TaiWha Lease Industrial Co., Ltd.
15th Fl, Jeongdong Bldg. #15-5, Jeong-dong, Jung-gu, Seoul, Korea
TEL : (82-2) 774-0522 FAX : (82-2) 774-5509
E-mail : yhmoon @ taiwha.co.kr

Greetings, June 1st, 2011

My name is Young Hak Moon, C.E.O. Vice Chairman of TaiWha Co., Ltd.
We've been involved in projects in the Middle East for nearly 10 years and I, myself, have worked on various projects in the region for the past 37 years.

Dear clients,

We are more competitive.

You may easily find many big contractors for your projects. However, their prices will likely be higher than ours, because they subcontract their work to many smaller professional contractors like us.

We offer superior General Contracting Work for mid-size construction projects. Our nimble structure allows us to carry out projects more productively, more efficiently, and less expensively than larger General Contractors.

We are well connected.

We have gained a great deal of experience working as subcontractors for larger companies, such as Hyundai or Samsung, and through this experience, we are associated with the same professional contractors that larger companies use. With our wealth of experience working with smaller contractors, we are able to network with the best and find those who are tailor-fit to your project and are able to procure them under our management with less overhead and administrative costs than larger companies.

As well, TaiWha will be fully responsible for completion of the project under our name.

We have an excellent team and superb inventory.

We recently acquired Hong Sung Housing Co., Ltd. which has a great deal of experience in medium-size building and housing projects. Maintaining our own Sheet Pile stocks and steel components, as well as Semi-Shield Machines, we can offer EPC capabilities at a very competitive price for any kind of Drainage Work and for

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E-mail : yhmoon @ taiwha.co.kr

Temporary Steel Bridge Work. We are also very well associated with a Railway Track construction company for upgrading existing tracks and maintenance work.

We have cost-efficient technology.

TaiWha holds patents for an advanced process using computer monitoring control systems for Sewage Treatment Plants. We call it SMART³ and it promises to save you money on construction and maintenance costs.

We care about the localization of talent.

When we bid, we are preparing bids together with local professional contractors not only on a commercial basis, but on more of a technical basis.

Our company believes in achieving success through localization. By working together we may establish a successful presence in your country while at the same time sharing our expertise and professional techniques with the local contractors creating a stronger, more self-reliant workforce with improved abilities in a wide range of construction fields.

As the strength of local contractors grows, they will provide professional work for major contractors in many different construction fields. Accordingly, the portion of government funds on projects returning to local contractors will increase and it will help to create a more robust local industry and economy.

As you can see, we can provide you with improved localization and a "total package" from Engineering to Construction for a wide range of projects and look forward to serving your needs.

Sincerely,

Young Hak Moon

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CURRENT CAPABILITIES

Engineering, Procurement, and Construction (EPC)

A. Housing

B. Semi-Shield Work

C. Temporary Steel Bridge

D. Earthwork, Structural and Sheet Piling Work

E. Environmental Work ($SMART^3$)

ⓐ. Retrofitting, Upgrading of Existing Sewage Treatment Plant

ⓑ. Engineering and Construction of New S.T.P. Project

F. Leasing

ⓐ. Sheet pile and Prefabricated H-Beam

ⓑ. Temporary Steel Bridge

TAIWHA LEASE INDUSTRIAL CO., LTD.

兌和鋼材産業株式會社

CONTENTS

The President's Greeting

For more than 22 years since 1989, TAIWHA has been engaged in the field of civil, structural, and other industrial projects as well as its prime line of business of leasing construction materials (sheet pile, pre-engineered H-beam).

In 2003, TAIWHA formed a new joint-venture company, TAIWHA-INGÉROP, with a French engineering firm. This company has developed into a three-party company (TAIWHA-INGÉROP-SEC: TIS) with a French and a Japanese firm.

In 2004, TAIWHA was awarded a research contract from The Ministry of Environment of Korea for its High-Efficiency Super-Integrated Sewage Treatment Project. This research project, called "The Eco-Star project", has been jointly performed with a Danish corporation, Waste Water Control Aps, and the Korea Institute of Construction Technology. TAIWHA is designated as the official leading company of this multinational team.

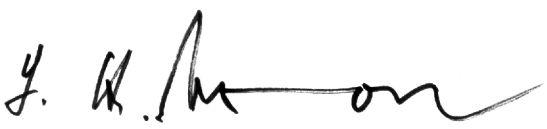
TAIWHA acquired Sang Myung Electric Co., Ltd. of Korea in Jan, 2005, which has experience in the field of electrical work, and recently TAIWHA also acquired Hong Sung Housing Co., Ltd. of Korea in Jun, 2010.

We are very proud that TAIWHA has successfully developed itself into a company that offers a full range of engineering and construction for infrastructure, environmental, and power plant projects since its inception as a materials leasing company.

TAIWHA is committed to the improvement of the environment and the overall living standards of our global community. We will continue to participate in, and support environmentally safe and efficient projects to this end.

I would like to thank all those who worked together and supported TAIWHA in reaching its accomplishments thus far. I consider 2011 to be the year that will witness the commencement of a "New Era" for TAIWHA and look forward to your continued support.

Sincerely.



YOUNG HAK MOON
President.

COMPANY HISTORY

JAN. 1989	TAIWHA LEASE INDUSTRIAL CO., LTD. IS INCORPORATED
DEC. 1992	OPENED PLANT FOR MAINTENANCE & FABRICATION OF STEEL COMPONENTS IN SIWHA, GYEONGGI-DO(TOTAL SPACE : 17,000m^2)
MAY. 1995	ACQUIRED CERTIFICATE OF NEW TECHNOLOGY FOR T.S.P.D. (TIP SEPARATED PILE DRIVING) FROM THE MINISTRY OF CONSTRUCTION
JAN. 1997	ENTERED INTO LICENSE AGREEMENT WITH HARENINVEST CO., LTD. OF BELGIUM FOR PILING TECHNOLOGY (Ω-PILE)
OCT. 1998	ACQUIRED "I.S.O. 9002" CERTIFICATION
JUN. 2000	ENTERED INTO LICENSE AGREEMENT WITH NITTOCO CO., LTD. OF JAPAN FOR CLEAN-JET GROUTING TECHNOLOGY
FEB. 2003	FORMED TAIWHA-INGÉROP, A JOINT VENTURE COMPANY WITH INGÉROP, A FRENCH FIRM THE JV COMPANY LATER, DEVELOPED INTO A THREE-PARTY JOINT VENTURE COMPANY (TIS, OR TAIWHA-INGÉROP & SEC) JOINED BY A JAPANESE COMPANY
MAR. 2003	ACQUIRED "I.S.O. 9001" CERTIFICATION
SEP. 2004	OPENED A NEW MAINTENANCE & FABRICATION PLANT FOR STEEL COMPONENTS IN PYEONGTAEK, GYEONGGI-DO. (TOTAL SPACE: 70,000M^2)
DEC. 2004	AWARDED A RESEARCH CONTRACT FROM THE MINISTRY OF ENVIRONMENT FOR "HIGH EFFICIENCY, COMPACT SEWAGE TREATMENT TECHNOLOGY"
JAN. 2005	ACQUIRED SANG MYUNG ELECTRIC CO., LTD.
MAR. 2006	STARTED OPERATION OF SPID PROCESS AND SMART SYSTEM JANGDANG SEWAGE TREATMENT PLANT IN PYEONGTAEK
JUN. 2010	ACQUIRED HONGSUNG HOUSING CO., LTD.
OCT. 2010	EXTENSION OF PERIOD OF NEW EXCELLENT TECHNOLOGY (3YEARS) ACQUIRED PATENT CERTIFICATES IN CHINA AND THE U.S.A.

Young Hak Moon, President of Taiwha, is awarded the Presidential Medal for Outstanding Contribution in the Field of Civil Engineering on March 31st 2001 by the President of the Republic of Korea.

Young Hak Moon, President of Taiwha at the welcoming reception at the Blue House(Presidential Office) with President Lee Myung Bak, The Heir Apparent HH Sheikh Tamim bin Hamad Al Thani, H.E. Abdullah bin Hamad Al-Attiyah, Deputy Prime Minister and Minister of Energy and Industry of Qatar, and First Vice Minister Kwon Jong Rak, Ministry of Foreign Affairs and Trade of Korea along with other Korean business professionals.

Young Hak Moon attends opening remarks at an award ceremony for Khalid A. Al-Falih, Saudi Aramco President & Chief Executive Officer, who received an Honorary Doctorate from KAIST in Daejon, Korea. May 17, 2011.

Young Hak Moon greets The Heir Apparent HH Sheikh Tamim at the Blue House along with other Korean business professionals before lunch with Korean President Lee Myung Bak. May 25, 2009.

Young Hak Moon, briefing The Heir Apparent HH Sheikh Tamim bin Hamad Al Thani.

.. ويستقبل رجال الأعمال الكوريين

QNA. سول

استقبل سمو الشيخ تميم بن حمد آل ثاني ولي العهد في مقر إقامة سموه بفندق لوتي بالعاصمة الكورية بعد ظهر أمس كلا من السيد كيم جوونغ كيوم رئيس شركة هيونداي للهندسة والإنشاءات والسيد هوه شانغ سوو رئيس مجموعة شركات جي أس والسيد موون يونغ هاك رئيس شركة تيواه الصناعية والسيد دونغ بن شين نائب الرئيس التنفيذ لمجموعة لوتيه، وذلك بمناسبة زيارة سموه الحالية لجمهورية كوريا. تم خلال المقابلات بحث أوجه التعاون بين دولة قطر وكل من هذه الشركات. حضر المقابلات أصحاب السعادة أعضاء الوفد الرسمي المرافق لسمو ولي العهد.

The Qatari Crown Prince HH Sheikh Tamim bin Hamad Al Thani met with Korean business leaders individually at the Lotte Hotel, where he stayed during his official visit, yesterday afternoon. Attending business leaders were Joong Kyum Kim, president of Hyundai E&C, Chang Soo Huh, chairman of GS Group, Young Hak Moon, president of Taiwha Lease Industrial Co. and Dong Bin Shin, vice-chairman of Lotte Group. This meeting was arranged in time for the official visit of the Crown Prince from the State of Qatar, where all attendees shared and discussed cooperative plans for Qatari and Korean business organizations. Qatari officials, visiting Korea along with The Crown Prince, were also present at the meeting.

Dr. Gee, Chai-Sung explaining the SMART^3 system (wastewater purifying technology) to the Public Work Authorities in Doha, Qatar. March 26, 2009.

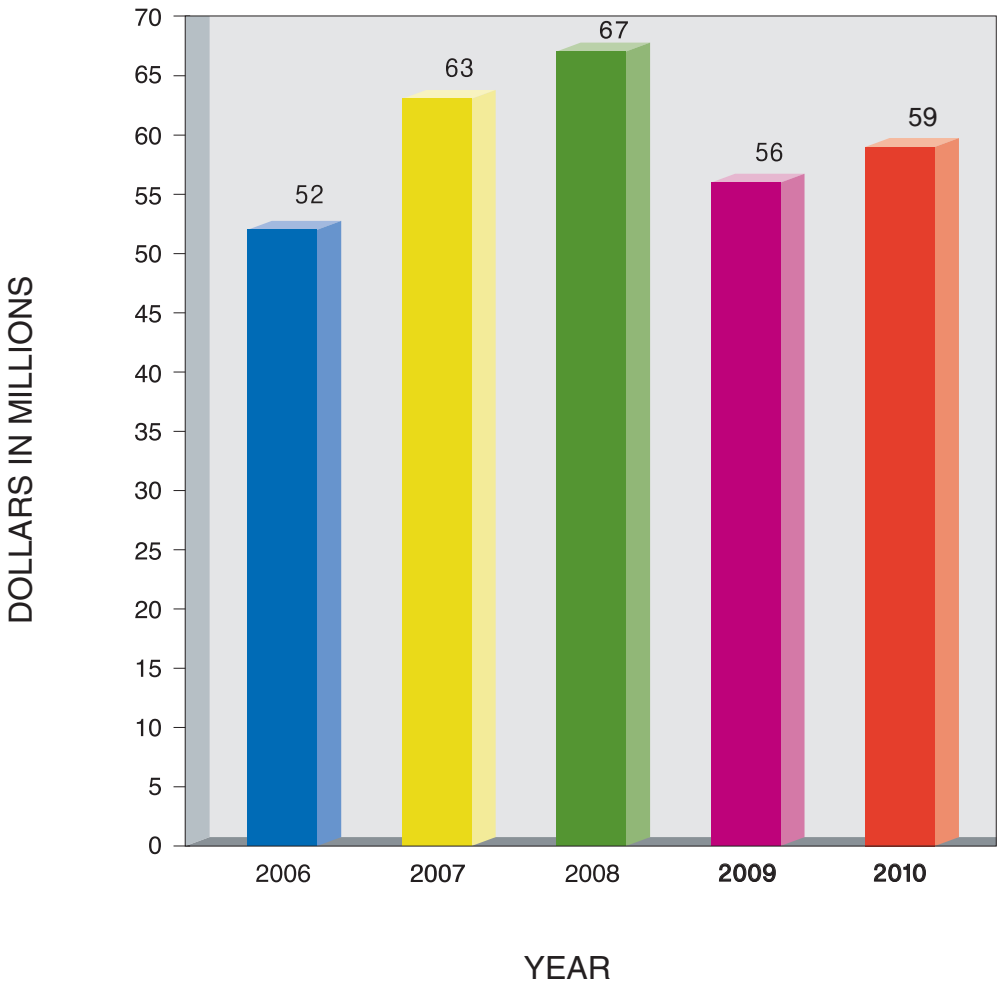
Dr. Gee, Chai-Sung explaining the SMART^3 system (wastewater purifying technology) to the Public Work Authorities in Doha, Qatar. March 29, 2011.

FINANCIAL STATUS

1) Paid-In Capital : U.S. $ 9.5million

2) Turnover, 2010 : U.S. $ 59million

ANNUAL TURNOVER, 2006-2010



CAPABILITIES

A. HOUSING

B. SEMI - SHIELD

C. TEMPORARY STEEL BRIDGE

D. EARTHWORK, STRUCTURAL & SHEET PILING WORK

E. ENVIRONMENTAL WORK(SMART^3)

ⓐ Retrofitting, Upgrading of Existing Sewage Treatment Plant

ⓑ Engineering and Construction of New S.T.P. Project

F. LEASING

ⓐ Sheet Pile & Prefabricated H-Beam

ⓑ Temporary Steel Bridge

MAJOR WORK EXPERIENCE

A. HOUSING

LOCATION	NAME OF PROJECT	CLIENT	REMARK
KOREA (Camp Hialeah)	DAJB 03-93-C-0181 Camp Hialeah	*K.C.A	U.S $169,000
KOREA (Tango Site)	DAJB 03-94-C-0162 Repair Flood Channel, Tango Site	K.C.A	U.S $162,000
KOREA (Camp Hialeah)	DAJB 03-94-C-0254 Replace Concrete Dikes for A/G Fuel Tanks Camp Hialeah	K.C.A	U.S $181,000
KOREA (Camp LaGuardia)	FY-87 MCA, PN-1166 Airfield Fire&Rescue Station and PN-1177, UOPH&UEPH(DACA&81-87-C-0067)	*F.E.D	U.S $157,000
KOREA (Camp Page)	FY-88MCA, PN-1201 Unaccompanied Personnal Housing Camp Page, Korea (DACA 81-89-C-0005)	F.E.D	U.S $1,959,000
KOREA (Camp Page)	FY-88 OMA, Replace Existing Over -head Doors With New Roll Korea (DACA 81-89-C-0039)	F.E.D	U.S $460,000
KOREA (Camp Casey)	FY-91 OMA, Upgrade Building No. S-456 for BSC, Camp Casey, Korea (DACA 81-91-C-0024)	F.E.D	U.S $394,000
KOREA	Sanbon Hospital Project	Sanbon Hospital	U.S $7,140,000
KOREA	Sinsung/Baikchon Multi-Housing Project	Sinsung Baikchon Development Association	U.S $6,445,000
KOREA	Sindorico Office Building Project	Sindorico Co., Ltd.	U.S $2,508,000
KOREA	PoongYunMoolsan Office Building Project	PoongYun Moolsan Co., Ltd.	U.S $3,280,000
KOREA	Misung Multi-Building Project	Yim, Woo Sun	U.S $5,127,000
KOREA	Wolgye-Jangwol Road Expansion Project	Nowongu Office	U.S $2,076,000
KOREA	Welcome Office Building Project	Well Comunication Co., Ltd.	U.S $2,981,000
KOREA	Sindaebangdong Devel. APT. Project	Sindaebangdong Housing Association	U.S $4,527,000
KOREA	Culture Space Building Project	Culture Space Co., Ltd.	U.S $3,184,000

*K.C.A : U.S Army Korea Contracting Agency
*F.E.D : U.S Army Corps of engineering Far East District

MAJOR WORK EXPERIENCE

B. SEMI-SHIELD

ⓐ Local Projects.

LOCATION	NAME OF PROJECT	PERIOD	CLIENT	REMARK
KOREA	Kimpo City Sewage Treatment Build Transfer Lease Project	2011. 01. ~	POSCO E&C	U.S $15,737,000
KOREA	Pohang City Sewage Treatment Build Transfer Lease Project	2010. 11. ~	SK E&C	U.S $607,000
KOREA	Young ju~Sang ju Main Pipe Construction	2010. 12 ~ 2011. 01	HYUN DAI E&C	U.S $182,000
KOREA	Songdo International City Yonghyeon~Hagik Heat Transportation Construction	2010. 01 ~ 2010. 02	DONG BU E&C	U.S $521,000
KOREA	Nambu~Bucheon Road Construction	2009. 12 ~ 2009. 12	HYUN DAI Develop.	U.S $519,000
KOREA	Pohang City Sewage Treatment Build Transfer Lease Project	2009. 10 ~ 2009. 12	POSCO E&C	U.S $204,000
KOREA	Masan City Sewage Pipe repair work	2008. 11 ~ 2008. 12	GS E&C	U.S $113,000
KOREA	Chung ju Dam above Sewage Treatment Plants Design & Construction	2008. 03 ~ 2008. 04	DAE WOO E&C	U.S $387,000
KOREA	Namyang ju~Gun ja Main Pipe Construction	2008. 01 ~ 2008. 04	HYUN DAI E&C	U.S $774,000

ⓑ Overseas Projects.

LOCATION	NAME OF PROJECT	PERIOD	CLIENT	REMARK
JAPAN	Ooba nakago Sewers Construction (1-area)	2003. 03 ~ 2003. 06	Take Naka Civil E&C	U.S $234,000
JAPAN	Sakuramoto Sewers Construction	2002. 12 ~ 2003. 03	Nito diato E&C	U.S $1,763,000
JAPAN	Taitogu taito 3 Johnchome area Construction	2002. 01 ~ 2002. 04	Ookinete E&C	U.S $883,000
JAPAN	Kytasirakawha rain water Public Sewers Construction	2001. 08 ~ 2001. 11	Fuji E&C	U.S $842,000
JAPAN	City Planning Sewers Construction	2000. 09 ~ 2000. 12	Nissin E&C	U.S $911,000
JAPAN	Sinmachi Ojack Sewers Construction	1999. 09 ~ 2000. 01	Hannas E&C	U.S $759,000
JAPAN	Public Sewers Construction	1997. 12 ~ 1998. 03	Ma-eda E&C	U.S $981,000

C. TEMPORARY STEEL BRIDGE

LOCATION	NAME OF PROJECT	PERIOD	CLIENT	REMARK
KOREA	Expressway No. 10 Jinjoo-Masan Extension Works (Section 4)	2008.12. ~ 2008.12.	LH Corporation	U.S $1,180,000
KOREA	Temporary Bridge Works for Taeku Kangchang Bridge Extension Project	2008. 08. ~ 2008.11.	LH Corporation	U.S $1,102,000
KOREA	Temporary Bridge Works for Iksan – Sinri Dual Track Works of Cholla Railway	2008. 07. ~ 2010.12.	Cholla Railway Co., Ltd.	U.S $630,000
KOREA	PanKyo I/C Temporary Bridge	2008. 05. ~ 2010. 05.	Korea Expressway Corporation	U.S $790,000
KOREA	Temporary Bridge Works for Choongro No. 1 – 19 Temporary Road Project	2008. 03. ~ 2008. 07.	Yongin Dongchun District Development Office	U.S $299,000
KOREA	Temporary Bridge Works for 346 Regional Road Project to Daegok-dong	2007. 06. ~ 2007.12.	Incheon City	U.S $1,023,000
KOREA	Temporary Bridge Works	2007. 04. ~ 2008. 05.	LH Corporation +SSangyong Construction	U.S $883,000
KOREA	Temporary Bridge Works for Sungnam Pankyo District No. 57 Bypass Project	2006.12. ~ 2007. 03.	LH Corporation	U.S $905,000
KOREA	Underground Road Works for Sungnam Pankyo District Branch Road No. 23	2006. 05. ~ 2008. 02.	LH Corporation	U.S $150,000
KOREA	Eunpa Suspension Bridge Work (A Permanent Sidewalk Bridge)	2005.11. ~ 2006. 03.	Gunsan City	U.S $2,147,000
KOREA	Moksang Temporary Bridge for Gulpo Channel step2	2005.11. ~ 2006. 06.	Korea Water Resources Corporation	U.S $1,331,000
KOREA	Temporary Bridge Installation Works for Bulgokchun Bridge Improvement Project	2005. 04. ~ 2005. 06.	Korea Expressway Corporation	U.S $1,115,000
KOREA	Temporary Railway Bridge for Kyungwon Railway New Road Bed Project, Section 1.	2005. 04. ~ 2005. 05.	Korea Railway Corporation	U.S $173,000

MAJOR WORK EXPERIENCE

D. EARTH WORK, STRUCTURAL & SHEET PILING

ⓐ Local Projects.

LOCATION	NAME OF PROJECT	PERIOD	CLIENT	REMARK
KOREA	Earthwork and Re-bar concrete work for construction of underwater concrete columns at Danyang	2011. 04 ~ 2012. 04	Sam Bu const.	U.S $12.7 Million
KOREA	Temporary facilities and structural work for the main bridge of Youngdo Large Bridge for the 2nd Lotte World	2011. 03 ~ 2013. 10	Lotte E&C	U.S $14.7 Million
KOREA	Relocation of Pipeline at Yang-Jae in Seoul	2010. 12 ~ 2012. 10	Lotte E&C	U.S $ 4.7 Million
KOREA	Dong-bu Main Road section No.2	2009. 10 ~ 2012. 12	Halla E&C	U.S $26.3 Million
KOREA	Earthwork, apartment & stores in Songdo, Incheon	2008. 05 ~ 2009. 10	Hyun Dai E&C	U.S $13.9 Million
KOREA	Hwamyeong Bridge Production and installation of cable stayed bridge(under construction)	2008. 04 ~ 2010. 10	Hyun Dai E&C	U.S $ 5.5 Million
KOREA	Masan sewage line earthwork and structural work	2007. 09 ~ 2008. 06	GS E&C	U.S $ 3.5 Million
KOREA	Civil work for the #EXPO APT. of Songdo, Incheon	2007. 07 ~ 2008. 06	Posco E&C	U.S $ 5.6 Million
KOREA	2ND Incheon Grand Bridge Link Road project(section 4)	2006. 03 ~ 2009. 03	SK E&C	U.S $ 9.6 Million
KOREA	Myangji Grand Bridge project in Busan city	2005. 11 ~ 2008. 12	Lotte E&C	U.S $19.6 Million
KOREA	Kwang Yang industrial water supply system	2005. 09 ~ 2007. 12	Doo San C&E	U.S $15.1 Million
KOREA	Busan-GeoJe Fixed Link Road Project Dry Dock work for submerged tunnel concrete Box	2005. 04 ~ 2006. 10	Dae Woo E&C	U.S $ 9.3 Million
KOREA	Incheon International Airport Facility Project	2004. 11 ~ 2007. 06	Han Jin I&C	U.S $ 8.3 Million
KOREA	Civil Work for Puchon Housing Complex	2004. 07 ~ 2005. 04	Doo San C&E	U.S $ 7.7 Million
KOREA	KwangYang LNG Power Plant	2004. 02 ~ 2005. 06	Dae Lim Indus	U.S $ 7.3 Million
KOREA	Site preparation & Civil Work for Sungsoo Industrial	2003. 06 ~ 2005. 03	Sam Sung corp.	U.S $ 2.6 Million
KOREA	Site Preparation for Busan Railway Station	2002. 02 ~ 2004. 05	Dae Lim Indus	U.S $ 6.0 Million
KOREA	Kuro Industrial Complex	1993. 07 ~ 1996. 09	Dae Lim Indus	U.S $ 4.2 Million
NORTH KOREA	KEDO Power Plant Project	2000. 02 ~ 2002. 02	Hyun Dai E&C	U.S $ 1.8 Million

ⓑ Overseas Projects.

LOCATION	NAME OF PROJECT	PERIOD	CLIENT	REMARK
QATAR	QAFCO-5 at utility sump pit and Ammonia Storage Area	2010. 03 ~ 2010. 05	• Qatar fertilization Company Ltd. • Hyun Dai E&C	(U.S $ 377,928) Steel Sheet Pile work
QATAR	Nakilat Ship Repair Yard Project	2010. 01 ~ 2010. 07	• Qatar Gas Transport Company Ltd.(Nakilat) • Dae Woo E&C	(U.S $ 429,515) Water Retaining Steel Sheet Pile work
QATAR	Construction of Marine works for Nakilat Ship Repair Yard Port of Ras Laffan	2008. 01 ~ 2008. 05	• Qatar Gas Transport Company Ltd. • Dae Woo E&C	(U.S $ 5,400,000) Steel Sheet Pile work of Drydock
QATAR	Q-Chem II Ethylene Derivatives Project at Mesaieed Industrial City	2007. 12 ~ 2009. 03	• Qatar Chemical Company Ltd. • Dae Woo E&C	(U.S $ 5,600,000) Electric Facility works of Ethylene Derivatives Project
OMAN	Duqm Ship Repair Yard and Dry Dock PJ	2008. 05 ~ 2010. 11	• Ministry of Transport and Communication • Dae Woo E&C	(U.S $ 4,000,000) Steel Sheet Pile & PHC Pile work
U.A.E	Khalifa Port & Industrial Zone Project	2009. 07 ~ 2009.08	• Abu Dhabi Ports Co. Hyun Dai E&C	(U.S $ 536,000) Steel Sheet Pile work of Marine
IRAQ	Electric Work at ZAYTUN Division in ARBIL.	2004. 07 ~ 2004. 11	• KOREAN Army Finance Accounting Corps	(U.S $ 2,300,000) 500 kw generator 13 set. automatic synchronizing and paralleling system
IRAQ	400KV Transmission Line Restoration from BAJI. to BAGHDAD West Substation	2003. 10 ~ 2004. 03	• Washington Group International (American Firm)	(U.S $ 6,500,000) Foundation, steel tower erection stringing work
KUWAIT	KOCRP Project	2003. 02 ~ 2004. 05	• SK E&C	(U.S $ 950,000) Electric work of L.N.G plant
MEXICO	MADERO Project	2001. 08 ~ 2002. 09	• SK Engineering Construction Co., Ltd.	(U.S $ 2,650,000) Electric work of Oil plant
PHILIPP -INES	LLI-JAN cut-in-point 500kv ehv Transmission Line	2000. 04 ~ 2001. 12	• Sumitomo Electric Ind., Ltd. (Japanese Firm)	(U.S $ 9,300,000) Foundation, Steel tower erection stringing work

MAJOR WORK EXPERIENCE

E. ENVIRONMENTAL WORK

ⓐ Local Projects.

LOCATION	NAME OF PROJECT	PERIOD	CLIENT	REMARK
KOREA	PaengSung Sewage Treatment Plant	(2012)	PyeongTaek	14,200* ㎥/d
KOREA	JangDang Sewage Treatment Plant	2006	PyeongTaek	45,000㎥/d

ⓑ Overseas Projects.

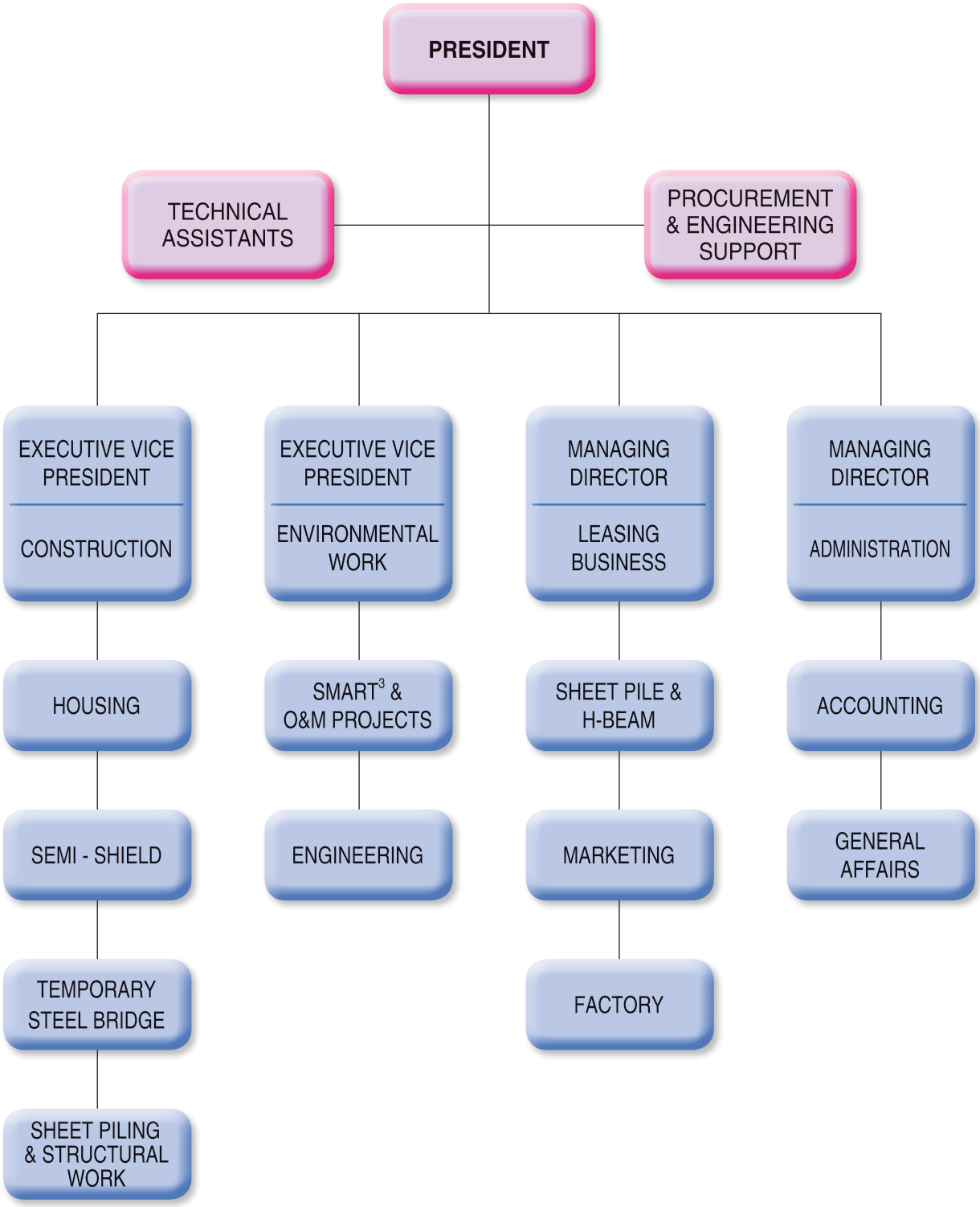
LOCATION	NAME OF PROJECT	PERIOD	CLIENT	REMARK
DENMARK	Renseanlæg Luntofte WWTP	2004	Lyngby-Taarbæk	24,000㎥/d
DENMARK	Skagen WWTP	2000	Skagen	25,000㎥/d
SWEDEN	Borås Reningsverk Gässlösa WWTP	2000	Borås kommun	78,000㎥/d
DENMARK	Lynetten WWTP	1997	Copenhagen	170,000㎥/d
DENMARK	Damhusaen WWTP	1997	Copenhagen	100,000㎥/d
DENMARK	Spildevandscenter Avedøre I/S WWTP	1996	Copenhagen	70,000㎥/d
DENMARK	Aalborg East WWTP	1995	Aalborg	48,000㎥/d
DENMARK	Alborg West WWTP	1992	Alborg	65,000㎥/d
DENMARK	Marselisborg WWTP	-	Århus	49,500㎥/d
DENMARK	Kolding Central WWTP	-	Kolding	28,620㎥/d
DENMARK	Herning WWTP	-	Herning	33,700㎥/d
DENMARK	Slagelse WWTP	-	Slagelse	15,713㎥/d

*m^3/d : m^3/day

F. LEASING

Location	Name of Project	Period	Client	Q'ty(MT)
KOREA	Pohangjechol PGL(Pickling & Galvanizing Line) construction	2010. 07. - 2011. 06.	Posco E&C	1,293
KOREA	Gyeongin Canal construction project	2010. 04. - 2011. 01.	Hyun Dai E&C	698
KOREA	Paengseong public sewage treatment facilities	2010. 01. - 2011. 10.	Halla INDUS.	2,227
KOREA	Nakdong River Restoration Work, Lot 33	2009. 12. - 2011. 12.	Hyun Dai E&C	2,670
KOREA	Nakdong River Restoration Work, Lot 30	2009. 12. - 2011. 12.	Posco E&C	6,172
KOREA	Han River Restoration Work, Lot 3	2009. 11. - 2011. 11.	Dae Lim Indus.	3,476
KOREA	Water Retaining Wall Work for Gyeongin Canal, Lot 2	2009. 08. - 2011. 06.	Sam Sung C&T	7,500
KOREA	Water Retaining Wall Work for Enlargement of Cheongpyeong hydroelectric power plants	2009. 05. - 2011. 09.	Sam Bu Const.	3,474
KOREA	New Construction for Steel Plate Factory at Gwangyang Steel Mill (4-step)	2008. 07. - 2009. 01.	Posco E&C	6,016
KOREA	Gunsan Ship Repair Yard and Dock Project	2008. 06. - 2009. 06.	Hyun Dai E&C	13,626
KOREA	International Service Area Central Park Parking Lot in Songdo	2007. 06. - 2008. 06.	Posco E&C	1,438
KOREA	Water Retaining Wall Work for Songdo Beach Expansion Road	2007. 05. - 2009. 02.	Dae Won C&I	4,506
KOREA	Work for the Housing Compound at Gwangmyeong, etc	2006. 09. - 2007. 07.	Lotte E&C	1,819
KOREA	Sheet Piling for Buldang Sewage Water Treatment Plant, Ansung	2006. 08. - 2007. 01.	Ssang Yong E&C	3,886
KOREA	Work for Around the Back Railway at New-port, Busan, etc	2005. 11. - 2007. 10.	Sam Sung Corp.	2,319
KOREA	Singori Nuclear Power Plant 1st, 2nd	2005. 10. - 2009. 01.	Hyun Dai E&C	5,994

ORGANIZATION CHART



KEY PERSONNEL

YOUNG HAK MOON

C.E.O Vice Chairman

Taiwha Lease Industrial Co., Ltd.

15th Fl, Jeongdong Bldg. #15-5, Jeong-dong, Jung-gu,
Seoul 100-784, Korea
Tel: 82-2-774-0522, Fax: 82-2-774-5509
E-mail: yhmoon@taiwha.co.kr

EDUCATION

B.S. CIVIL ENGINEERING, COLLEGE OF ENGINEERING,
SEOUL NATIONAL UNIVERSITY, 1970

COMPLETED CONSTRUCTION MANAGEMENT COURSE
UNIVERSITY OF CALIFORNIA, LOS ANGELES, U.S.A.
(SEPT. 1977 - FEB. 1978)

COMPLETED BUSINESS ADMINISTRATION COURSE
WOODBURY UNIVERSITY, LOS ANGELES, U.S.A.
(MARCH 1978 - MAY 1978)

PROFESSIONAL EXPERIENCE

JAN. 1989 ~ PRESENT	:	PRESIDENT, TAIWHA LEASE INDUSTRIAL CO., LTD.
JUN. 2010	:	ACQUIRED HONGSUNG HOUSING CO., LTD.
JAN. 2005	:	ACQUIRED & MERGED, SANG MYUNG ELECTRIC CO., LTD.
SEP. 2004 ~ PRESENT	:	PRESIDENT, TAIWHA, INGÉROP & SEC (TIS), A THREE-PARTY JOINT VENTURE COMPANY WITH FRENCH & JAPANESE FIRMS
JUL. 1978 ~ DEC. 1988	:	GENERAL MANAGER, GENERAL AGENCIES OF CORPORATION, JEDDAH, SAUDI ARABIA

KEY PERSONNEL

1. Manager
Projects Department at the Head Office, Jeddah, Saudi Arabia

2. Project Manager
PIC A-1025 Project for the Royal Commission for Jubail & Yanbu, Saudi Arabia (A project engineered and supervised by PARSONS of U.S.A.) (Contract Amount: Saudi Riyal 288 million or about US $80 million)

3. Project Manager
Jeddah Beautification Project including Three Lagoon Bridges (Contract Amount: Saudi Riyal 500 million or about US $139 million), Saudi Arabia

4. Project Manager
Al Jubail Airport Project for the Royal Commission for Jubail & Yanbu, Jubail, Saudi Arabia (A project engineered and supervised by BECHTEL of U.S.A.) (Contract Amount: Saudi Riyal 67million or about US $19 million)

JAN 1974 ~ JUN 1977 : SAMWHAN ENTERPRISE CO., LTD. SAUDI ARABIA.

1. Project Engineer
Beautification and Improvement Project for City of Jeddah, Jeddah, Saudi Arabia

2. Project Engineer
Al Ula-Khaybar Highway Project, Khaybar, Saudi Arabia

JAN 1970 ~ DEC 1973 : SAMWHAN ENTERPRISE CO., LTD. SEOUL, KOREA

1. Civil Engineer
Keum-Gang River Irrigation Project, Korea

2. Civil Engineer
Feasibility Study for Manila Expressway Project, Philippines

3. Civil Engineer
Union Oil Company, Base Camp Project, Indonesia

4. Civil Engineer
Seoul-ChonJu Expressway Project, Korea

AWARD

PRESIDENTIAL MEDAL FOR OUTSTANDING CONTRIBUTION IN THE FIELD OF CIVIL ENGINEERING, AWARDED BY THE PRESIDENT OF THE REPUBLIC OF KOREA, 31. MAR. 2001

LICENCE

CERTIFIED FIRST CLASS GEO-SURVEYOR, MINISTRY OF CONSTRUCTION, KOREA(NOV. 1969)

ACTIVITIES

1998 ~ PRESENT : PROFESSOR OF CIVIL ENGINEERING DEPARTMENT, SEOUL NATIONAL UNIVERSITY

Department of Civil, Urban and Geosystem Engineering SEOUL NATIONAL UNIVERSITY on a site visit to the MAPO Grand Bridge (07. JUN. 2002)

KEY PERSONNEL

JUNG HAN HWANG

Executive Vice President

PROFESSIONAL ENGINEER /
CIVIL ENGINEERING EXECUTION


국가기술자격증

등록번호 81120110001

성명 황 정 한

기술자격종목 및 등급

토목시공기술사

주민등록번호 470307-1042118

주소 서울 송파 구 시 군

방이동 코오롱아파트 105-1104

합격년월일 81년 06월 29일

등록년월일 81년 08월 12일

발행년월일 94년 09월 24일

한국산업인력관리공단 이 사 장

EDUCATION

B.S. CIVIL ENGINEERING,
COLLEGE OF ENGINEERING,
SEOUL NATIONAL UNIVERSITY, 1969

PROFESSIONAL EXPERIENCE

FEB. 2002 ~ PRESENT : EXECUTIVE VICE PRESIDENT,
TAIWHA LEASE INDUSTRIAL CO., LTD.

JAN. 1972 ~ DEC. 2001 : HYUNDAI CONSTRUCTION CO., LTD.

1997 ~ 2001	Director, Incheon International Airport Railroad (SOC) Project
1994 ~ 1997	Manager, Seoul Subway 6-12Site Project
1993 ~ 1994	Manager, Singapore Brani Harbor Project
1991 ~ 1992	Design Manager, Oil Facilities, Majan, Saudi Arabia

HYUN KYUNG SHIN

Special Advisor

EDUCATION

B.S ELECTRICAL ENGINEERING COLLEGE OF HONGIK UNIVERSITY 1969.

COMPLETED BUSINESS ADMINISTRATION COURSE KOREA UNIVERSITY 1992.

PROFESSIONAL EXPERIENCE

JUN. 2010 -	:	Special Advisor Taiwha Lease Industrial Co., Ltd
MAY. 1988 - MAY. 2010	:	President Hongsung Construction Co., Ltd
FEB. 1984 - APR. 1988	:	Executive Director in charge of FED Team & Business Team Samwhan Coporation
AUG. 1980 - JAN. 1984	:	Project Director Military Survey Department Project in Saudi Arabia Samsung Construction Co., Ltd
FEB. 1975 - JULY. 1980	:	Assistant Project Manager Financial Information Center Project in Saudi Arabia SANG Maintenance Facilities Project (C.O.E) in S/A SANG Training Facilities Project (C.O.E) in S/A Samwhan Coporation
FEB. 1970 - APR. 1975	:	Project Engineer Unaccompanied Enlisted Personal Housing (UEPH) Project in Osan Airbase (F.E.D), Korea Unaccompanied Enlisted Personal Housing (UEPH) Project in Camp Ames, DaeChon (F.E.D), Korea Samwhan Coporation
JULY. 1968 - APR. 1970	:	Senior Engineer Phantom Aircraft Hanger & Taxiway Project in KunSan Airbase (F.E.D), Korea Samwhan Corporation

KEY PERSONNEL

TAE HOO PARK
Advisor

PROFESSIONAL ENGINEER /
CIVIL ENGINEERING STRUCTURE


국가기술자격증

등록번호 80118000648

성명 박 태 후

기술자격종목 및 등급

토목구조기술사

주민등록번호 460725-1074316

주소 서울 강남 구시군

신사동85-1 미성아파트26-402

합격년월일 80년 07월26 일

등록년월일 80년 07월29 일

발행년월일 92년 04월10 일

한국산업인력관리공단 이 사 장

EDUCATION

B.S. CIVIL ENGINEERING,
COLLEGE OF ENGINEERING,
YONSEI UNIVERSITY, 1972

PROFESSIONAL EXPERIENCE

JAN. 1999 ~ PRESENT	:	TAIWHA LEASE INDUSTRIAL CO., LTD.
APR. 1984 ~ DEC. 1998	:	DONG-A GEOLOGICAL ENGINEERING CO., LTD.
MAY. 1977 ~ MAR. 1984	:	DAE LIM ENGINEERING CO., LTD.
NOV. 1975 ~ APR. 1977	:	KOREA ENGINEERING CO., LTD.
MAR. 1972 ~ SEP. 1975	:	CONSTRUCTION OFFICE OF SEOUL SUBWAY

MANPOWER OF COMPANY

Description	Nos
President	1
Vice President	3
Administration	10
Civil Engineer	15
Electrical Engineer	5
Mechanical Engineer	5
Structural Engineer	5
Foremen	10
Technicians	24
Mechanics	10
Miscellaneous	10
Total	98

HOUSING PROJECTS

Welcome City Building, Seoul, Korea

Distribution Supporting Facilities,
Gangwon-do, Korea

Daeya Elementary School, Gyeonggi-do,
Korea

Company Building SINDORICO Co., Ltd.
Seoul, Korea

Daehyon Logistics Center, Seoul, Korea

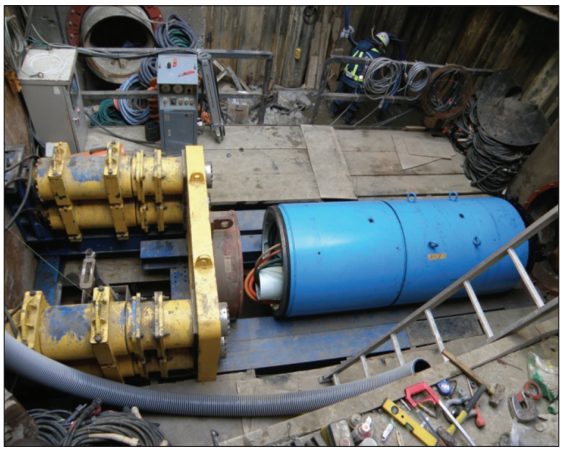
Uiwang Highway Service Area, Gyeonggi-do,
Korea

SEMI - SHIELD

Youngju ~ Sangju Main Pipe Construction
Hyun Dai E&C

Shield Tunneling Body

Shield Tunneling Body Setting



Shield Tunneling Body Setting

Filter-Press

SEMI - SHIELD

MACHINES

PRESSTON-BODY SH720 (ø250mm~ø500m)

IRON-MOLE BODY TP95S-1(ø500mm~ø600mm)

UNCLE-MOLE TCS BODY(ø600mm)

LIST OF EQUIPMENT

MACHINERY NAME	Q' TY	REMARK
PRESSTON-BODY SH720	2	EARTH
IRON-MOLE BODY TP95S-1	1	EARTH
UNCLE-MOLE TCC BODY(ø250mm)	1	EARTH
UNCLE-MOLE TCC BODY(ø350mm)	1	EARTH
UNCLE-MOLE TCC BODY(ø400mm)	1	EARTH
UNCLE-MOLE TCC BODY(ø450mm)	1	EARTH
UNCLE-MOLE TCC BODY(ø500mm)	1	EARTH
UNCLE-MOLE TCC BODY(ø600mm)	1	EARTH
UNCLE-MOLE TCS BODY(ø600mm)	1	ROCK
UNCLE-MOLE TCC BODY(ø700mm)	1	EARTH
UNCLE-MOLE TCC BODY(ø800mm)	1	EARTH
UNCLE-MOLE TCC BODY(ø900mm)	1	EARTH
UNCLE-MOLE TCC BODY(ø1000mm)	1	EARTH
Tele-Mole TM BODY(ø1200mm)	1	EARTH
Tele-Mole TM BODY(ø1350mm)	1	EARTH
Tele-Mole TM BODY(ø1500mm)	1	EARTH
KOMATSU SEMI SHIELD(ø900mm)	1	EARTH
KOMATSU SEMI SHIELD(ø1000mm~ø1200mm)	1	EARTH
KOMATSU SEMI SHIELD(ø1000mm)	1	ROCK
KOMATSU SEMI SHIELD(ø1200mm)	1	ROCK
HITACHI SEMI SHIELD BODY(ø1200mm)	1	EARTH
KOMATSU SEMI SHIELD(ø1500mm)	1	EARTH
KOMATSU SEMI SHIELD(ø1650mm)	1	EARTH
KOMATSU SEMI SHIELD(ø1800mm)	1	EARTH
KOMATSU SEMI SHIELD(ø2000mm)	1	EARTH
HITACHI SEMI SHIELD BODY(ø2200mm)	1	EARTH
DESAND-MAN(ø350~ø600)	3	
DESAND-MAN(ø700~ø1500)	4	
MASTER-R	1	
FILTER-PRESS M/C	1	

TEMPORARY STEEL BRIDGE

PanKyo I/C Temporary Bridge. Gyeongi-do, Korea

Moksang Temporary Bridge for Gulpo Channel Step2. Incheon, Korea

Underground Road Works for Sungnam Pankyo District Branch Road No. 23. Gyeongi-do, Korea

TEMPORARY STEEL BRIDGE

Temporary Bridge Works for Iksan – Sinri Dual Track Works of Cholla Railway.
Jeollabuk-do, Korea.

Eunpa Suspension Bridge Work(A Permanent Sidewalk Bridge)
Gunsan-si, Jeollabuk-do, Korea.

EARTHWORK, STRUCTURAL & SHEET PILING

TAIWHA OVERSEAS PROJECTS

Construction of Marine Works for Nakilat Ship Repair Yard Port of Ras Laffan, Qater
Qatar Gas Transport Company Ltd., Dae Woo E&C

Overall View of Water Jet Jetting

EARTHWORK, STRUCTURAL & SHEET PILING

TAIWHA OVERSEAS PROJECTS

Construction of Marine Works for Nakilat Ship Repair Yard Port of Ras Laffan, Qatar
Qatar Gas Transport Company Ltd., Dae Woo E&C

Construction of Marine Works for Nakilat Ship Repair Yard Port of Ras Laffan, Qatar
Qatar Gas Transport Company Ltd., Dae Woo E&C

Duqm Ship Repair Yard and Dry Dock project, OMAN
Ministry of Transport and Communication, Dea Woo E&C

Duqm Ship Repair Yard and Dry Dock project, OMAN
Ministry of Transport and Communication, Dea Woo E&C

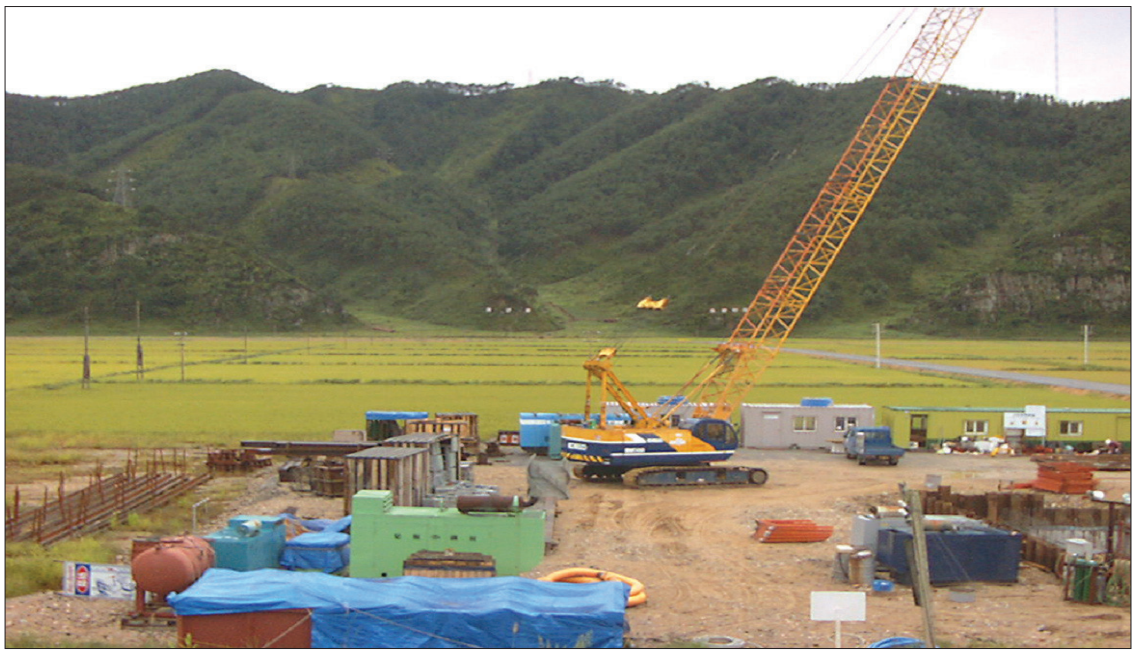
EARTHWORK, STRUCTURAL & SHEET PILING

TAIWHA OVERSEAS PROJECTS

Q-Chem Ⅱ Ethylene Derivatives Project at Mesaieed Industrial City, Qatar
Qatar Chemical Company Ltd., Dae Woo E&C

Q-Chem Ⅱ Ethylene Derivatives Project at Mesaieed Industrial City, Qatar
Qatar Chemical Company Ltd., Dae Woo E&C

NORTH KOREA PROJECT



North Korea
KEDO Power Plant Project
Hyun Dai E&C

North Korea
KEDO Power Plant Project Intake Pump Station Hyun Dai E&C

EARTHWORK, STRUCTURAL & SHEET PILING

KOREA PROJECT

Incheon International Airport IAT/BHS Project, Korea
Dae Woo E&C

Hyundai Heavy Industry #5Dock Extension project, Ulsan, Korea
Hyun Dai E&C

Myungji Grand Bridge, Busan, Korea
Lotte E&C

Myungji Grand Bridge, Busan, Korea
Lotte E&C

EARTHWORK, STRUCTURAL & SHEET PILING

KOREA PROJECT

2ND Incheon Grand Bridge Link Road, Korea
SK E&C

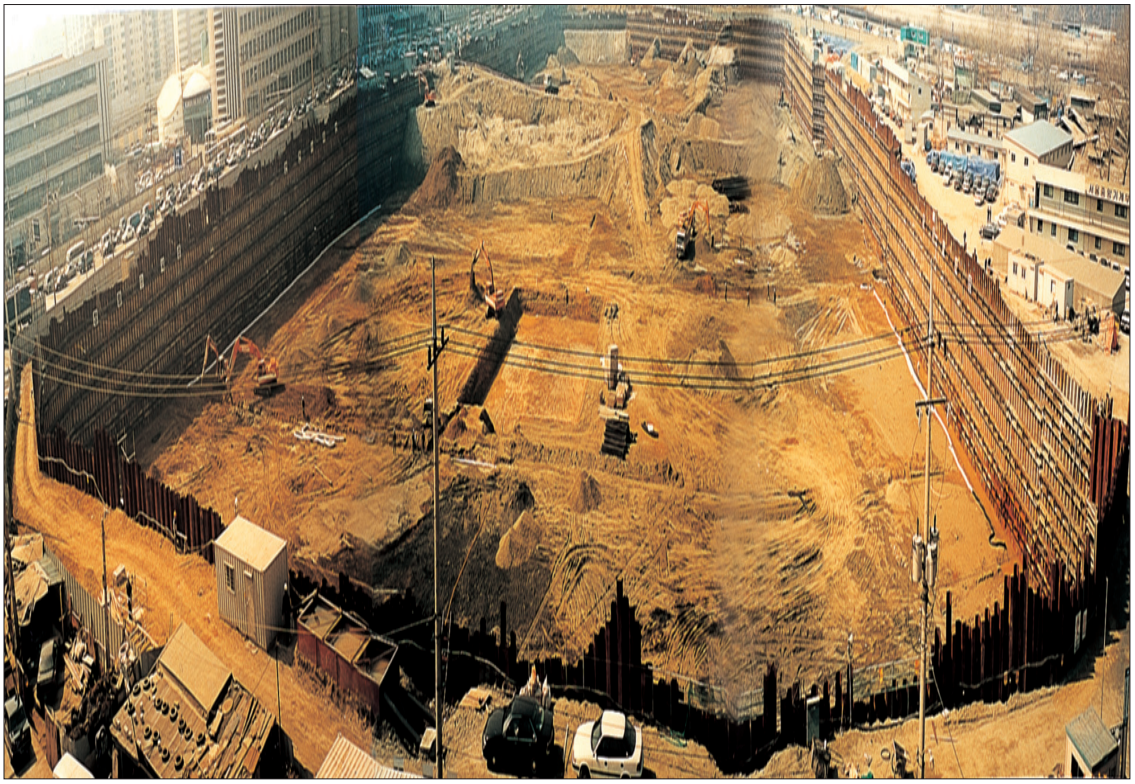
2ND Incheon Grand Bridge Link Road, Korea
SK E&C

Noksan Dewatering Pump Station, Korea
Tae Young E&C

Dangsan Railway Bridge Foundation, Seoul, Korea
Hyun Dai Heavy Indus.

EARTHWORK, STRUCTURAL & SHEET PILING

KOREA PROJECT



Kuro Industrial Complex, Seoul, Korea
Dae Lim Indus.

Incheon International Airport Facility Project, Korea
Han Jin I&C

Incheon International Airport railway earth retaining wall, Korea
Dae Woo E&C

Resource Collection Facility in Dongdaemun, Seoul, Korea
Seo Hee E&C

Sangam CES Building, Seoul, Korea
Sam Whan Corp.

ENVIRONMENTAL WORK

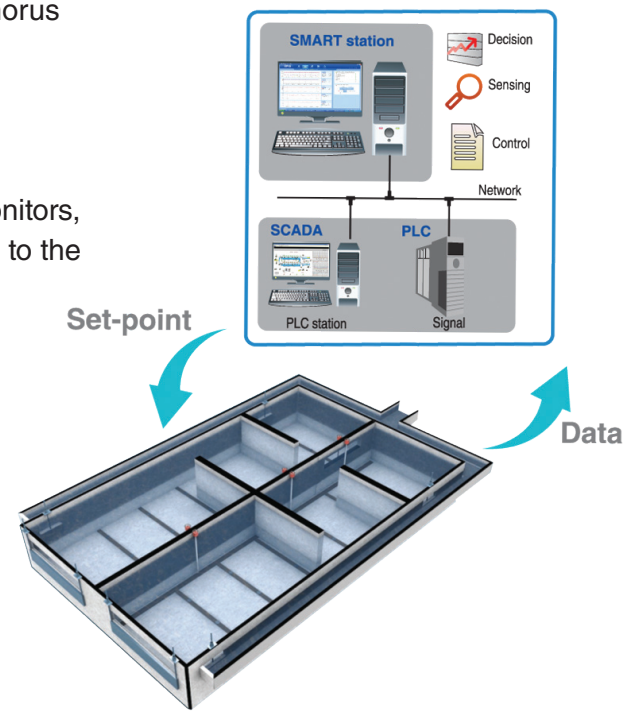
SMART^3 system

(**S**uperior **M**anagement **A**nd **R**esponsive **T**reatment **T**echnology of **T**aiwha)

SPID(**S**uperior **P**hased **I**solation **D**itch) **process**
Advanced treatment process which can biologically purify organic materials, nitrogen and phosphorus

SMART system
Real time automatic control system which monitors, diagnoses and controls bio-reactor according to the influent load

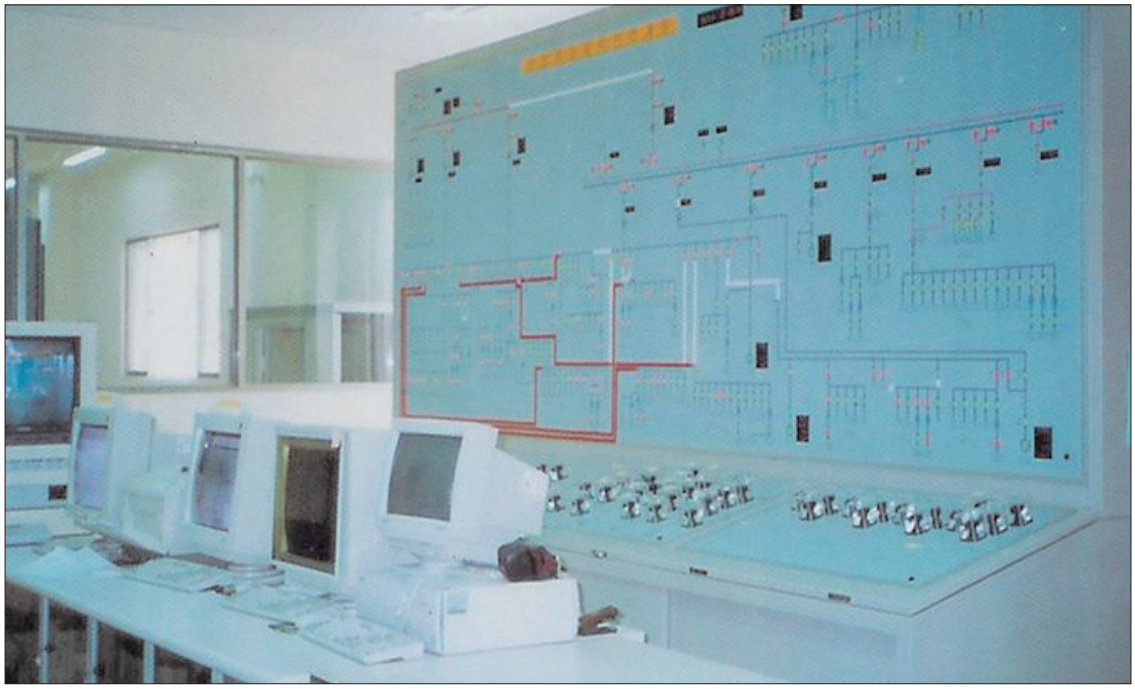
SMART^3 system
High efficiency, low energy and compact advanced treatment technology



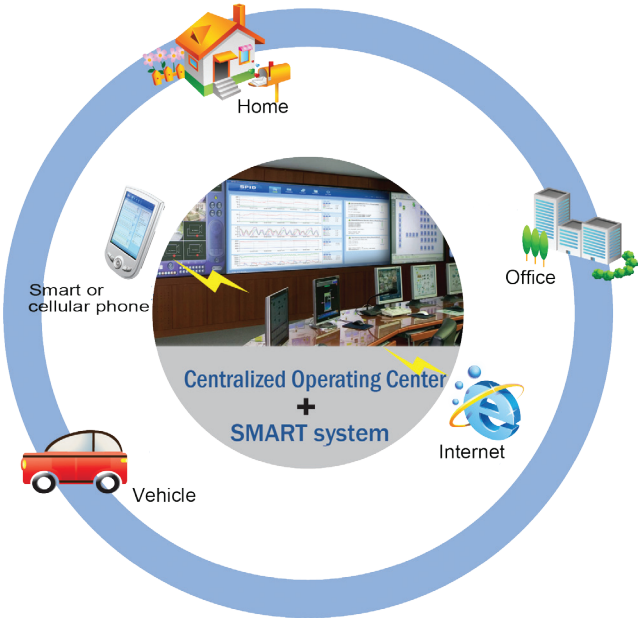
Overview of SMART^3 system

SPID process
- An advanced biological nutrient removal(BNR) process composed of two intermittent aeration basins and a settling tank
- Alternating inflow of influent and returned sludge
  → the omission of mixing, internal recirculation pumping
- Automatic control of aeration/non-aeration for optimal treatment of N, P

SMART system
- Real time automatic control system supports SPID process for scientific and economical operation
- This system monitors the influent load variation in real time, and auto tunes the treatment process for efficiency, quality and stable effluent, while using the least amount of energy



We are capable of providing efficient automation solutions for most power and industrial systems to provide highly developed computing and communication technologies.



- Real time diagnosis and control via ubiquitous system
- Automation of process operation
- Prevention of water quality violation and pollution

ENVIRONMENTAL WORK

Jang Dang Sewage Treatment Plant in Pyeong Taek, Korea.

PaengSeong Sewage Treatment Plant in PyeongTaek, Korea

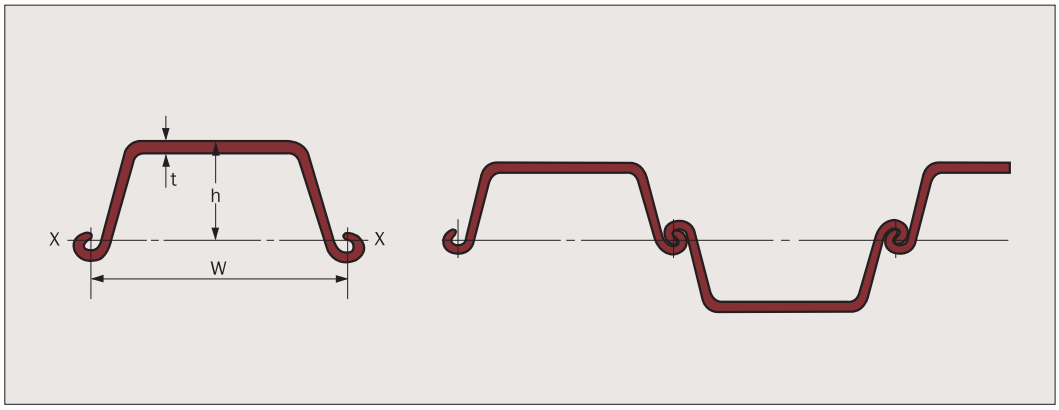
Borås Reningsverk Gässlösa Wastewater Treatment Plant, Sweden

Lynetten Wastewater Treatment Plant, Denmark

STEEL SHEET PILES

- Since the beginning of the 20th century millions of tons of U sheet piles have been used all over the world for every kind of structure.

1. Sectional Image



2. Dimensions and Sectional Properties

Section	Dimension			Sectional Area		Unit Weight		Moment of Inertia		Modulus of Section	
	B	H	t	Per Pile	Per Wall Width	Per Pile	Per Wall Width	Per Pile	Per Wall Width	Per Pile	Per Wall Width
	mm	mm	mm	cm^2	cm^2/m	kg/m	kg/m^2	cm^4	cm^4/m	cm^3	cm^3/m
SP-IIIA	400	150	13.0	76.4	191.0	60.0	150	3,060	22,600	278	1,510
SP-IV	400	170	15.5	96.9	242.5	76.1	190	4,670	38,600	362	2,270
SP-VA	500	200	19.5	133.8	267.6	105.0	210	7,960	63,000	520	3,150

Lease of Prefabricated H-Beam

1. H-300

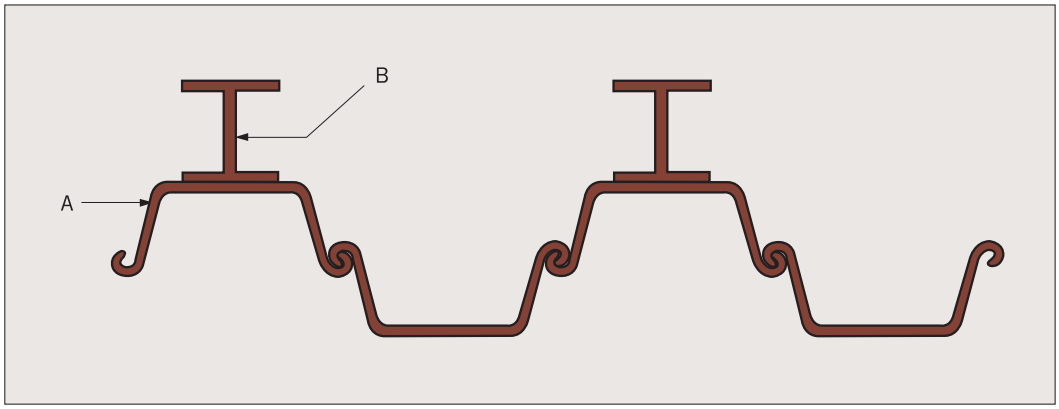
2. H-350

Dimensions and Sectional Properties (Including bolt holes)

Nominal Size	Standard Sectional Demension	Hole Size (mm)	Sectional Area (cm^2)	Unit Weight (kg/m)	Moment of Inertia (cm^4)		Modulus of Section (cm^3)		Radius of Gyration (cm)	
					Ix	Iy	Zx	Zy	ix	iy
H-300	H-300X300X10X15	Ø= 25 L=100	104.8	100	17,300	5,900	1,150	394	12.9	7.51
H-350	H-350X350X12X19	Ø= 25 L=100	154.9	150	35,000	12,500	2,000	716	15.1	8.99
H-400	H-400X400X13X21	Ø= 25 L=100	197.7	200	59,000	21,200	2,950	1,060	17.3	10.4
Note	※ H-400 size are not included in lease.									

■ Complex Steel Sheet Pile (Sheet Pile + H-Pile)

1. Sectional Image (C.T.C 0.8M)



2. Dimensions and Sectional Properties

Section		Sectional Area	Moment of Inertia	Modulus of Section
A	B	cm^2/m	cm^4/m	cm^3/m
SP-III_A	H-250×250×9×14	304.7	95,864	3,256
	H-300×300×10×15	339.3	121,146	3,834
	H-350×350×12×19	406.8	177,253	5,451
SP-IV	H-250×250×9×14	354.6	119,426	3,685
	H-300×300×10×15	389.1	158,028	4,556
	H-350×350×12×19	456.8	224,143	6,300
SP-V_A	H-250×250×9×14	369.7	145,626	3,957
	H-300×300×10×15	397.3	184,448	4,693
	H-350×350×12×19	451.2	251,906	6,223

GROUTING WORK(CLEAN JET METHOD)

Joong bu Inland Expressway Foundation Clean-Jet, Korea
(Licensing Agreement with NITTOC JAPAN)

Joong bu Inland Expressway Foundation Clean-Jet, Korea
(Licensing Agreement with NITTOC JAPAN)

TAIWHA(KOREA) PROJECTS / OMEGA PILE

Sungsu Shindorico Ω Piling, Korea (Licensing Agreement with HARENINVEST, BELGIUM)
Sam Sung E&C

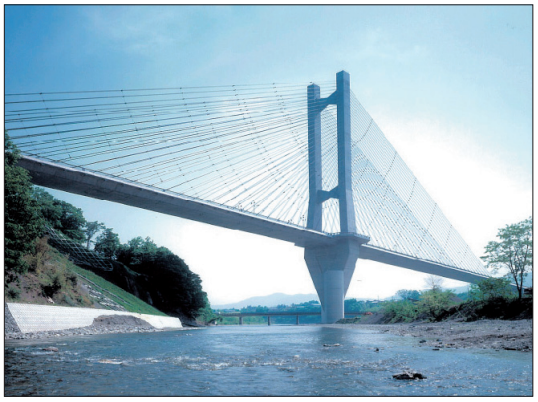
Hongcheon Apartment Ω Piling, Korea (Licensing Agreement with HARENINVEST, BELGIUM)
Korea National Housing Corporation

TAIWHA(韓)/INGÉROP(佛)/SEC(日)

Cable Production and Installation work for the Hwamyeong cable stayed bridge under construction, Busan, Korea
Hyun Dai E&C

SEC(JAPAN)

Shin-Onomichi Bridge, Fukuoka, Japan



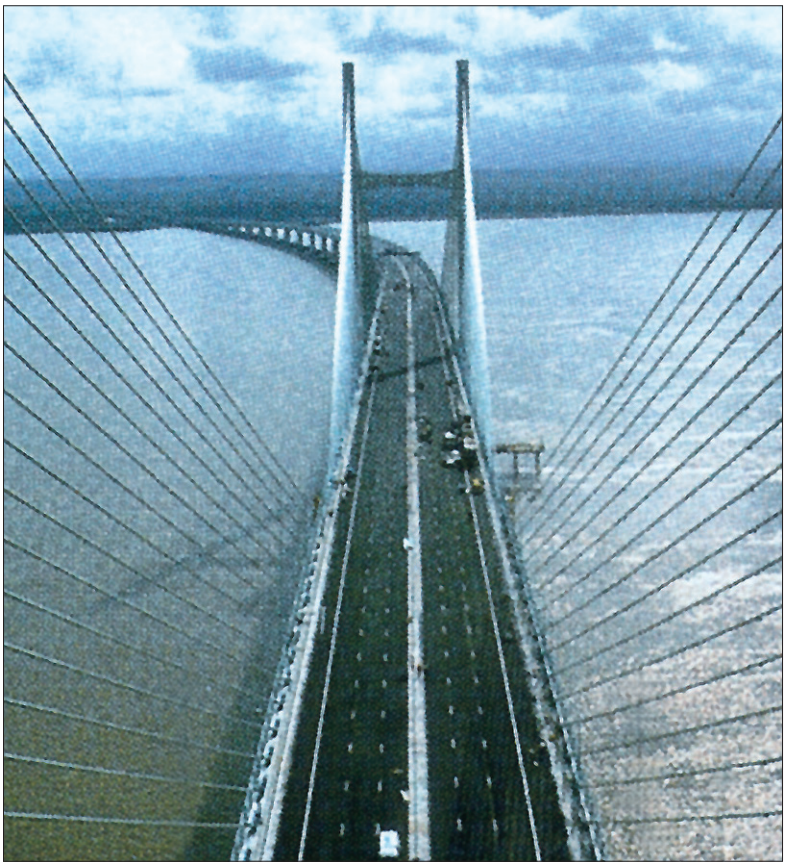
Chichibu Bridge, Tokyo, Japan

SUN Marine Bridge, Hamada, Japan

Yobuko Bridge, Yobuko, Japan

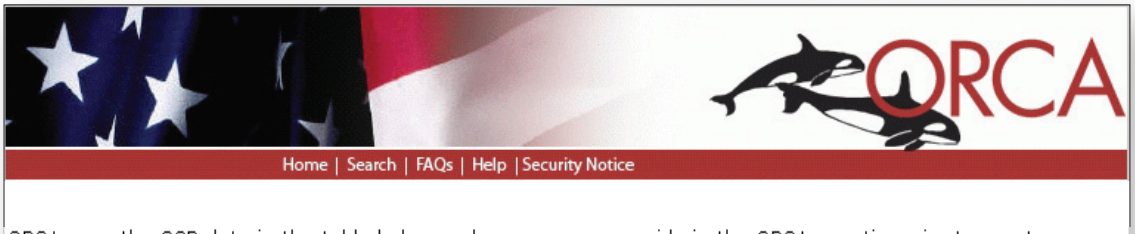
INGÉROP(FRANCE)

The Stade de France roof in Saint-Denis (1998 World Cup Stadium) Paris, France



The Severn bridge between England and Wales

CENTRAL CONTRACTOR REGISTRATION



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By submitting the reps and certs in ORCA, you are attesting to the accuracy of the information and may be subject to penalties for misrepresentation.

Update your previously completed ORCA record | Update your partially saved ORCA record

Legal Business Name:	**TAIWHA LEASE INDUSTRIAL CO., LTD.**
Physical Address:	15FLOOR,JEONGDONG BLDG, #15-5, JEONG-DONG, JUNG-GU
City:	SEOUL
State:	
Foreign Province:	
Postal Code:	100-784
Country:	KOR
CCR Status:	Active Until: 5/19/2012
NAICS Codes:	**NAICS DESCRIPTION** 236210 Industrial Building Construction 236220 Commercial and Institutional Building Construction 237110 Water and Sewer Line and Related Structures Construction 237120 Oil and Gas Pipeline and Related Structures Construction 237130 Power and Communication Line and Related Structures Construction 237310 Highway, Street, and Bridge Construction 237990 Other Heavy and Civil Engineering Construction 238110 Poured Concrete Foundation and Structure Contractors 238120 Structural Steel and Precast Concrete Contractors 238210 Electrical Contractors and Other Wiring Installation Contractors 238910 Site Preparation Contractors 238990 All Other Specialty Trade Contractors

FSC Codes:	FSC DESCRIPTION
Type of Organization:	Other
Federal Government Agency:	No
TIN on file:	No
Veteran-Owned Business concern:	No
Service-Disabled Veteran-Owned Business concern:	No
Women-Owned Business concern:	No
Women-Owned Small Business Program:	No
Economically Disadvantaged Women-Owned Small Business:	No
Joint Venture Women-Owned Small Business:	No
Joint Venture Economically Disadvantaged Women-Owned Small Business:	No
Number of Employees:	109
Average Annual Gross Revenues:	$60,411,393
Minority-owned Ethnicity:	
Historically black college or university:	No
Minority institution:	No
SBA certified small disadvantaged business concern:	No
SBA certified HUBZone small business concern:	No

ISO CERTIFICATE

CERTIFICATE

QUALITY MANAGEMENT SYSTEM

kfq Korean Foundation for Quality

Valid Date 2010. 08. 31 ~ 2013. 02. 02
Issue Date 2010. 08. 31
Initial Registration Date 1998. 02. 03
Certificate Number AC-00964

TAI WHA LEASE INDUSTRIAL CO., LTD.

15th Fl, Jeongdong Bldg, #15-5, Jeong-dong, Jung-gu, Seoul, 100-784, Korea

Korean Foundation for Quality certifies that The Quality Management System of the above organization has been audited and has complied with the requirements of the following standard

Standard

KS Q ISO 9001:2009 / ISO 9001:2008

Scope of certification

- CONSTRUCTION OF EARTH WORKS, SCAFFOLD WORKS (PILE WORKS), BORING & GROUTING WORKS, REINFORCED CONCRETE WORKS AND WATERWORKS & SEWERAGE WORKS
- DESIGN AND CONSTRUCTION OF RETAINING WALL
- CONSTRUCTION OF ELECTRICAL WORKS & TELECOMMUNICATION WORKS
- CONSTRUCTION OF MARINE WORKS

[PERMITTED EXEMPTIONS : 7.3 DESIGN & DEVELOPMENT

- CONSTRUCTION OF EARTH WORKS, SCAFFOLD WORKS (PILE WORKS), BORING & GROUTING WORKS, REINFORCED CONCRETE WORKS AND WATERWORKS & SEWERAGE WORKS
- CONSTRUCTION OF ELECTRICAL WORKS & TELECOMMUNICATION WORKS
- CONSTRUCTION OF MARINE WORKS]

IQNet

KAB

IAF

Jae Ryong Kim
President & CEO, KFQ

The use of Accreditation Mark indicates accreditation in respect of those activities covered by the Accreditation Certificate Number KAB-QC-01

13F, Woolim Lion's Valley B Bldg., 371-28, Gasan-Dong, Geumcheon-Gu, Seoul 153-786, Korea

www.kfq.or.kr

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

IQNet and
KFQ
hereby certify that the organization

TAI WHA LEASE INDUSTRIAL CO., LTD.

15th Fl, Jeongdong Bldg, #15-5, Jeong-dong, Jung-gu, Seoul, 100-784, Korea

for the following field of activities

- CONSTRUCTION OF EARTH WORKS, SCAFFOLD WORKS (PILE WORKS), BORING & GROUTING WORKS, REINFORCED CONCRETE WORKS AND WATERWORKS & SEWERAGE WORKS
- DESIGN AND CONSTRUCTION OF RETAINING WALL
- CONSTRUCTION OF ELECTRICAL WORKS & TELECOMMUNICATION WORKS
- CONSTRUCTION OF MARINE WORKS

[PERMITTED EXEMPTIONS : 7.3 DESIGN & DEVELOPMENT

- **CONSTRUCTION OF EARTH WORKS, SCAFFOLD WORKS(PILE WORKS), BORING & GROUTING WORKS, REINFORCED CONCRETE WORKS AND WATERWORKS & SEWERAGE WORKS**
- **CONSTRUCTION OF ELECTRICAL WORKS & TELECOMMUNICATION WORKS**
- **CONSTRUCTION OF MARINE WORKS]**

has implemented and maintain a

Quality Management System

which fulfills the requirements of the following standard

ISO 9001:2008

Issued on : 2010. 08. 31
Validity date : 2013. 02. 02

Registration Number : **KR - 00964**

Michael Drechsel
President of IQNet

Jae Ryong Kim
President & CEO of KFQ

IQNet Partners*:
AENOR Spain AFNOR Certification France AIB-Vincotte International Belgium ANCE Mexico APCER Portugal CCC Cyprus CISQ Italy CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany DS Denmark ELOT Greece FCAV Brazil FONDONORMA Venezuela HKQAA Hong Kong China ICONTEC Colombia IMNC Mexico Inspecta Certification Finland IRAM Argentina JQA Japan KFQ Korea MSZT Hungary Nemko AS Norway NSAI Ireland PCBC Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia
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* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

U.S.A CERTIFICATE

(12) **United States Patent**
Moon

(10) **Patent No.: US 7,862,722 B2**
(45) **Date of Patent: Jan. 4, 2011**

(54) **SEWAGE TREATMENT CONTROL DEVICE, METHOD, AND SEWAGE TREATMENT SYSTEM**

(75) Inventor: **Young Hak Moon**, Seoul (KR)

(73) Assignee: **Tai Wha Lease Industrial Co., Ltd.**, Seoul (KR)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 413 days.

(21) Appl. No.: **12/142,405**

(22) Filed: **Jun. 19, 2008**

(65) **Prior Publication Data**

US 2008/0314841 A1 Dec. 25, 2008

(30) **Foreign Application Priority Data**

Jun. 22, 2007 (KR) 10-2007-0061878

(51) **Int. Cl.**
C02F 3/00 (2006.01)

(52) **U.S. Cl.** **210/614**; 210/739; 210/746; 210/143

(58) **Field of Classification Search** 210/614, 210/739, 746, 143

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,535,795 B1 * 3/2003 Schroeder et al. 700/266

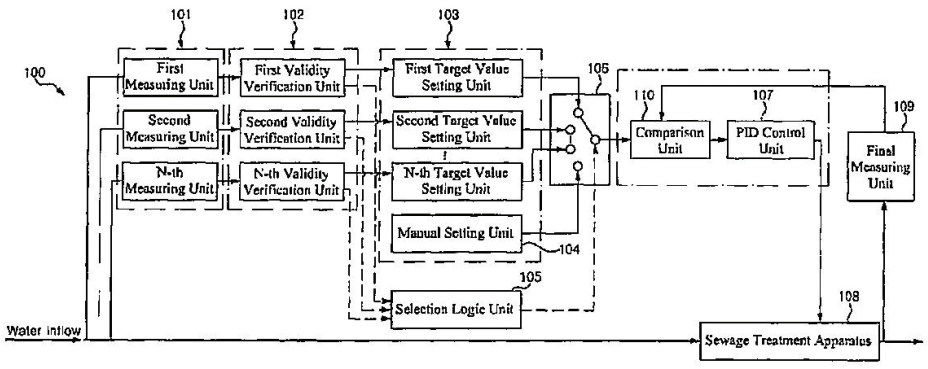
* cited by examiner

Primary Examiner—Chester T Barry
(74) *Attorney, Agent, or Firm*—Christopher Paradies; Fowler White Boggs P.A.

(57) **ABSTRACT**

A sewage treatment control device, a method and a sewage treatment system, are disclosed. In one example, the sewage treatment control device includes measuring units having sensors for inspecting specific components in water, respectively; validity verification units connected to the measuring units to determine validities for measured component values, respectively; target value setting units connected to the validity verification units to set target values for the component values measured in the measuring units, respectively; a manual setting unit for setting a target value depending on a component value inputted by an operator; a signal selection unit for allowing either one of the respective target value setting units or the manual setting unit to be connected; a proportional-integral-derivative control unit for performing proportional, integral or derivative action for the target value inputted from the signal selection unit to convert the target value into a control signal; and a manipulation unit for manipulating a sewage treatment apparatus depending on the control signal converted in the proportional-integral-derivative control unit.

10 Claims, 9 Drawing Sheets



G.C.C. CERTIFICATE

Information Sheet

Country	Gulf Cooperation Council
Title :	APPARATUS AND METHOD FOR CONTROLLING AND MONOTORING WASTEWATER TREATMENT EQUIPMENT BY ADVANCED PHASED ISOLATION DITCH
Priority(ies) Claimed	—
Application No	GC 2011 - 17777
Application Date	09/02/2011

Applicant / Inventor: Young Hak Moon

Missing Documents:

1) Power of Attorney, legalized up to the Consulate of any GCC member state.

The aforesaid documents should be filed at the GCC Patents Office before the deadline of May 05, 2011; otherwise the application will be treated as abandoned.

Annuity: The second annuity will be due as from the year following the filing year; i.e. from 1 January 2012 - 31 March 2012 and within a grace period as from 1 April 2012 - 30 June 2012 (subject to a surcharge)

CHINA CERTIFICATE

证书号第657200号

发明专利证书

发明名称：污水处理控制设备和方法及污水处理系统

TITLE OF THE INVENTION : Sewage treatment control device, method and sewage treatment system

发　明　人：文永学

INVENTOR : Young Hak Moon

专　利　号：ZL 2008 1 0126770.5

PATENT NUMBER :ZL2008 1 0126770.5

专利申请日：2008年06月20日

FILING DATE : June 20, 2008

专利权人：兑和钢材产业株式会社

PATENTEE : TAIWHA Lease Industrial Co., Ltd.

授权公告日：2010年08月11日

REGISTRATION DATE : August 11, 2010

本发明经过本局依照中华人民共和国专利法进行审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

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局长 田力普

Director : Tial Lipu

Republic of china

中华人民共和国国家知识产权局

2010年08月11日

第 1 页 （共 1 页）

KOREA CERTIFICATE

특 허 증

CERTIFICATE OF PATENT

특 허 제 10-0661455 호
(PATENT NUMBER)

출원번호 (APPLICATION NUMBER) 제 2006-0047566 호
출 원 일 (FILING DATE:YY/MM/DD) 2006년 05월 26일
등 록 일 (REGISTRATION DATE:YY/MM/DD) 2006년 12월 19일

발명의명칭 (TITLE OF THE INVENTION)
하수처리장치 및 이를 이용한 하수처리방법
Apparatus for treating waste water and method of using

특허권자 (PATENTEE)
태화강재산업 주식회사(110111-0******)
TAIWHA Lease Industrial Co., Ltd.
서울 중구 정동 15-5
#15-5, Jeong-dong, Jung-gu, Seoul

발명자 (INVENTOR)
문영학(461212-1******)
Young Hak Moon
서울 강남구 청담동 102-1 효성빌라 22동 201호
Hyoseong Villa 22-201, #102-1, Cheongdam-dong, Gangnam-gu, Seoul

위의 발명은 「특허법」에 의하여 특허등록원부에 등록되었음을 증명합니다.
(THIS IS TO CERTIFY THAT THE PATENT IS REGISTERED ON THE REGISTER OF THE KOREAN INTELLECTUAL PROPERTY OFFICE.)

2006년 12월 19일

특 허 청 장
COMMISSIONER, THE KOREAN INTELLECTUAL PROPERTY OFFICE

KOREA CERTIFICATE

특 허 증
CERTIFICATE OF PATENT

특 허 제 10-0796456 호
(PATENT NUMBER)

출원번호 (APPLICATION NUMBER) 제 2007-0061878 호
출 원 일 (FILING DATE:YY/MM/DD) 2007년 06월 22일
등 록 일 (REGISTRATION DATE:YY/MM/DD) 2008년 01월 15일

발명의명칭 (TITLE OF THE INVENTION)
하수처리공정의 제어장치 및 제어방법
Waste water treatment process control apparatus and method

특허권자 (PATENTEE)
태화강재산업 주식회사(110111-0******)
TAIWHA Lease Industrial Co., Ltd.
서울 중구 정동 15-5
#15-5, Jeong-dong, Jung-gu, Seoul

발명자 (INVENTOR)
문영학(461212-1******)
Young Hak Moon
서울 강남구 청담동 102-1 효성빌라 22동 201호
Hyoseong Villa 22-201, #102-1, Cheongdam-dong, Gangnam-gu, Seoul

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(THIS IS TO CERTIFY THAT THE PATENT IS REGISTERED ON THE REGISTER OF THE KOREAN INTELLECTUAL PROPERTY OFFICE.)

2008년 01월 15일

특 허 청 장
COMMISSIONER, THE KOREAN INTELLECTUAL PROPERTY OFFICE

특 허 증

CERTIFICATE OF PATENT

특 허 제 10-0884502 호
(PATENT NUMBER)

출원번호 (APPLICATION NUMBER) 제 2008-0045359 호

출 원 일 (FILING DATE:YY/MM/DD) 2008년 05월 16일

등 록 일 (REGISTRATION DATE:YY/MM/DD) 2009년 02월 12일

발명의명칭 (TITLE OF THE INVENTION)

하수 처리 장치 및 그 제어 방법

Apparatus for treating waste water and method for controlling the same

특허권자 (PATENTEE)

태화강재산업 주식회사(110111-0******)

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발명자 (INVENTOR)

문영학(461212-1******)

Young Hak Moon

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#230-12, Baekbong-ri, Cheongbuk-myeon, Pyeongtaek-city, Gyunggi-do

위의 발명은「특허법」에 의하여 특허등록원부에 등록되었음을 증명합니다.

(THIS IS TO CERTIFY THAT THE PATENT IS REGISTERED ON THE REGISTER OF THE KOREAN INTELLECTUAL PROPERTY OFFICE.)

2009년 02월 12일

특 허 청 장

COMMISSIONER, THE KOREAN INTELLECTUAL PROPERTY OFFICE

KOREA CERTIFICATE

특 허 증
CERTIFICATE OF PATENT

특 허 제 10-0884504 호
(PATENT NUMBER)

출원번호 (APPLICATION NUMBER) 제 2008-0056762 호
출 원 일 (FILING DATE:YY/MM/DD) 2008년 06월 17일
등 록 일 (REGISTRATION DATE:YY/MM/DD) 2009년 02월 12일

발명의명칭 (TITLE OF THE INVENTION)
하수 처리 장치 및 그 제어 방법
Apparatus for treating waste water and method for controlling the same

특허권자 (PATENTEE)
태화강재산업 주식회사(110111-0******)
서울시 중구 순화동 5-2 순화빌딩 2층 (우:100-731)
TAIWHA Lease Industrial Co., Ltd.
2nd Fl, Sunhwa Bldg. #5-2, Sunhwa-dong, Jung-gu, Seoul 100-731

발명자 (INVENTOR)
문영학(461212-1******)
Young Hak Moon
경기 평택시 청북면 백봉리 230-12
#230-12, Baekbong-ri, Cheongbuk-myeon, Pyeongtaek-city, Gyunggi-do

위의 발명은「특허법」에 의하여 특허등록원부에 등록되었음을 증명합니다.
(THIS IS TO CERTIFY THAT THE PATENT IS REGISTERED ON THE REGISTER OF THE KOREAN INTELLECTUAL PROPERTY OFFICE.)

2009년 02월 12일

특 허 청 장
COMMISSIONER, THE KOREAN INTELLECTUAL PROPERTY OFFICE

특 허 증

CERTIFICATE OF PATENT

특 허 제 10-0911688 호
(PATENT NUMBER)

출원번호 (APPLICATION NUMBER) 제 2008-0111117 호

출 원 일 (FILING DATE:YY/MM/DD) 2008년 11월 10일

등 록 일 (REGISTRATION DATE:YY/MM/DD) 2009년 08월 04일

발명의명칭 (TITLE OF THE INVENTION)

ＡＰＩＤ 공법 제어 및 모니터링 장치 및 그 방법

Apparatus and method for controlling and monitoring using APID

특허권자 (PATENTEE)

태화강재산업 주식회사(110111-0******)

서울시 중구 순화동 5-2 순화빌딩 2층 (우:100-731)

TAIWHA Lease Industrial Co., Ltd.

2nd Fl, Sunhwa Bldg. #5-2, Sunhwa-dong, Jung-gu, Seoul 100-731

발명자 (INVENTOR)

문영학(461212-1******)

Young Hak Moon

경기 평택시 청북면 백봉리 230-12

#230-12, Baekbong-ri, Cheongbuk-myeon, Pyeongtaek-city, Gyunggi-do

위의 발명은「특허법」에 의하여 특허등록원부에 등록되었음을 증명합니다.

(THIS IS TO CERTIFY THAT THE PATENT IS REGISTERED ON THE REGISTER OF THE KOREAN INTELLECTUAL PROPERTY OFFICE.)

2009년 08월 04일

특 허 청 장

COMMISSIONER, THE KOREAN INTELLECTUAL PROPERTY OFFICE

KOREA CERTIFICATE

제224호

신 기 술 인 증 서

1. 기 술 명 : 혐기/무산소/호기공정의 운전모드 변경과 실시간 자동운전 시스템을 이용한 하수고도처리공법

2. 기술보유자 : 태화강재산업(주)
   가. 법인등록번호 : 110111-0604565
   나. 소재지 : 서울 중구 정동 15-5 정동빌딩 15층

3. 기 술 개 요 :
   내부격벽이 없는 두 개의 간헐포기조와 최종침전지로 구성된 공정으로, 운전모드에 따라 각 간헐포기조의 전단과 후단에 하수 및 반송슬러지의 유입이 가능하고 반응조의 상태에 따라 혐기/무산소/호기공정의 운전모드와 체류시간, 호기공정의 용존산소 농도를 제어하는 실시간 자동운전시스템을 이용한 질소와 인을 제거하는 하수고도처리기술

4. 신기술 범위
   ○ 하수 및 반송슬러지의 유입위치와 혐기/무산소/호기공정의 운전모드를 변경하여 하수의 질소와 인을 제거하는 기술
   ○ 하수 및 반송슬러지의 유입위치와 혐기/무산소/호기공정 운전모드를 변경하는 하수고도처리공법의 각 공정별 체류시간 및 호기공정의 용존산소농도를 제어하는 실시간자동운전 기술

5. 유 효 기 간 : 2007. 10. 2 ~ 2013. 10. 1

6. 기 타

「환경기술개발 및 지원에 관한 법률」 제7조, 같은 법 시행령 제18조의5 제1항 및 같은 법 시행규칙 제6조제3항에 따라 위의 기술을 환경분야 신기술로 인증합니다.

2010년 9월 14일

환 경 부 장 관

No. 224

New Excellent Technology

Title :

Advanced Wastewater Treatment Technology by Shifting Anaerobic/Anoxic/Aerobic Phase and Real-Time Automatic Operation System

Issued to :

TAIWHA Lease Industrial Co., Ltd
401, Jeongdong Bldg. # 15-5, Jeong-dong, Jung-gu, Seoul, Korea

Technology description :

This technology consists of two intermittent aeration basins without walls dividing oxidative phases and a clarifier. This technology is for the removal of nitrogen and phosphorous as well as BOD using the real-time automatic operation system. The automatic operation system leads the flow of influent and return activated sludge to the front or the end of each intermittent aeration basin depending upon the operational mode. The operational mode(hydraulic retention time and the concentration of dissolved oxygen) of anaerobic/anoxic/aerobic basin can be controlled depending on the various conditions of the basin.

Scope of New Technology :

- The advanced wastewater treatment technology by shifting the anaerobic/anoxic/aerobic phase of biological reactor basins and the flow direction of influent and return activated sludge for the treatment of N, P as well as BOD
- Real-time automatic operation system controlling hydraulic retention time and the concentration of dissolved oxygen in the anaerobic/anoxic/aerobic phase shifting process

Validity :

October 2nd, 2007 ~ October 1st, 2013

Hereby, this technology is certified as New Excellent Technology under the Development of and Support for Environmental Technology Act, Article.7, the Execution Ordinance Article.18-5 Clause.1, and the Execution Regulation Article.6 Clause.3.

September 14th , 2010

Minister of Environment, Republic of Korea

AGREEMENT

[Attachment 4]

Eco-STAR Project Agreement

(The Standard Form for Agreement between Water Technical Innovation & Integration Center and the Main Research Institute of detailed R&D project)

***[A Template for R&D projects with participating companies]**

◦ Name of the Project Enforcer: Water Technical Innovation & Integration Center

◦ Detailed Name of the Technology: Development of high efficiency and high compactness technology for Sewage treatment plant

◦ Name of the R&D Project: Enhancing the efficiency and Integration of Sewage Treatment plant using the integrated operation system and the retrofitting technique

◦ Overall Term of the Research and Development: 2004. 12. 1. ~ 2011. 5. 31. (78 months)

◦ Agreed Term of the Research: 2009. 6. 1. ~ 2011. 5. 31.

◦ Payment for the Research and Development
- Government support : 1,855,000,000won
- Private capital:1,614,450,000won

(A)	Head of General Main Institute :	Head Lee, Jong Myung Myongji University, The University-Industry Cooperation Center (Business Registration No.: 135-82-11060)
	Head of Business Group	Director Nam, Kung Eun Water Technical Innovation & Integration Center

(B1)	Head of the Main Research Institute :	Moon, Young Hak Representative Director Taiwha Lease Industrial Co., Ltd. (Business Registration No.: 110-80-20715)
	Researcher in Chief:	Hwang, Jung Han Vice President Taiwha Lease Industrial Co., Ltd. (Resident ID No.: 470307-1042118)
(B2)	Head of the Main Research Institute :	Lee, Soon Yong CEO Hyosung Ebara Engineering (Business Registration No.: 106-81-65557)
	Researcher in Chief:	Choi, Young Sam Director Hyosung Ebara Engineering (Resident ID No.: 650115-1018414)
(B3)	Head of the Main Research Institute :	Park, Young Chul CEO Samchang En-Tech (Business Registration No.: 124-86-79113)
	Researcher in Chief:	Park, Young Chul CEO Samchang En-Tech (Resident ID No.: 600703-1903710)

AGREEMENT

Consignment Agreement with
Korea Institute of Construction Technology (KICT)

[Attachment 8]

Consignment of Eco-STAR Project Agreement

(The Standard Form for Agreement between Main and Consigned Institutes)

◦ Name of the Project Enforcer: Water Technical Innovation & Integration Center

◦ Detailed Name of the Technology: Development of high efficiency and high compactness technology for Sewage treatment plant

◦ Name of the R&D Project: Enhancing the efficiency and Integration of Sewage Treatment plant using the integrated operation system and the retrofitting technique

◦ Name of the Project Consigned: Development of optimized management system for Sewage treatment plant

◦ Overall Term of the Research and Development: 2004. 12. 1. ~ 2011. 5. 31.
(78 months)

◦ Agreed Term of the Research (1 stage): 2004. 12. 1. ~ 2005. 5. 31.

◦ Payment for the Consigned Research and Development (1 stage)

(Unit: 1,000won)

	1st Year	2nd Year	Total
Government support	100,000		100,000

(A) Head of the Main Research Institute: Representative Director Moon, Young Hak
Taiwha Lease Industrial Co., Ltd.
(Business Registration No.: 110-80-20715)
Researcher in Chief: Hwang, Jung Han (Resident ID No.: 470307-1042118)
Vice President, Taiwha Lease Industrial Co., Ltd.

(**B**) Head of the Cosigned Research Institute: President, Lee, Seong Woo
Korea Institute of Construction Technology (KICT)
(Business Registration No.: 229-82-01135)
Researcher in Chief: Gee, Chai Sung (Resident ID No.: 480115-1057938)
Construction Environment Research Department Director

For performance of the consigned research for Eco-STAR project, **A** and **B** agree as follows:

Attachment : 1 copy of Business Plan

Date : Dec., 2004

(**A**)	Head of the Main Research Institute:	Moon, Young Hak Representative Director Taiwha Lease Industrial Co., Ltd.
	Researcher in Chief:	Hwang, Jung Han Vice President Taiwha Lease Industrial Co., Ltd.
(**B**)	Head of the Cosigned Research Institute:	Lee, Seong Woo President Korea Institute of Construction Technology(KICT)
	Researcher in Chief:	Gee, Chai Sung Korea Institute of Construction Technology(KICT) Construction Environment Research Department Director

M.O.U

Memorandum of Understanding

for

Research Cooperation

between

Korea Institute of Construction Technology(A)

and

Waste Water Control aps(B)

WHEREAS, **Korea Institute of Construction Technology**(hereinafter referred to as "A"), and **Waste Water Control aps** (hereinafter referred to as "B") are mutually interested in furthering cooperation in research and technological development in environmental science under a global perspective.

THEREFORE, A and B (hereinafter referred to as "Parties") do hereby agree as follows ;

Article 1. Objective

A and B shall together promote research cooperation with a view to contributing to the advancement of scientific research and technological development in environmental science under a global perspective and to the benefit of international community at large.

Article 2. Areas of Research Cooperation

2.1 Research cooperation between A and B shall be carried out in areas of mutual interest and on the basis of the specific research projects executed by each Party.

2.2 Each Party shall designate one person as a "Project Leader" who will be responsible for the implementation of each research project to be carried out

IN WITNESS WHEREOF, each Party hereto has caused this MOU to be executed in duplicate, each having equal authenticity, and retains one copy.

For and on behalf of A	For and on behalf of B
Korea Institute of Construction Technology	**Waste Water Control aps**
Chai S. Gee	*Marinus K. Nielsen*
Project Leader	Project Leader
Dated : 11/13/04	Dated on Nov. 12th. 2004
Korea Institute of Construction Technology	Waste Water control aps
	Marinus K. Nielsen
	President
Dated :	Dated on Nov. 12th. 2004

WWControl
Tlf.: 4585 5147
wwc@WWControl.dk
Waste Water Control aps
Kollemosevej 47
2830 Virum

KOREA CERTIFICATE

CERTIFICATE OF ACTUAL RECORD ON WORKING OPERATION

1. Name of Facility: Jangdang Public Wastewater Treatment Facility
2. Classification: Drainage
3. Location: 505 Jangdang-dong, Pyeongtaek City, Gyeonggi-do, Korea

Confirming Contents

4. Capacity(m^3/day): 10,000
5. Date of Completion: Mar. 24, 2006
6. Consecutive Operation Period: Mar., 2006 ~ as of present time (Full 30 months)
7. Applied Method of Construction: Advanced Wastewater Treatment Technology by Shifting Anaerobic/ Anoxic/Aerobic Phase and Real-time Automatic Operation System (SPID)
8. Possessor of Technology: Taiwha Lease Industrial Co., Ltd.
9. Company of Operation: Taiwha Lease Industrial Co., Ltd.
10. Others: Attached with: Actual Inflow Quantity of Wastewater at 3/4(third/quarter)term of 2008 by Real Proof Research Facility

This is to certify that Real Proof Research Facility at Jangdang Public Wastewater Treatment Facility is now being normally operated.

TAIWHA STEEL SHEET PILE & PRE-FABRICATED H-BEAM FACTORY,
PYEONGTAEK, GYEONGGI-DO, KOREA

SEMI SHIELD

TAIWHA Lease Industrial Co., Ltd.

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Factory : 230-12 Baekbong-ri, Cheongbuk-myeon, Pyeongtaek, Gyeonggi-do 451-833, Korea
Tel: 82-31-683-4719, Fax: 82-31-683-4801

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