



Contents

KOSHA NEWSLETTER | 2012.6

Cover Story

- 01_ Occupational Safety and Health Week opens on 2, July**
State of the art OSH equipment, UCC Show to promote importance of safety

KOSHA News

- 02_ Gift Donation in rural area**
KOSHA team up to help residents along remote country side
- 03_ Domestic motor company protect workers of partners**
The Ministry of Labor and Employment and KOSHA hosts 'Leader's Meeting on Occupational Safety and Health in the Car Industry' together with representatives of 11 car factories of five Korean motor companies.
- 04_ Contract with Samsung Everland's FC division**
Preventing accidents from wet and slippery kitchen
- 05_ Certification of best workplace to make the work site healthy**
KOSHA selects top five workplaces in promoting workers' health through, for example, job stress management program
- 06_ Medical service, now to workers of small-scaled enterprises**
Workers' health center opened in Chang-won industrial complex on the 17th added to existing four centers across the nation
- 07_ Uninvited guest of summer : suffocation**
KOSHA's warning of suffocation
Deaths from suffocation under manholes or in septic tanks are the most frequent in June and July with 73 cases for the past decade.
- 08_ Konkuk University hospital first to win the safety and health management system**
Contribute to ensure fundamental OSH for workers and patients
- 09_ Winning the 2nd prize in the research sector of the 53rd Korean Society of Otorhinolaryngology-Head and Neck Surgery's Annual Spring Meeting**
- 10_ Sharing OSH experience with Vietnam**
KOSHA invite the Vietnamese public officials, to sign MOU on technological cooperation
- 11_ OSH, essential factor for advanced management**
Essential factor for advanced management was focused at OSH workshop for management level
- 12_ Domestic Steel Industry's Reaffirm commitment to OSH**
Top five steel companies intensify OSH support for their partners KOSHA and MOEL co-host 'Leader's meeting for the OSH in the steel industry'

Accident Report

- 13_ Example of Serious Accident in Construction**
Gang Form Fall During Installation



Occupational Safety and Health Week opens on 2, July

State of the art OSH equipment, UCC Show to promote importance of safety

25th June

Around 250 workers are hurt at their work sites and six out of them lose their lives every day in Korea. Some 93,000 got injury and 2,114 fatality cases were reported last year alone. The economic cost, as a result, goes over KRW18 trillion, the amount that could hire 900,000 workers paying KRW 20 million annually other than that.

This statistics show the dark side of the nation that does a good job on the global arena that boasts USD 1 trillion-size of the trade and focus on hosting international meetings.

To improve that situation, KOSHA and the Ministry of Employment and Labor have been hosting the Occupational Safety and Health Week as part of efforts to help people cherish the importance of the safety and health and raise the awareness of it within our community.

► The Occupational Safety and Health Week was launched in 1968 to let people as well as employers and employees know the importance of OSH and seriousness of occupational accidents. This annual event is celebrated in every first week of July.

This year marks the 45th anniversary of the occupational safety and health week which lasts from 2 to 6, July at COEX in Sam-sung dong. Various OSH-related programs and events will encourage people to know the importance of occupational safety and health.

Major events during the week are: celebration of occupational accident's victims on the 2nd; OSH Seminar that deals with 26 themes on recent OSH issues and responses; OSH best practice presentation to share knowledge and information; OSH Experts Night.

All participants as well as people in the OSH industry can participate in : International OSH Exhibition for four days, where state-of-the-art OSH device and safety products for daily lives; OSH philosophy lecture by Mr. Um, a mountaineer; OSH UCC Show , a UCC video clips contest.

Especially Mr. Um will serve as an honorary ambassador to disseminate the importance of OSH. Meanwhile in the International OSH Exhibition, around 10,000 safety device or equipment from 15 nations are shown including safety gloves which are not torn even by knife and safety device for the gas, electricity, fire and transportation sectors. This exhibition is expected to attract many visitors as they can try the device.



This week-long event will also be an opportunity to allow participants to check their stress level, blood pressure and body mass, and get to know the hazards of asbestos. Through these experiences, people can check their safety and health.

Summary of the 45th Occupational Safety and Health Week

- ▶ Catch phrase: Safe workplace, Healthy workers, Happy country
- ▶ Aim: Providing recent OSH information with workplaces, and building a common ground for all people
- ▶ Useful OSH information for the field
 - Through paying tribute to victims of OSH accidents and celebrating the OSH experts night, participants could honor those who left a valuable asset. Also seminars and presentations on best practices will provide information on OSH. In addition, companies can have a chance to improve awareness on OSH by sharing OSH best practices with each other.
- ▶ Improving awareness on safety through participation
 - The international exhibition encourages visitors to enjoy the event by providing various experiences such as self-checking stress, blood pressure and body fat checks as well as showing various prevention products which could be used in their daily lives.
 - Another interesting events are: OSH UCC Show, the contest of UCC makers, and Safety Philosophy Lecture.

위험을 뚫고 가는 것이 안전의 시작입니다

안전한 일터, 건강한 근로자, 행복한 나라

제45회 산업안전보건강조주간

2012.7.2(월) ~ 7.6(금) / 서울, COEX



Gift Donation in rural area

KOSHA team up to help residents along remote country side

27th April

“After four hours, we finally reach the village to share our talent”

KOSHA's union workers and management (President: Hun-ki Baek) teamed up to help residents living in a remote village with bad traffic in Gang-won Province on the 26th for two days, who desperately need help.

The village called ‘Byeol-chunji’ located in Jidong-ri, Pyeongchang, Gangwon Province is one of the highest villages in Korea in terms of altitude, with only four stops of a bus a day. It takes thirty minutes to get a hospital in the downtown for one who gets sick. There's even no one mom-and-pop store in the village.

The Byeol-chunji village is 1,256kms above sea level, nestled with Mount Cheong-ok where only 25 households are located. The average age of residents is 60, with the youngest adult of 40 year old.

Around forty staff members and physicians of KOSHA conducted blood test, liver function test, urine test, X-ray and electrocardiogram test for them.

Senior residents enjoyed free medical check-up and consultation service thanks to these volunteers, who have trouble going to hospitals due to rural location. Meanwhile, KOSHA's staff members also improved the convenience by checking the status of electricity and gas, and installing lights.

After that, they helped the residents harvest wild plants and corns, and eradicate old green houses.

Grandma Kim (86) who lives alone, said “I am grateful for this day and all those who are helping us coming a great distance.” adding that she feels like having her own grand children. Mr Kim, the head of the village also expressed his thanks saying that what they need is continuous support for the rural area like the village where he lives.

KOSHA has been in the sisterhood relationship with the village since 2005 as part of its efforts to conduct socially responsible activities : giving a hand in harvesting crops, providing safety training on using agricultural machinery, inviting the residents to tour factories and running the farmers' market within KOSHA so that people can buy agricultural produce directly from farmers.

KOSHA has been supporting rural areas located in In-cheon and Gang-hwa Island before it concluded the sisterhood relationship with this Byeol-chunji village. That's why those villages in the In-cheon and Gang-hwa were on the list of candidates for the sisterhood relationship as they are not far away from metropolitan area to visit. However, KOSHA concluded the tie finally with the Byeol-chunji village which is isolated in terms of economic and cultural benefit, to be all the more committed to upholding the meaning of helping the remote areas whose residents are desperately needed.

President Baek of KOSHA said that sharing what we have is all about participation, adding that it was a very meaningful time for KOSHA's staff members to lend safety knowledge and information to local communities.



〈One of residents receives medical service by the physician of KOSHA〉



Domestic motor company protect workers of partners

The Ministry of Labor and Employment and KOSHA hosts 'Leader's Meeting on Occupational Safety and Health in the Car Industry' together with representatives of 11 car factories of five Korean motor companies.

2nd May

As occupational accidents in the overall car industry are rising, KOSHA hosted a meeting to come up with measures to support partners of the five motor companies which are recording less accident cases though.

According to the occupational accidents statistics, 206 accidents were reported, reduced by 14 cases in the eleven car factories of the five motor companies, as of the end of March this year.

Meanwhile the overall car industry witnessed 18 more cases of accidents than last year's 833 cases to be total of 851 as of the end of March.

KOSHA(President: Hun-ki Baek), in that sense, hosted the 'Leader's Meeting on Occupational Safety and Health in the Car Industry' to find ways to support occupational safety and health of the partner companies' workers and to share progress of the eleven factories of the motor companies.

Leader's Meeting on Occupational Safety and Health in the Car Industry

- ▶ When: 11:00~13:00, Thu, 3rd May, 2012
- ▶ Where: on the 14th floor, Libera Hotel in Dae-jeon
- ▶ Participants: President of KOSHA, representatives from the Occupational Accident Prevention and Compensation Bureau of the Ministry of Employment and working group, and representatives from eleven factories of the motor companies.

※ Eleven factories are : Gwang-ju, So-ha Ri, Hwa-sung factory of KIA Motors, factories of Renault Samsung Motors and Ssangyong Motors, Gun-san, Chang-won, Bu-pyeong factories of GM Korea and Asan, Ul-san and Jeonju factories of Hyundai Motors.

The 'Leader's Meeting on Occupational Safety and Health in the Car Industry' was the venue to build up a partnership among the car factories, the Ministry of Employment and Labor and KOSHA, and to enhance the level of OSH within the auto industry of Korea.

Participants of the meeting will deal with the ways to harness 'Common Growth Program for Occupational Safety and Health' as a practical tool to reduce accidents in an effort to make the achievements of the factories to decrease accidents permeate in the overall auto industry.

※ 'Common Growth Program for Occupational Safety and Health' is a program led by a mother company to establish and implement safety and health plans together with its partners. The plan includes risk assessment and activities to provide technologies.

In addition, OSH progress and plan for this year of the five motor companies, by factories such as Ul-san factory of the Hyundai Motors and So-ha Ri factory of the KIA Motors, will be released in the meeting.

A person from KOSHA said "The auto industry is a comprehensive machinery industry with upstream and downstream benefits, creating jobs and promoting exports as an important sector in the Korean economy." adding that he hopes this meeting will serve as an opportunity to find ways to build up and run OSH management system of the motor companies' partners through the mother companies' efforts, contributing to bringing the OSH within the auto industry to the new level.



Contract with Samsung Everland's FC division

Preventing accidents from wet and slippery kitchen

30th April

KOSHA and Samsung Everland's FC division cooperate to enhance health and prevent accidents of workers at the kitchen that provides food to workplaces and hospitals etc.

President of KOSHA, Mr. Baek concludes Memorandum of Understanding on Preventing Occupational Accidents on the 30th April, with Samsung Everlands' FC division.

Memorandum of Understanding on Preventing Occupational Accidents at the kitchen

- ▶ When: 11:00a.m. 30th April
 - ▶ Where: on the 7th floor of Samsung Everland's FC building
 - ▶ Participants: President Baek of KOSHA, Director of the Samsung Everlands' FC division
- ※ Samsung Everland FC(Food Culture) division is in charge of providing group meal service, food and beverage distribution and customized food by its retailers.

If this contract begins, Samsung Everland FC division promotes protection activities of workers' health and implements prevention of occupational accidents for around 100,000 workers in some 580 work places and 8 partner work places across the country, together with KOSHA.

Meanwhile KOSHA supports the FC division to set up the safety and health program and develop safety and health technology. The division, by establishing the efficient safety and health system and infrastructure, encourage its subcontractors to accept the safety and health management system, under the goal of achieving common growth.

Through this contract, both parts improves working environment by making efforts to create safe kitchens which serve many people at the same time. In that sense, the memorandum holds the plan to reflect 'slips and trips accidents prevention system' for newly opened kitchens.

Also both KOSHA and the FC division plans to disseminate the best practice according to the result of projects of creating kitchens free from wet and slippery floors.

Meanwhile among 6,995 cases of accidents in the food related industry last year, 1,951 cases or 27.9% were from accidents which means that three out of ten workers in the food related industry are suffering from the slips and trips.

President Hun-ki Baek said that if we ensure safety and health of workers, the quality of service will be enhanced adding that he hopes to see accidents reduced. Through this contract, safety and health status of workers will be improved as KOSHA concludes the contract with one of the largest meal service company in Korea.



Certification of best workplace to make the work site healthy

KOSHA selects top five workplaces in promoting workers' health through, for example, job stress management program

14th May

KOSHA certified five enterprises for their efforts to enhance workers' health and two of them are : company that tries to prevent stress through 'stress-free body and mind'program towards workers with hypertension and high level of stress; pharmaceutical manufacturer which provides breakfast with all the workers once a month to prevent them from skipping the meal.

President Hun-ki Baek certified five enterprises including 'Dream Pharma', a medical product manufacture, as the best workplaces in promoting workers'health. The ceremony was held in KOSHA's headquarter on 14, Monday.

※ The five enterprises are: Dream Pharma, LG Electronics Seo-cho R&D Campus, LG Electronics MC Campus, GE sensing Korea, and Incheon branch of E-land Newcore Outlet.

'The best workplace in promoting workers health' refers to a certification program run by KOSHA. The agency receives companies' activities to promote workers' health and select the best cases among them through a comprehensive estimation to finally give certification.

The estimation focuses on: the company's efforts to manage cerebro and cardiovascular diseases, musculoskeletal disorder; management and labor's level of awareness of promoting workers' health; company's running of related programs or policies.

- KOSHA has set the program ever since July 2011 and certified 97 enterprises up until now including the five mentioned above.
- The certified enterprise is benefited with financial support to enhance workers' health and is recommended as the first candidate of the government's prize. Further, it is exempted from the inspection conducted by the Ministry of Employment and Labor in the health sector.

Meanwhile, around 6,000 works related diseases are reported including cerebro and cardiovascular diseases, musculoskeletal disorder and job stress, with the total cases of 18,857 in recent three years.

- Also 1,020 cases of fatal illnesses were reported showing some 340 workers lose their live a year from work related diseases.

KOSHA Newsletter



Occupational illnesses in recent three years from work related diseases

unit :case

	cases	2009	2010	2011
total	18,857	6,975	6,227	5,655
Non-fatality	17,837	6,626	5,857	5,354
Fatality	1,020	349	370	301

The relative person from Occupational Health Department of KOSHA said “as the culture of labor and management advances, they are all the more interested in enhancing workers’ health through supporting non-smoking program and coming up with programs to deal with job stress’ adding that he hopes to see more enterprises are certified in improving workers’ health.



President Hun-ki Baek(third from left) takes a picture with people from the certified enterprises.



Medical service, now to workers of small-scaled enterprises

Workers' health center opened in Chang-won industrial complex on the 17th added to existing four centers across the nation

17th May

Free medical service is expanded to cover workers of the small-scaled enterprises in the major industrial complex across the country.

KOSHA newly opens the health center in Chang-won industrial complex in Gyung-nam Province and focuses on running the center.

The health center in Gyung-nam area is the fifth one following ones in Incheon, Gyung-gi, Gwangju area and Dae-gu which opens the center this year. These centers were established to extend the medical service to workers in the small-scaled enterprises, whose health is in the loophole of the care.

*The five health centers are located in : Nam-dong Industrial Complex in Incheon, Banwol-Sihwa Industrial Complex in Gyung-gi Province, Ha-nam Industrial Complex in Gwang-ju, Seong-seo Industrial Complex in Dae-gu and Chang-won Industrial Complex in Gyung-nam Province.

The workers' health center would provide free medical service to those who are working in small-scaled enterprises who usually have difficulties in managing their health because of time shortage and economic reasons.

As for large-scaled enterprises, they have their own infirmary within the work places to help workers consult with experts on their diseases or health state. Enterprises with workers of less than 50, however, do not have a legal obligation to appoint a medical manager. Further they are lack of their financial capability to support the health of workers, finding themselves at the loophole of workers' health management.

Last year's statistics on occupational accident show that 4,565 occupational illnesses cases out of 7,247 were from enterprises with workers of less than fifty, meaning that roughly 7 out of 10 or 62.9% of cases are coming from small-scaled enterprises.

In that sense, workers' health centers are seen as the doctor of workers in the small-scaled enterprises, giving the workers chance to have infirmary. The center will be run by local-based university hospitals, professional OSH organizations to find out risk factors in the workplace and provide preventative measures.

For the newly opened health center in Gyung-nam area, 'Teo occupational environmental medical center' will run the health center, which is the first professional medical center dealing with occupational and environmental medical issues, established by experts in the industry.

*Organizations that run the workers' health centers are : Yeon-se University Health System in Incheon, Korea university Ansan hospital in Gyung-gi province, Jo-seon university hospital in Gwang-ju and Kye-myung university Dongsan Medical Center in Daegu.

Occupational and environmental doctors, physical therapists, nurses, clinical psychologists, professional engineers of industrial hygiene management, engineers of ergonomics, exercise instructors and other experts would provide occupational health service including preventative program of musculoskeletal disorders and cerebro and cardiovascular diseases while giving consult on occupational illnesses and job stress or ways to control the stress.

The centers open 9 a.m. and close 9 p.m. so that workers can enjoy the service after the work. If an enterprise wants to register its workers to have service, it should make a book prior to the check-up.

A person from the Occupational Health Department said that KOSHA plans to open around 48 workers' health center nationwide to contribute to creating healthy working environment and to improving the quality of workers' life.



Uninvited guest of summer : suffocation

KOSHA's warning of suffocation

Deaths from suffocation under manholes or in septic tanks are the most frequent in June and July with 73 cases for the past decade.

1st June

The safety warning lights are flashing red for people working in the manholes, septic tanks or sewage-treatment facilities due to rapidly rising temperature and torrential rain in Summer of Korea.

According to KOSHA(President Hun-Ki Baek)'s accident statistics, fatal suffocation cases have recorded the highest in June and July over the past ten years.

Monthly death status due to suffocation over the last 10 years

(From 2002 to 2011, unit: cases)

Month	total	1	2	3	4	5	6	7	8	9	10	11	12
Fatal suffocation	171	6	8	10	10	11	30	28	15	17	15	7	4

In summer, rising temperature and intensive rain facilitate reproduction of microorganism within a confined space, decaying organism easily.

Especially in places like under the manhole and septic tanks where usually access is limited with bad ventilation have high possibility of suffocating workers as oxygen is easily dried up and poisonous gas such as hydrogen sulfide that provokes suffocation increases.

When people are exposed to less than 18 percent of oxygen concentration, their pulse may go up with nausea, hyperpnea or dizziness. If the oxygen concentration goes below 10 percent, they could lose their consciousness or even die as they stop breathing in a few minutes.

What is more it is repeated that a rescuer also dies while trying and save the worker who passed out with suffocation, because of a low oxygen concentration rate.

Suffocation accidents in summer occur the most in under the manholes followed by in sewage treatment facilities, storage tanks, chemical facilities and inside the ships.

KOSHA Newsletter



Death status due to suffocation by places over the past ten years

(From 2002 to 2011, unit: cases)

places	total	manhole	sewage treatment facility	storage tank, chemical facility	ship
fatal suffocation	171	44	39	25	20
pipe	food storage hopper	of using combustion tool	underground studio	others	
9	3	8	2	21	

Especially, existing law on sewerage system forces owners of individual sewerage facility to clean inside the septic tank more than one time a year encouraging the owners pay more attention to prevent accidents.

MOEL(The Ministry of employment and labor) and KOSHA issues suffocation warning to work places as summer, the season witnesses frequent suffocation accidents at confined spaces, comes. They also plan to train people working at confined spaces such as tank cleaning company, and support them to back up technologies, with three prevention principles:

- ▶ check the concentration rate of poisonous gas rate before and during the work;
- ▶ ventilate the air before and during the work
- ▶ wear the respiratory protective equipment before going in to the confined space to rescue the suffocated.

Alongside with these efforts, KOSHA rents devices such as oxygen indicator, poisonous gas measuring instrument, and portable ventilation fan, free of charge or it backs up part of costs for companies to purchase.

Director Jeong MS of Occupational Health Team at KOSHA said “Suffocation accidents in summer can be prevented by just paying attention to it” encouraging workers to recognize the danger of working at a confined space and to stick to the safety principles.



Konkuk University hospital first to win the safety and health management system

Contribute to ensure fundamental OSH for workers and patients

30th May



President Hun-ki Baek(Second from left) took a picture with Director Yang of Konkuk university hospital

KOSHA(President Hun-ki Baek) certified Konkuk university hospital for its efforts to set up a comprehensive safety and health management system including: safety policies for hospital facilities and equipment ; workers' health promotion activities ; boosting awareness of safety and health of the executives.

The hospital received the KOSHA 18001 on 30 May, being the first winner as a medical organization.

※KOSHA : Korea Occupational Safety and Health Agency

Certification ceremony

- ▶ time: 10:00 on Wed, 30 May, 2012
- ▶ venue: meeting room on the 12th floor at Konkuk university hospital
- ▶ participants: President Hun-ki Baek, Director Yang of Konkuk university hospital and others

KOSHA has been giving KOSHA 18001 which is an advanced OSH control system, since 1999. The agency goes through review of management strategy, risk

assessment, improvement activities and workers' consult towards candidate companies comprehensively to certify the best among them.

As of now 1,113 enterprises have been certified and this is the first time that a medical organization received it.

- ❖ Enterprises certified with KOSHA 18001 reports decreased occupational accident rates by over 20% compared to those who were not. In addition, they are usually enjoying reduced premium of workers' compensation, improved labor management relations and increased awareness about their own company.

KOSHA reviewed OSH manual and guidelines for the hospital's room and injection room, evaluating cleaning team and partner of the hospital. Also the agency identified safety and health management policies of the hospital through interviewing of executives. The hospital applied for the certification July last year and finally received the it after the whole process of review and inspection.

Taking this opportunity, the Konkuk university hospital plans to provide rehabilitation medical team with wrist protector and to distribute patient transportation team with lumbar pads in an effort to prevent musculoskeletal disorders for workers.

A person from Safety Certification Department said "I hope to see hospitals promote fundamental safety and health with OSH management system and this certification will be a chance to improve safety of workers as well as patients."



Winning the 2nd prize in the research sector of the 53rd Korean Society of Otorhinolaryngology-Head and Neck Surgery's Annual Spring Meeting

4th June

The free paper presented in the 53rd Korean Society of Otorhinolaryngology-Head and Neck Surgery's Annual Spring Meeting (held at Seoul St. Mary's Hospital on 20th May, 2012) won the 2nd prize followed by one 3rd prize.

This paper re-analyzed the result of some part from 'Study on relations between exposure to risky factors against special medical check-up recipients and their disease development(I), especially focusing on assessment of noisy workplace workers and their medical check-up results, which was 2010's chosen theme.

Title : Exacerbation of Noise-Induced Hearing Loss by Co-Exposure to Organic Solvents and Heavy Metals in Korean Workers

ABSTRACT

- ▶ **Background** : While noise exposure is undoubtedly a predominant contributor to occupational hearing loss, recent evidence suggests that exposure to ototoxic chemicals such as organic solvents and heavy metals in occupational environments could be additional contributors to hearing loss. Despite these implications, few epidemiologic studies regarding interaction via co-exposure in the workplace have been conducted.
- ▶ **Study design** : This study aimed to investigate whether the co-exposure to organic solvents and/or heavy metals in the workplace modify the risk of noise exposure on hearing ability. We examined 30,072 adult workers in a wide range of industries from the Korea National Occupational Health Surveillance 2009, focused on occupational audiological disorders. Air conduction hearing thresholds were measured at 0.5 to 6 kHz and pure-tone averages (PTA) (means of 2, 3, and 4 kHz) were computed. Occupational noise, heavy metal and organic solvent exposure levels were assessed on an industrial basis. Noise was measured at the daily eight-hour time-weighted average level (8HR TWA dB). Heavy metals and organic solvents were classified as "exposed" or not by industrial hygienists, respectively.
- ▶ **Results** : In a multivariate linear model, an increase in PTA with the occupational noise level was observed to be significantly higher in subjects exposed to heavy metals and organic chemicals as compared to unexposed subjects.
- ▶ **Conclusion** : Our results provide epidemiological evidence that co-exposure to heavy metals and/or organic solvents may exacerbate the effect of noise exposure on hearing loss in a human population. Our findings support the need for general monitoring of ototoxic occupational environments with noise limits so as to design prevention strategies against work-related hearing loss.

Correspondence to
KyooSang Kim
E-Mail kobawoo@kosha.net



Sharing OSH experience with Vietnam

KOSHA invite the Vietnamese public officials, to sign MOU on technological cooperation

9th May

KOSHA(President: Hun-ki Baek) welcomed public officials of Ministry of Labor, Invalids and Social Affairs (MOLISA) who visit Korea through 'training program of the Vietnamese public officials in OSH' to deepen a mutual cooperation by renewing the MOU in the OSH area.

President Hun-ki Baek signed the MOU at KOSHA with Vice Minister Bui Hong Linh of MOLISA on 10, May (Thu) to enhance the level of technology in the OSH.

Outline of the MOU

- ▶ When : 10:00 ~12:00, Thu 10, May
- ▶ Where : headquarters of KOSHA(Incheon, Korea)
- ▶ Contracting parties: president Hun-ki Baek of KOSHA, Vice Minister Bui Hong Linh of MOLISA

The MOU period was renewed from 2012 to 2015 with existing terms and conditions of technological cooperation agreed in 2009. The renewed MOU still includes existing safety and health training, training invitation, technological consultancy and related materials provided to the Vietnamese part. Further, both of them agreed to back the cooperation businesses of KOICA and MOLISA.

※outcome of the business with Vietnam from 2001 to 2011 : 14 training invitations and joint research with 45 people, and 19 times of local technological consulting with 26 people.

Now KOSHA is training civil servants of Vietnam for a week until 11th from 7th this month under the goal of enhancing the level of OSH in Vietnam.

-Participants are fifteen including Vice Minister of MOLISA, Vice Director of NILP, and other high ranking

officials. The programs they receive consist of : sharing Korea's OSH progress ; education on theory and application of risk assessment ; experiencing Korean traditional culture.

President Baek said "This MOU will serve as an opportunity to deepen the bilateral relationship in the OSH industry." adding that he hopes to witness both nations share more in the OSH technology which might be contributing to practical progress in Vietnam's OSH area.



President Baek of KOSHA (first from left) and Vice Minister Bui Hong Linh of MOLISA (Second from left)

OSH, essential factor for advanced management

Essential factor for advanced management was focused at OSH workshop for management level

12th June

KOSHA(President Hun-ki Baek) hosted 'Occupational safety and health for the management' organized to help the dissemination of safety culture, at Lavidor resort on 12, June.

Through his special lecture 'Challenges and opportunities of OSH, and leadership of the management', president Baek stressed the importance of occupational safety and health as it has great impact on the corporate management. The lecture earned empathy from the participants.

Around 200 leaders participated in this event from business association of 16 companies in Hwasung and Hwa-sung Chamber of Commerce and Industry. The 64th Hwa-sung business leaders' forum was held together with this event.



Domestic Steel Industry's Reaffirm commitment to OSH

Top five steel companies intensify OSH support for their partners
KOSHA and MOEL co-host 'Leader's meeting for the OSH in the steel industry'

12th June



Mr. SJ LEE, Director General for Technology at KOSHA, 4th from the right of above picture

According to the statistics on occupational accidents, 96.6% of the steel workplaces are worksite with less than fifty workers and 57.9% of them are worksite with less than five workers at small scale business sector.

The workplaces with less than fifty workers, usually partners of the top five steel-making companies, recorded 2,442 cases of accidents or 84.9% of the whole steel worksites.

This means over 8 out of 10 steel workers who experienced accidents are working at the place with workers less than fifty. Looking by types, the most common accidents were : slip & trips, crushes, falls, and being struck by falling or flying objects.

Meanwhile the accident status as of April this year shows 16 partners of the top five steel companies witnessed 12 cases of accidents, reduced by 17 cases this year on last year. The whole industry's accident rates, however, increased by 96 cases from 848 to be 944.

KOSHA Newsletter



Accident cases are on the rise as the mill's operating ratio goes up with growing steel production and export for the first quarter of this year.

On the backdrop, the Ministry of Employment and Labor and KOSHA(president Hun-ki Baek) organized the 'Leader's meeting for the OSH in the steel industry' at POSCO's Global Safety Center located in Pohang, Gyung-book on 12 June, together with the top five domestic steel companies to find ways to support OSH in their steel mills.

※ The top five steel companies are : POSCO, Hyundai's steel mill in Dang-jin, Dongguk's steel mill in Po-hang, Dongbu's steel mill in Dang-jin and Hyundai Hysco.

The 'Leader's meeting for the OSH in the steel industry' serves as a venue to deepen the partnership between KOSHA, MOEL and steel companies recognized as the top five in the steel industry last year, and to enhance the level of OSH for domestic steel industry.

Participants in this meeting forged 'Win-win program for safety and health' program that focuses on giving risk assessment and technical assistance to partners of the top five steel companies.

Based on the 'Win-win program for safety and health', both mother companies and their partners will launch a cooperative body. Meanwhile the mother companies assess the OSH status, and set up and implement plans to improve OSH. KOSHA also plans to finance consulting for setting up the OSH management system to the steel mills.

Leaders from the top five steel companies including POSCO and Hyundai steel also gave presentations on their efforts to improve OSH for their partners.

A person from KOSHA said that the steel industry affects many parts in Korea's economy and industries as it supplies the entire industry with primary materials, adding that he hopes to see advancement of OSH in the steel industry through dissemination of the 'Win-win program for safety and health'.





Example of Serious Accident in Construction

Gang Form Fall During Installation

1. Construction Outline

- Site : ○ ○ ○ ○ ○ Apartment house (tenement type) construction by ○ ○ Construction Co., Ltd.
- Period : Jan 2008 ~ May 2009
- Scale : 1 building of B1 ~ F15 apartment
- Price : KRW 42,680,000,000
- Process Rate : 21%
- Main Process : Gang form installation
- Damage : 1 death
- Date of Accident : Jun. 13, 2008

2. Accident Outline

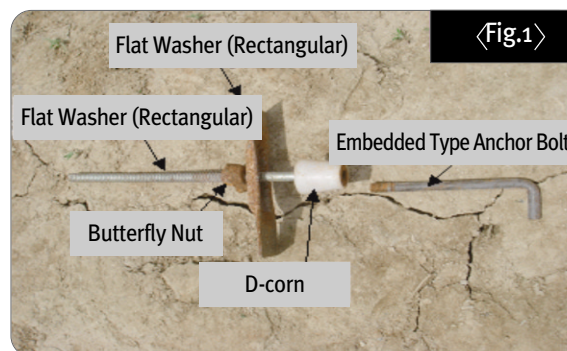
- Jun. 13, 2008(Fri.) at 06:57
- ○ ○ ○ ○ ○ apartment house construction site by ○ ○ Construction Co., Ltd.,
- Victim: subcontractor member (male, 38 years old, formwork)
- Fell on the concrete at the first floor (H=5.0m) with the “detached” gang form
- Occurred when victim climbed up to the work place to extend the 2-level cage to the gang form installed outside the second floor.

3. Accident Process

- Jun. 13, 2008(Fri.), 06:00
 - The victim (male, 38 years old, formwork), member of ○ ○ Construction Co., Ltd, together with 4 co-workers came and started to extend the 2-level cage to the gang form installed outside the second floor at 6:30.
- 06:57
 - When the victim climbed up to the work plate of the gang form to extend the 2-level cage to the gang form (width : 0.475m, height: 3.07m) in the wing wall at the center of the balcony in the second floor, the gang form detached from the wall and the victim fell on the concrete at the first floor (H_5.0m) with the gang form.

4. Installation status of gang form's anchor bolt in balcony

- To support the gang form, as shown in <Fig.1>, “Embedded Type Anchor Bolt” and “D-corn” should be embedded in the concrete wall and be tightened with “Bolt and Nut” iron.



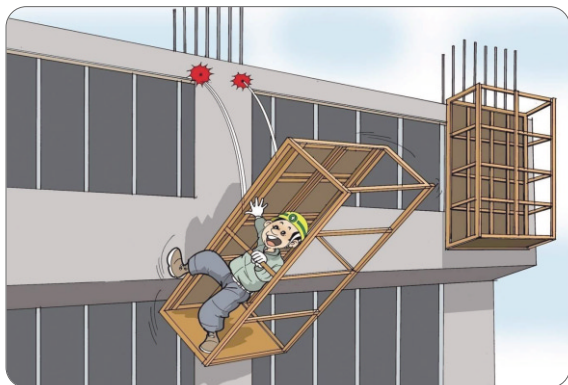
- It was predicted that the anchor bolt to support the gang form in this site did not have an “Embedded Type Anchor Bolt” that should be embedded in concrete wall as shown in <Fig.2>



- Therefore, the gang form detached from the wall as the victim stepped on the work plate.



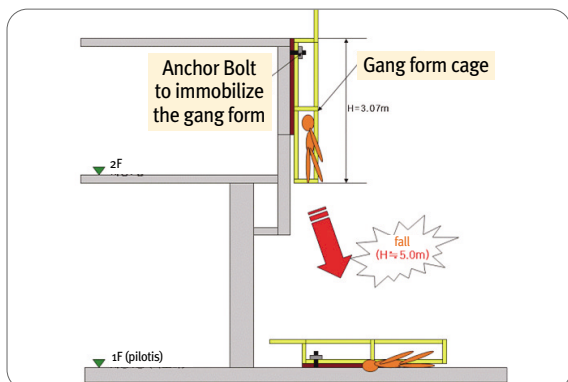
• Accident Situational Map (Normal)



• Gang form detached from wall and the concrete floor where the victim fell



• Accident Situational Map (Detailed)



• Installation spot for the anchor bolt to support gang form



• Front View of the Accident Site (Outer Wall of the Balcony on the 2F)



• Installation of a gang form, same with the gang form involved in the accident





5. Accident Prevention

- Did not use an anchor bolt to support gang form
 - An anchor bolt (embedded type) should be “embedded” in the concrete before the wall concrete is placed, after curing concrete, to support a gang form safely.
 - But in this case/site, embedded type anchor bolt was not installed during the gang form installation. As a result, the gang form detached from the wall when the victim climbed on the work plate and both fell on the concrete floor, resulting to the death of the victim.
- Did not wear safety helmet properly and worked without a safety belt
 - Workers must wear safety helmet and safety belt to protect their body while working on a gang form which may accidentally fall.
 - However, the victim did not tighten the safety helmet’s chin strap and did not wear a safety belt. As a result, his head was not protected when he fell.
- Install an anchor bolt to support the gang form firmly
 - Embedded type anchor bolt should be embedded in the concrete firmly before placing the wall concrete after curing to support gang form safely.
- Wear safety helmet and safety belt properly
 - Workers must wear safety helmet, tighten its chin strap and wear a safety belt to protect their body when working on a gang form which may have a tendency to fall.

