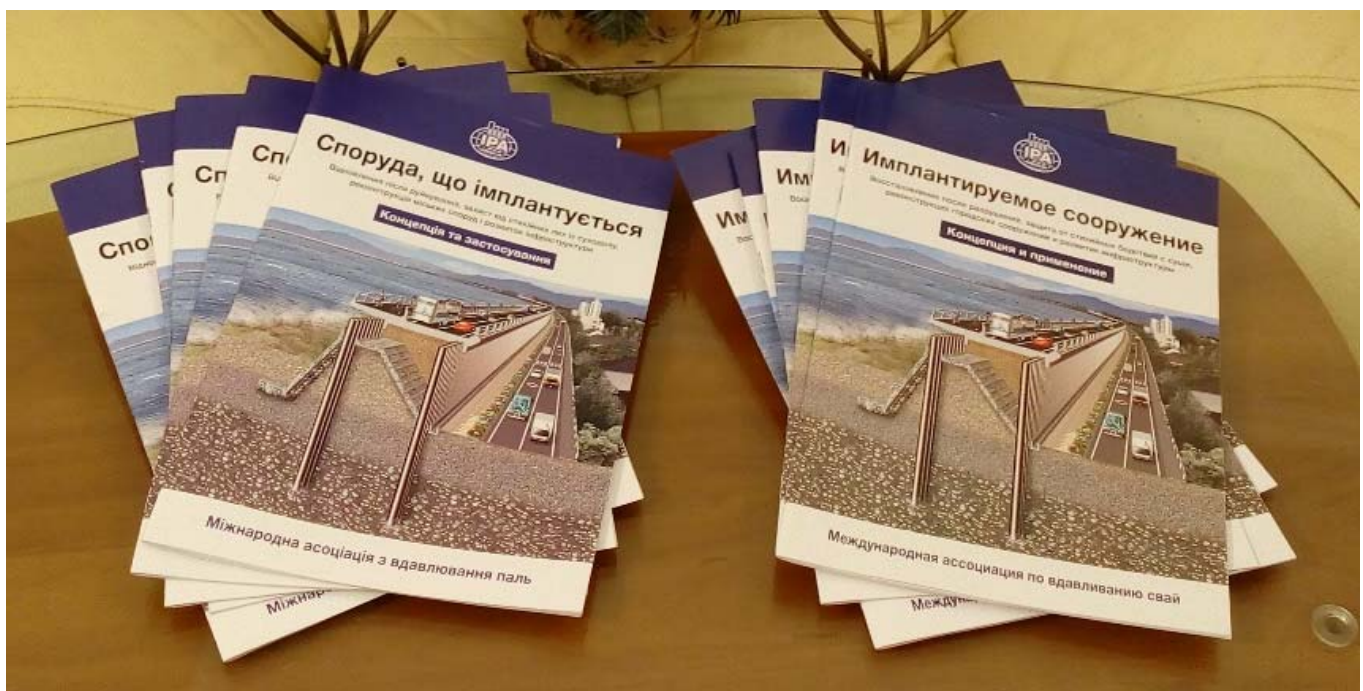
There were a lot of interesting contacts at the Giken/IPA booth. Local professionals used this opportunity to obtain objective and up-to-date information about peculiarities of Giken machines and technologies regarding construction conditions of Ukraine and development of Ukrainian construction market.



At the Conference a special “Press-In” session was arranged to provide acquaintance of Ukrainian construction-related people with IPA activity and Giken technologies. At the mentioned specialized session two presentations were delivered. The first one “Implant Structure: Innovative Approaches and Construction Philosophy” was proposed by Professor, Dr. Michael Doubrovsky (International Press-In Association, Odessa National Maritime University). The second presentation “Silent Piling Technologies & Implant Foundations” was carried out by Mr. Tsunenobu Nozaki (Giken Ltd). “Press-In” special session was attended by number of professionals (designers, contractors, researchers) and academicians, scientists as well as by students (by the way, there are 14 universities in Odessa-city). Both presentations had a great success; not only Conference Hall but also stairs leading to the hall were crowded by attendees during presentations and subsequent discussions and considerations.

So it's possible to conclude that the first IPA/Giken appearance in Ukraine was rather successful and prospective. We can expect that the first acquaintance with Press-In technology and principles will be developed into wide application of silent pilers in number of coming projects (coastal zones and ports development, urban construction, slopes stabilization, etc.).

Appropriately to point out that it is rather symbolic to consider IPA/Giken coming to Ukraine just after recent official visit of Ukrainian President to Japan. Mr. President has announced that year of 2017 will be the Year of Japan in Ukraine. So we hope that Press-In technologies may be successfully applied in Ukraine on the mutually advantageous basis.



↑ Implant Structure; Ukraine and Russian version

Announcement

IPA Secretariat

Two remarkable activities have been executed by IPA Publication committee last two years and IPA sincerely appreciates an outstanding contribution made by the each committee member. The Japanese version of a handbook for the Gyropress Method with 152 pages was published in 2014, and then a handbook for the Press-in Method with 522 pages was published in 2015 as well. Following the publication, IPA had organized the Seminars utilizing a handbook throughout Japan co-hosted by JPA (Japan Press-in Association) and those were successfully done.



Gyropress Method
Published March 2014
(152pages/Japanese)



Press-in Method
Published June 2015
(552pages/Japanese)

The Publication committee has commenced to undertake the “**Press-in retaining structures: a handbook (First Edition, 2016)**” immediately after the publication of the Japanese version of the Press-in hand book . A first draft has just distributed to the nominated international members on early August for review and comments then it plan to be completed in December 2016.

This handbook consists of 4 chapters and 3 Addendums for approximately 500 pages in total. This handbook referred to European, American and also Japanese standards with respect to the current trend of investigation, planning and design, therefore the Publication committee has spent almost 1 year to implement its contexture based on the Japanese version.

It is also planned to hold the international Seminar for dissemination of the Press-in method by utilizing this handbook. The first international Seminar is scheduled to hold it in Singapore on early March of 2017 and the Local organizing committee lead by Professor C F Leung, National University of Singapore / IPA director, has already been organized for preparation activities. Singapore is very important country as a gateway of the Southeast Asia in technology and economy where the further awareness of the Press-in method to the up-stream level is developed.

Further, IPA will proceed with translation of a handbook to multiple languages such as Chinese and etc. upon publication of an English version of “**Press-in retaining structures: a handbook (First Edition, 2016)**” then also will continue to update and implement its contents as well.

Event Diary

■ The Japanese Geotechnical Society

https://www.jiban.or.jp/e/events_jgs/

6th Japan-Korea Geotechnical Engineering Workshop

12 Sep. 2016 / Okayama, Japan

■ International Society for Soil Mechanics and Geotechnical Engineering

<http://www.issmge.org/en/conferences-and-events/conferences-issmge/eventsbycategory/>

3rd ICTG International Conference on Transportation Geotechnics

04-07 Sep. 2016 / Guimaraes, Portugal

Fifth International Conference on Geotechnical and Geophysical Site Characterisation (ISC'5)

05-09 Sep. 2016 / Gold Coast, QLD, Australia

8th International Conference on Scour and Erosion

12-15 Sep. 2016 / Oxford, United Kingdom

3rd European Conference on Unsaturated Soils - Paris 2016

12-14 Sep. 2016 / Marne la Vallée, France

13th Baltic Sea Geotechnical Conference

22-24 Sep. 2016 / Vilnius, Lithuania, Lithuania

International Geotechnical Engineering Conference on Sustainability in Geotechnical Engineering Practices and Related Urban Issues

23-24 Sep. 2016 / Mumbai, Maharashtra, India

69th Annual Canadian Geotechnical Conference - GeoVancouver2016

02-05 Oct. 2016 / British Columbia, Canada

GEO-EXPO 2016 Scientific and Expert Conference

07-08 Oct. 2016 / Banja Luka, Bosnia and Herzegovina

9th All-Ukrainian Scientific-Technical Conference "Soil mechanics, geotechnics and foundation engineering": "Geotechnical innovations and implementation of Eurocodes in Ukraine"

11-13 Oct. 2016 / Dnipropetrovsk, Ukraine

XVIII Brazilian Conference on Soil Mechanics and Geotechnical Engineering - COBRAMSEG 2016

19-22 Oct. 2016 / Belo Horizonte, MG, Brazil

SFGE 2016 – Shaping the Future of Geotechnical Education – International Conference on Geo-Engineering Education

20-22 Oct. 2016 / Belo Horizonte, MG, Brazil

11th ANZ Young Geotechnical Professionals Conference (11YGPC)

25-28 Oct. 2016 / Queenstown, New Zealand

5th International Conference on Geotechnical Engineering and Soil Mechanics

14-16 Nov. 2016 / Tehran, Tehran, Iran

Geotec Hanoi 2016

24-25 Nov. 2016 / Hanoi, Vietnam

IX Chilean Congress of Geotechnics

05-07 Dec. 2016 / Valdivia, XIV Región de Los Ríos, Chile

International Conference on Forensic Geotechnical Engineering

08-10 Dec. 2016 / Bangalore, Karnataka, India

Advances in Laboratory Testing and Modelling of Soils and Shales

18-20 Jan. 2017 / Swiss Alps, Switzerland

International Conference on New Challenges In Geotechnical Engineering, ICNCGE-2017

23 Jan. 2017 / Lahore, Punjab, Pakistan

International Conference on Advances in structural and geotechnical engineering

27-30 Mar. 2017 / Red Sea Governorate, Egypt

■ Deep Foundations Institute

<http://www.dfi.org/dfievents.asp>

Soil Mixing and Micropiles: States of Practice for Design, Construction and Quality Assurance

8-9 Sep. 2016 / Orlando, FL, USA

DFI-India 2016: 6th Conference on Deep Foundation Technologies for Infrastructure Development in India

8-10 Sep. 2016 / Kolkata, India

DFI International Conference on Deep Foundations, Seepage Control and Remediation (41st Annual Conference on Deep Foundations)

12-15 Oct. 2016 / New York, NY, USA

Piled Foundations & Ground Improvement Technology for the Modern Building and Infrastructure Sector

21-22 mar. 2016 / Melbourne, VIC, Australia

13th International Â Workshop Â on Â Micropiles

29 Mar. 2017 – 01 Apr. 2017 / Vancouver, BC, Canada

Corporate Members



GIKEN LTD.
3948-1 Nunoshida, Kochi-shi,
Kochi 781-5195,
JAPAN



Akatsuki Industrial Co., Ltd.
301-1, Yoshikawachofurukawa
Konan, Kochi 781-5242,
JAPAN

有限会社 大晋機工

Daishin Kikou Co., Ltd.
2-4-20, Haradaminami
Toyonaka, Osaka 561-0805,
JAPAN



Fuji Tokushu Co., Ltd.
399-503, Yamada aza ishikiri, Kasuyagun
Hisayamachi, Fukuoka 811-2502
JAPAN



**Ozawa Civil Engineering
and Construction Co. Ltd.**
6 Moritacho, Nakaku, Hamamatsu City,
Shizuoka Prefecture, 432-8048
JAPAN

有限会社 矢後自動車整備工場

Yagozidousha Seibi Koujyou Co., Ltd.
615-2, Yachiyocho mukaiyama
Akitakata, Hiroshima 731-0306,
JAPAN



**NIPPON STEEL &
SUMITOMO METAL**
6-1, Marunouchi 2-chome,
Chiyoda-ku, Tokyo 100-8071,
JAPAN



JFE Steel Corporation
Hibiya Kokusai Bldg., 2-3,
Uchisaiwai-cho, 2-chome,
Chiyoda-ku, Tokyo 100-0011,
JAPAN



THL FOUNDATION EQUIPMENT PTE LTD
8, Sungei Kadut Avenue,
SINGAPORE 729645



IZUMO GIKEN LTD.
267-1, Eta-cho, Izumo-shi, Shimane,
693-0056,
JAPAN



Giken Seko Co., Ltd.
3948-1 Nunoshida, Kochi-shi,
Kochi 781-5195,
JAPAN

横浜ゴムMBジャパン株式会社 近畿カンパニー

10-20, Kitakawazoe
Kochi, Kochi 780-0081,
JAPAN



TUNGALOY CORPORATION
11-1 Yoshima Kogyodanchi
Iwaki 970-1144,
JAPAN



Ishii Kiso-Contstruction Co., Ltd.
1162-37, Shinei 4-chome,
Souka-city, Saitama 340-0056,
JAPAN



SUGISAKI KISO CO., LTD.
709-2, Niizaki
Niigata Kita-ku, Niigata 950-3134,
JAPAN



Mizuho Jyuki Co., Ltd.
4020-1, Nigorigawa,
Kitaku, Niigata, Niigata, 950-3131,
JAPAN



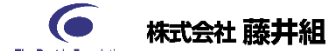
**SHANGHAI TRUST MACHINERY
IMPORT & EXPORT Co., Ltd.**
Room 2307, Johnson's Building,
No. 145 PuJian road, Pudong District,
Shanghai CHINA



**CONSTRUCTION PROJECT
CONSULTANTS, INC.**
Osaka Honmachi Nishi Dai1 Bldg, 2-1-1
Awaza Nishi-ku, Osaka 550-0011,
JAPAN



**Guan Chuan Engineering
Construction Pte Ltd**
28 Sungei Kadut Way, Guan Chuan Building
SINGAPORE 729570



FUJIGUMI Co., Ltd.
2-44 Kobayashihigashi 1-chome,
Taisyoku-ku, Osaka-shi, Osaka, 551-0011,
JAPAN



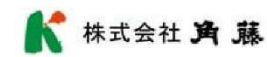
KAKIUCHI Co., Ltd.
391-8, Nalajima, Okou-cho,
Nankoku-shi, Kochi, 783-0049,
JAPAN

有限会社 黒田鉄工

Kuroda Tekkou Co., Ltd.
3169-53, Otsu Otsu
Kochi, Kochi 781-5103,
JAPAN



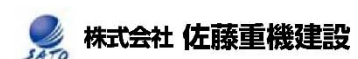
Kajikawa Construction CO., LTD
2-8, Tenjinmachi
Hekinan, Aichi 447-0033,
JAPAN



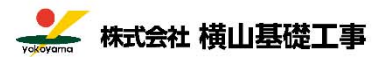
KAKUTO CORPORATION
60, Higashisurugamachi,
Nagano, Nagano, 380-0811,
JAPAN

エムシー中国建機株式会社

MC Chugoku Kenki Co., Ltd.
10-10, Hashimotocho
Hiroshima Naka-ku, Hiroshima, 730-0015,
JAPAN



Sato Jyuki Kensetsu Co., Ltd.
2888, Fujiyose
Kitakanbaragun Seiromachi, Niigata, 957-0127,
JAPAN



Yokoyama-Kiso Co., Ltd.
385-2, Sanemori
Sayogun Sayocho, Hyogo 679-5303,
JAPAN



Eng Lee Engineering Pte Ltd
12 Kian Teck Crescent,
SINGAPORE 628879



2-24, Sakai-machi, Kochi city,
Kochi 780-0834,
JAPAN



Takeuchi Crane Industry
37-1, Suzu
Tottori. Tottori 680-0875,
JAPAN

Editorial Remarks

The Editorial board is pleased to announce that the first volume of IPA Newsletter is now launched in September 2016. The IPA Board believes that the Newsletter improves our services to IPA members by disseminating information with respect to current & future activities in our organization, and also with respect to updated technology through case histories. The Newsletter also encourages our communication paths not only among member organizations but also with the IPA Board beyond generations.

The Newsletter is planned to be issued quarterly basis and the second issue is scheduled to publish in December 2016. Contributions from IPA member, Technical committee and individual members are very much welcome, in particular in the categories of 'Case History', 'Report'. Any comments and suggestions to implement the Newsletter are also very welcome.

Please feel free to contact the Editorial board members below with email address or IPA Secretariat (tokyo@press-in.org) for your clarifications and/or suggestions.

Editorial board:

Dr. Osamu Kusakabe (ipa.kusakabe@press-in.org)

Dr. Tadahiko Okumura (okumura@enaa.or.jp)

Prof. Limin Zhang (cezhangl@ust.hk)

Dr. Andrew McNamara (A.McNamara@city.ac.uk)

Mr. Yukihiro Ishihara (ipa.ishihara@press-in.org)

Mr. Kazuyoshi Ishii (ipa.ishii@press-in.org)

Ms. Mutsumi Minami (tokyo@press-in.org)

Ms. Hongjuan He (ipa.ka@press-in.org)

Remarks;

Editorial board would like to express our sincere appreciation for contribution made by Mr. Hirose, Ms. Takeuchi and Ms. Kocho at initiate setting up stage of the Newsletter.