

Main OSH Policy

- o Innovative Industrial Accident Prevention Strategies [Inno-Vision 2005].
 - Strategies to achieve a Safe and Healthy Industrial Society -

With the recent changes of industrial structure and environment, structural factors such as an increase of small-sized businesses and part time workers, which are raising concerns over safety management Protection of human resource is being more important and increasing demand of customer service to be provided by businesses. international movement to standardize the safety and health measures is being established and trade barriers introduced in a full-scale. Like those above, the environment surrounding us has been changing fast and industries in the world are trying hard to keep up with.

Considering the circumstances, the [Inno-Vision 2005] which was announced on July 9 by the Korea Occupational Safety and Health Agency (KOSHA), contains a timely message urging the industry to take prompt actions to improve industrial safety and health.



The 'Inno-Vision 2005' which is aiming to reduce accident rate as lower as that of advanced countries by 2005, consists of specific strategies to realize its mission 'to Promote a Safe and Healthy Industrial Society' by reviewing and assessing overall performance of its previous accident prevention projects, and prioritizing tasks to address.

In order to achieve this, first of all, it will supervise and support high-risk enterprises in stages by selecting 15,000 businesses experiencing accidents consecutive times and also specially manage 6,000 enterprises, which didn't comply with working environment standard. Furthermore, the

agency will focus on managing workers at high-risk and safety neglected by supporting safety and health management activities of the agricultural, forest, and marine product industries, protecting women workers' health, assisting small businesses with less than 5 employees with the 「Safety Helpers」. The below is major points of the strategy

* INNO-VISION: INNOVATION+VISION

- 1. Background
- ♦ Hovering occupational Accident Rate.

The KOSHA had managed to reduce occupational accident rates to less than 1% since 1995 through a variety of accident prevention projects developed and performed for 15 years. However for the recent years, there has been little improvement in terms of accident rate.

| | 1987 | | 1988 | | 2001 |
|-------------------------|---------|---------|--------|---------------------|--------|
| Accident Rates : | 2.66% | (△74%) | 0.68% | (13%) | 0.77% |
| No. of People Injured : | 142,596 | (△ 64%) | 51,514 | → (58%) | 81,434 |

◆ Rapid change of environmental condition of occupational safety and health

The environmental aspects of occupational safety and health have changed rapidly with the increase of high-risk, small-size enterprises and casual workers contributed to accident increasing. There are also another factors such as the emphasis on protection of human resource and customer's demand to increase the service quality as well as the international standardization movement.

< Increase of Businesses with less than 5 Employees >

| | 31 Dec 2000 | 31 Dec 2001 | Increase | Percent(%) |
|-----------------|-------------|-------------|-----------|------------|
| No. of Business | 706,231 | 909,461 | 203,230 | 29 |
| (Less than 5) | (430,212) | (588,721) | (158,509) | (37) |
| No. of Injured | 68,976 | 81,434 | 12,458 | 18 |
| (Less than 5) | (8,139) | (17,324) | (9,185) | (113) |

(Source: Ministry of Labor)

♦ Strategy is Required to Cope with Changes and Address Current Issues.

With the need of enhancing core capabilities to response to these environmental changes and innovative accident prevention strategies, we have established and performed a mid-term accident prevention strategy, [Inno-Vision 2005]

- 2. Vision and Strategy
- ♦ We have subdivided the KOSHA's management policy into 4 categories; business, customer, human resource, and culture:
- Demonstrate the best technical abilities
- Realize the highest customer satisfaction
- Manage the human resource progressively
- Create the innovative constitution culture
- ♦ 'Inno-Vision 2005' has established 3 management strategies knowledge-based management, innovative business management and customer management to achieve the mission of the agency, 'to Promote a Safe and Healthy Industrial Society' by practicing our management policies.



- 3. Major Actions
- ♦ Support the activities to reduce the possibilities of accident that can be occurred easily

Reorganize general technical support by incorporating similar technical support projects aiming at accident prevention, Overall support by stages for high-risk enterprises experiencing repeated

accidents (15,000 businesses), improve sites exceeding the exposure standard of working environment (about 6,000), structure and operate a wide area network of occupational disease prevention system, and support construction companies with a poor condition to implement safety measures

Support the Accident Prevention Activities at High-Risk and Safety Neglected

Help high-risk and safety neglected class including new comers into the industry with technology, fund and training to facilitate their understandings on safety and health. Support agricultural, forest and marine product industries, and women's health and safety protection, address hazardous material transportation measures, and assist businesses with less than 5 employees with the Safety Helpers.

◆ Support of Safety Improvement of Machinery, Equipment and Facility

To enhance domestic and international competitiveness of business by supporting to secure safety while using machinery, equipment and facility Provide technical aid of risk assessment relate to Manufactured Goods Responsibility Act; introduce a precision diagnostic system for process and facilities, expand and reorganize certification system by establishing safety certification institute and operating general laboratory; reintroduce regular inspection of dangerous machinery like press, shearing machine; Rearing self-inspection agents and expand government funded inspection support.

◆ Activation of R&D in Safety and Health Technology

Support to enhance national health competitiveness through industrial accident prevention projects, establishment of national safety and health policies, and standardization of technologies Lead problem-focused, active application R&D, enhance research activities into occupational and related diseases, develop and distribute hazardous facility and process improvement technologies, standardize safety and health measures, and expand industrial accident inspection and set prevention measures to block occurrences of the same kind accident.

◆ Enlarge technical Information Service Expansion on Safety and Health

Develop and distribute technical information data sheet to meet the demand from diverse prospective demanders; secure information infrastructure and expand safety and health community boundaries and distribute safety and health practice handbook for each business sectors, structure high-speed telecommunication service infrastructure; operate an Internet

broadcasting station; implement a general knowledge management system.

♦ Support of Advanced Safety and Health Management System

Expand safety and health service to help business management, develop and distribute advanced safety and health management techniques in order to facilitate self-regulating safety management. Construct hazardous material management system including establishing a material safety and health information center; assist safety and health management system and activate certification system; expand the scope of business subjected to submit a process safety report and secure professional review, introduce advance consulting system for manufacturing, installation, and relocation; Broaden the extent of construction business subjected to submit hazardous risk prevention plan

♦ Magnify Safety and Health Training centered on demanders

Operate the safety and health training courses responding to the workers' needs by insuring substantiality of the training to support labor-management safety and health activities, develop and operate courses which can do much toward reducing accidents; Establish a wide-area training support center and expand specialized training programs; operate an instructor pool system and implement regular courses; introduce an in-house safety and health training total service system; open a training course for dangerous machinery and facility operators; and develop and utilize editable training materials

♦ Make Safety and Health essential

Support to improve the safety and health awareness nation-wide; activate the monthly Safety Day through a [good neighborhood] system; continuous support of school safety education, promote the movement [reduce accidental falls and contractions to half], enhance promotion of the agency's image; construct a safety and health exhibition building equipped with training and promotion facilities; support activities of private safety and health association

♦ Support of Industrial Accident Prevention Projects

Support the nation's safety and health policies and accident prevention projects to be efficient while securing timely and accurate strategy and information available for occupational accident projects, Complete statistical information system on the occupational accident causation and improve the statistical reckoning system extend international cooperation; establish management

performance assessment system, introduce knowledge-based management; planning a selective amendment to alleviate safety related regulations

- 4. Expectations
- ◆ Secure the basis to achieve occupational accident rate equivalent to that of advanced countries
- Secure abilities to respond changes of environmental factors and customers' needs
- **♦** Enhance competitiveness through management innovation voluntarily
- o Reduce Electrical Accident including Electric Shock.
 - Ministry of Commerce, Industry and Energy plans to tighten Installer registration and facility inspection standards

 To reduce electrical accident including fire and electric shock, the standards for electrical installer

 business registration, and safety and management of vulnerable facilities will be tightened.

MOCIE announced on August 8 its general measures to decrease electrical accident rates consisting of 8 measures to secure safety from the beginning stage of electrical installation to follow up after installation.

According to the measures, MOCIE will amend the Electrical Installation Business Act to clamp control of electrical business registration standards including up to W30 million in capital with a registered office. It is expected to prevent a disqualified business entering the market.

Also, it is decided to classify 3 classes 'regular check-up per 1~ 3 years by the level of danger of electrical facilities in residential building which currently has been reviewed once for two years.

An inspection as occasion demands also is included in the measures for electrical products. If there is any violation of laws, the management standards also are strengthened to be able to order for improvement or disposal of the products.

For the disputable electrical safety manager agency system with dumping price bidding, it plans to introduce 3 times strikeout and standard contract articles. To prevent reoccurrences of major electrical accidents including fire, electric shock and blackout, it is going to utilize its accident inspection function.

On top of these, it will constitute a special team with relevant electrical safety institutions to consult on improvement of regulations for electrical safety while raising the nation's awareness on electrical safety through progressive training and promotion activities.

Last year, in Korea, fires have occurred and 34% of them was due to electrical reasons which were

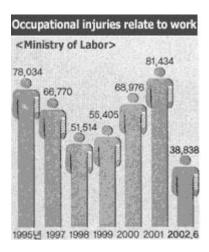
much higher than U.S.A. (18.9%), Japan (11.8%), and Taiwan (13.7%) while electric shock accident rates were shown 2.26 per 1 million people compared to 2.03 (U.S.A.) and 0.27 (Japan).

Occupational Safety & Health Statistics

- MOL analyzes accident statistics with striking increase in small-sized enterprises.
 - Decreased accident rates with increasing number of the injured –
 For the first half of this year from January to June, accident rates stood at 0.37% indicating a decrease from the same period of last year but the number of people injured increased because of the rising numbers of enterprises and workers thanks to the overall economic upturn.

Especially, occupational patients increased with brain, coronary and blood vessel related diseases and heavy metal intoxication, pneumoconiosis, and laborious work-related illnesses. According to the report of the Ministry of Labor on the industrial accidents for the first half of this year which was announced on 20th September, the number of industrial accident victims have been increased to 38,838, up 3.42% with 36,022 for occupational accidents and 2,816 for occupational diseases.

Occupational disease victims have been increased from 2,609 to 2,816 by 7.93% to contribute to the increase of 8.2% of the number of death from 573 to 620. Among the occupational illnesses, traditional hearing loss and heavy metal poisoning victims are recorded at 735, up 29.2% (166 people) while work- related victims have been increased to 2,081, up 2% (41). Looking at types of the work-related illnesses, brain, heart and blood vessel related diseases have increased to 1,105, up 2.9% (31), laborious work-related diseases to 541, up 44.7% (167) while lumbago illness patients decreased to 335, down 23.2% (101). Occupational accidents have been raised by 3.09% from the first half of previous year with 622 death tolls.



For the overall industrial accidents including occupational accidents and diseases, 70.57% of total has happened in less than 50 employee enterprises, and 22.42% in less than 5 employee

enterprises. Among the victims, 49.28% had worked for less than 6 months at the workplaces and by ages, 29.62% was workers aged 50 or older.

By days, Monday has shown the highest occurrences (16.7%) followed by Friday (16.14%), Thursday (15.94%). Especially, with the brisk construction business, the first half of this year, accidents at construction sites have increased as much as 33.41% with increased death toll by 14.62%.

Spokesperson of the ministry said that the accidents showed an increase at construction sites and in small-sized businesses with the overall economic recovery. 'We will inspect distribution and wearing of protective equipment at construction sites while enhancing safety and health support activities for small-sized enterprises', he added.

• UPDATE in KOREA

Over 4 trillion won Damage by Typhoon.

Typhoon 'Rusa' which swept over the country has left a property damage over 5 trillion won.

According to the report of National Disaster Prevention and Countermeasures Headquarters (NDPCH), based on the information collected on September 7, the damage on properties has reached 5,051,600 million won so far.

The largest damage was on rivers with 5,857 places amounted to 1,558,300 million won, followed by ships and farmland (296,700 million won), marine farming and other related facilities (1,930,700 million won), 1,562 roads and bridges (761,500 million won), 9,520 buildings (136,300 million won), and 4,769 irrigation facilities and tide embankments (368,100 million won).

It is the largest typhoon inflicted damage in Korea, as much as 5 times of the typhoon 'Olga' in 1999 when the property damage reached 1,070,400 million won.

However NDPCH predicts that additional damage amount would not be added to much as the investigation of the isolated areas in Gangwon and Gyungbuk has almost been completed.

The casualties have been confirmed as 184 with 122 deaths and 62 missing. However, it is likely to increase to over 200 as NDPCH is currently investigating whether the other 27 buried or lost was caused by the typhoon. The below is a brief list of damage resulted from the typhoon:

Casualties: 184 (death 122, missing 62)

- District: Gangwon 101, Gyungbuk 31, Gyungnam 16, Jeonbuk 14, Jeonnam 11, Choongbuk 8, Ulsan

- Strong current 95, Landslide 56, Others 33

Evacuated Victims: 76,883 of 27,259 households (including temporarily sheltered)

Flood Damage: 17,046 buildings, crops 143,261ha

Property Damage: 5,051,600 million won

- Building: 9,520 136,300 mil.

- Road (bridge): 1,562(198) sites 761,500 mil.

- River, stream: 5,857 sites 1,558,300 mil.

- Irrigation (tide embankment): 4,769(123) sites 368,100 mil.

- Farm land, ship: 15,735ha, 1,040 ships 296,700 mil.

- Marine culture, small-sized facilities 1,930,700 mil.

The Federation of Korean Industries urges to enact a safety management law for business sites.

On August, the Federation of Korean Industries has proposed establishing an 'Industrial Safety Administration' (tentative designation) to incorporate and manage various safety facilities in business premises.

It has also demand to integrate safety management provisions scattered over individual laws into a Énterprise Premise Safety Management Law' (tentative) to address overlapped regulations with multiple government agencies on permit and license reviews and investigation, and enhance the effectiveness of the safety regulations.

The organization has recommended the above, saying that if the various legal systems and supervising agencies are remained, little improvement can be achieved with amendments of some provisions such as complex investigation system of individual laws.

On the other hand, the report of FKI, 'Overlapped Inspection Situation on Premise Safety' announced on that day points out that high pressure gas facility which is belonging to chemical facility risk management sector, is currently classified as 'hazardous material usage facility' in the Industrial Safety and Health Act and also registered as 'high pressure gas facility' in the High Pressure Gas Safety Management Act. Both of the Ministry of Labor (KOSHA) and the Ministry of Commerce, Industry and Energy (Korea Gas Safety Corporation, City Hall) are inspecting those facilities from Safety Plan Review and Site Inspection to Periodical Inspection, and Guidance and Check-up

For construction site safety management, there are overlapping two laws - Construction Technology Management Act and the Industrial Safety and Health Act, so the industry has to submit similar reports including safety management plan and hazard, danger prevention plan to the Ministry of Construction and Transportation and the Ministry of Labor, both of them perform a review and a site inspection.

For hazardous chemical materials, the Ministry of Environment, the Fire Department, and KOSHA has issued permits and licenses separately as well as performed safety investigations as the materials are described as hazardous material (Firefighting Act), harmful material (Industrial Safety and Health Act), and toxic material (Hazardous Chemical Material Management Act).

Opposing the easing of industrial safety regulation.

The Federation of Korean Trade Union has announced that they have recommended restoring the industrial safety and health related regulations which has been eased to have caused safety and health management system at risk on sites as well as threaten workers' lives and health.

The union indicates that the industrial accidents, which had showed a decrease in the statistics has increased since 1993 and rapidly risen in 2001 by 58.7% in the injured and 29.6% in death from 1998. They say that the main reason is the government who has introduced the mitigation of regulations thoughtlessly and unilaterally without considerations on the result of the action in economical and social aspects.

The union pointed out problems with the regulations less strict 'allowance of concurrent position and relaxing the obligatory employment of safety manager, exemption of regular inspection of press and lifts, exemption of safety and health training, release of obligatory submission of manufacturer's hazard and danger prevention plan' and made recommendation of restoring the regulations to the government.

o Postmen's consecutive deaths from overwork 'more mails with less postmen.

Postmen's death from overwork has occurred in succession due to rapidly increasing of mails and long-hours of work resulted from cutting jobs.

On 18, September, the Korean Postal Workers' Union disclosed that the number of postmen who died from overwork and car accident has reached 19 that already over the previous year's record at 18. On 4, September, postman Kwang Ho Lee (age: 31) of Gwangju Post Office, Gyunggi, collapsed to die while having a rest in a resting place for postmen after finishing his holiday work from 8:40 am to 8:00 pm. Another postman

The union has insisted that their long-time work and accumulated fatigue are the reasons of the death and the hospitalization, as an industrial accident. They say 'Postmen's severe working conditions with 16 hours work a day and 150 hours a month are driving them into death.'

The government had cut 5,742 jobs including postmen and post office clerks from 1998 to 2001. The number of postmen stood at 14,544 last year, which was not much changed from 13,404 postmen in 1997. However, the amount of mails had increased 40.1% with 6,420,230,000 from 4,583,790,000 in 1997 while parcels had rapidly increased from 22,704 in 1997 to 42,897 last year, up 88.9% with the increase of home shopping.

Since 1998, the workforce in the post offices had been cut with the expectation of decrease of postal service due to the Internet but it has turned out to be the opposite. It has increased with billing and promotional mails mainly from home shopping industry, instead.

To cope with the problem, this month, the Ministry of Information and Communication asked the Ministry of Planning and Budget to increase the number of postmen by 2,973 but MPB showed disapproval to the request saying that it was opposed to the 'small government'.

UPDATE in KOSHA

Held Training Sessions wih Industrial Safety and Health Personnel from 7 Asian Countries.

KOSHA operated a 'Training Program for Industrial Safety and Health Personnel of Developing Countries' to train them accident prevention techniques to deal with overall industrial safety and health matters. They was taught about Korea's industrial safety and health system, accident prevention skills and experiences. It was held to help the developing countries including China, Vietnam and Bangladesh prevent industrial accidents.

In the training, 15 high-ranking officials (Vice Chief of the National Safety Production Supervision Administration, China) and relevant personnel from 7 countries including China, Vietnam and Bangladesh.

The training session was held from July 6 till 23, which consisted of training program on Korea´s industrial safety and health system, and various accident prevention skills together with a field trip.



This training was hosted through KOSHA's application submitted with the plan of 'Training Program for Industrial Safety and Health Personnel of Developing Countries' when the Korea International Cooperation Agency (KOICA) under the Ministry of Foreign Affairs had researched on the demand of invitation and training programs for developing countries. This training was chosen through the final screening in KOICA in order to provide trainees of developing countries with accident prevention techniques together with Korea's industrial safety and health system, skills and experiences in order to improve relevant technologies in the countries as well as help them make efficient policies and improve practical matters. This training with 15 participants of high-ranking officials and employees in relevant institutions from 7 countries including China, Vietnam and Bangladeshi was operated to train them in overall safety and health issues including in the construction, educational and promotion industries to facilitate learning about Korea's industrial safety and health system, policies and general accident prevention techniques. Lecturers were the personnel of KOSHA who were specialized in each aspect and able to teach and discuss in English. The program was discussionoriented to induce trainees into direct participation and also consisted of various programs to help them understand Korean culture. The programs included sessions such as Korea's relevant laws and systems in relation to the industrial accident prevention (3 hrs), safety and health securing techniques in small enterprises (18 hrs), industrial heath including assessing and improving working conditions (13 hrs), construction safety including hands-on training (3 hrs), educational promotion (3 hrs), others (16 hrs) and field trip and hands-on site experiences.

KOSHA held the ceremony for the completion of 'Electro-Magnetic interference Testing Laboratory.
KOSAH celebrated the completion of 'Electro-Magnetic Interference (EMI) Testing Laboratory' together with the Ministry of Labor, European certification bodies including T V Reiland of Germany, KOSHA staff and other EMI test experts in its research center located in Gusan-dong, Bupyung-gu,

Inchon-si on July 11, 2002 at 4:30 pm.

The transition from the traditional analog-type control to digital control for industrial machinery and equipment, the possibility of faulty operation of the machinery and equipment due to the EMI is ever increasing. The EMI Testing Laboratory newly built can perform EMI test required to certify 'S-mark Safety Certification' which is issued to industrial machinery by the KOSHA and also pave the way for assisting new produce developing companies and exporters with EMI testing.



In Korea, we have tested EMI tests for home appliances and telecommunication equipment for 10 years but it has been difficult to support testing of industrial machinery and equipment. Therefore, with the completion of the laboratory construction, it will serve as a stepping-stone for related business including research into EMI safety on the industrial machinery and equipment.

KOSHA plans to establish EMI safety measures by posting EMI safe designing methods, EMI cases and countermeasures through its Internet home page to support the EMI testing as well as publishing and distributing relevant information.

In advanced countries, EMC regulations are being strengthened. For instance, the U.S. established FCC standards in 1934 to apply to every industrial sector including industrial machinery and equipment. For EC, the EMC Directive was prepared in 1989 to apply EMI testing to all products using electricity.

Trial performance of newly devoted falling preventive facility 'safety stand' for construction site.

KOSHA has given a trial performance upon its development of falling preventive facility for bridge construction on July 12, 2002 at the construction site of Gasan ~ Sangrim road (contractor: Daelim Corp. Head of the Construction Site: Jong Hyung Kim). Participants were Technology Director Kyun

Won Han, KOSHA, Jeong Ho Ha, Head of the Gumi Institute, KOSHA, and relevant personnel of the construction project.

Drawing interests from local construction companies and related people in the site, this demonstration held showed the falling preventive facility applicable to construction sites to prevent falling from open holes, especially for upper bridge works (PC beam and steel box-type bridge). It is designed to be economical and safe, and can be applied universally.

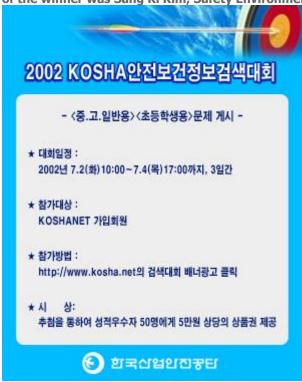
Construction Safety Team Leader Jae Seok Ko, Gumi Institute of KOSHA, who was in charge of development of the safety stand and its demonstration said that falling accidents were resulted from the absence of falling preventive facility and not wearing safety bar. 'KOSHA plans to distribute the falling preventive facility which has been developed especially for construction sites and expects it will contribute to preventing falling accidents which are counted for about 50% of total construction accidents', he said.



- o KOSHA held Internet OSH information searching competition.
 - Elementary and Adult Contests-

KOSHA hosted a safety and health information searching competition with members of KOSHANET (safety and health telecommunication service) in Korea from July 2 (Tue) through 4 (Thu) in the 35th national Industrial Safety and Health Week. It was a competition related to search domestic/international Internet as well as the information provided by KOSHA. This year, 23 safety education model schools - elementary, middle and high schools in the country participated. To raise the awareness of safety among young elementary student, we had posted different questions for them with the other, middle and high school students and adults.

This event was held to promote the abilities of the KOSHANET users to apply safe living and health information to everyday living. At the end of the contest, they drew lots to give 50,000 won worth cultural gift coupon to 50 of 72 participants who gave correct answers for the all-10 questions. One of the winner was Sang Ki Kim, Safety Environment Team, Daelim Corp.



o Deployment of additional mobile safety education buses.

KOSHA has provided training at site using mobile safety education bus equipped with various audiovisual materials including DVD, Video, notebook PC, and LCD projectors. So far, the troop of 17 mobile safety education buses have been driven to facilitate workers in the country to participate in the program utilizing easy-to-understand audio-visual media to enhance educational effects. The bus newly added to the existing troop is to be dispatched to workers in Cheonan city where a developing boom is on recently. In Cheonan, there have been large construction works and migration of manufacturers from Seoul. To cope with the increasing demand of safety and health training from the changes, KOSHA has introduced the bus remodeled from a medium-sized bus to its training institute in Cheonan. The maximum number of trainees is 26.





New Materials

o Distribution of 'Songs of Safety' for free for safe society and industrial sites