

- **MAIN TOPIC**

- Ministry of Labor begins 'CLEAN 3D project'

To improve the working environment of the workplace having less than 50 employees where accidents occur frequently, the Ministry of Labor decided to start, as part of the industrial safety and health program, CLEAN 3D(Danger, Dirtiness, Difficulty) project starting in the latter half of this year under which the Ministry intends to create 170,000 construction and manufacturing sites into "a safe and healthy workplace".

Large number of accidents occurred this year at industrial sites, and 68% of all accidents occurred at small business establishments having less than 50 employees. In connection with this, the Ministry plans to prevent industrial accidents and solve the shortage of workers by centrally managing such small workplace, drawing keen attention of many safety & health related officials.

The Ministry of Labor disclosed on August 21 that it will pour 76.2 billion won starting in the latter half of this year in the CLEAN 3D project under which the workplace having Danger, Dirtiness and Difficulty will be converted into a safe and healthy workplace by improving facilities and processes.

The Ministry of Labor believes that more than 2/3 of the total accidents occur at these small workplace because most such small establishments have unfavorable working environment, danger of the work itself, financial difficulties, while the labor and the management lack the awareness with respect to safety and health, and that they plan to tackle fundamental problems through the CLEAN 3D project.

The Ministry of Labor plans to apply one of the support projects from among the projects of the "Creation of the CLEAN 3D workplace", "provision of technical support for safety and health management", "safety and health management for subcontractors", and "the operation of the health-helper" to construction projects with contract amount not exceeding 300 million won and to some 170,000 manufacturing workplace with less than 50 employees.

The Ministry of Labor intends to provide up to 10 million won free of charge to improve the 3D elements such as Danger and Dirtiness. It will further organize a CLEAN 3D task force team, and award CLEAN workplace certification plaque issued in the name of the Minister of Labor. As for the 120,000 establishments that have already experienced, or are vulnerable to, accidents, customized safety and health technical support shall be provided through the Korea Occupational Safety & Health Agency (KOSHA) and professional private agencies. In the case of workplace having less than 5 employees, special examination will be carried out free of charge.

At the same time, the Ministry will organize a helper pool comprising college students related to safety and health, and retired safety and health managers. Through this, the Ministry plans to operate a health-helper system providing consulting services related to safety and health to some 30,000 workplace.

(The Korea Economic Daily, August 22, 2001)

- Ministry of Labor designates 70 construction companies as voluntary safety management companies
The Ministry of Labor announced recently that they had designated 70 construction companies possessing superior accident rate and ability to manage safety during the past 3 years, as voluntary safety management companies.

The companies designated as the voluntary safety management companies this time are the construction contractors having the converted accident rate less than the annual average converted accident rate during the past 3 years, of the 300 largest construction companies in terms of the contract amounts. These company will receive privileges in that examination of the dirtiness and danger prevention plan shall be exempted for construction works to be carried for 1 year (from August 1, 2001 to July 31, 2002), and the site confirmation inspection shall be exempted until the construction project is completed.

To break down the construction companies designated as the voluntary safety management companies this year, in terms of the contract amount, there were 36 companies falling within the 100th , 15 companies falling between the 100th and 200th, and 19 companies falling between the 201st and the 300th, with the companies falling within the 100th marking 51.4% of all companies.

In the meantime, 24 more companies including Lotte Engineering & Construction and Choongil Engineering and Construction were added to the list of the voluntary safety management companies. There were 46 companies that have been designated as the voluntary safety management companies consecutively following the previous year.

Meanwhile, the Ministry of Labor disclosed that it will continuously seek differentiated safety management system under which it will induce companies having ability to mange safety to voluntarily manage safety, and send surplus supervisory personnel to the workplace possessing ineffective safety management such as the small workplace having less than 5 employees.

- **UPDATE in KOREA**

- Accident decrease rate is 'evident' at workplace that have introduced KOSHA-OSHMS 2000.

Number of companies that voluntarily invest and take interest in safety and health to prevent accidents is being increased.

They seek voluntary safety management system under which they improve competitiveness by reducing indirect expenses and promote productivity through the aforementioned activities.

Especially, in the case of corporations that have constructed a voluntary safety management system through the KOSHA-OSHMS 2000 programs, average accident rate was only 0.18%, a level lower by 6 times than the average accident rate (1.21%) of the manufacturing industry last year. Moreover, additional effects including the harmony between the labor and the management created through the reduced industrial accidents, innovation of corporate image and the improved productivity were achieved.

The Korea Occupational Safety & Health Agency (KOSHA) disclosed on August 21 that as a result of the operating for 2 years the KOSHA program certification system introduced in July 1999 to lay foundation for the corporate voluntary safety management system, accidents at workplace have significantly decreased and the productivity have increased considerably.

KOSHA disclosed that, as a result of analysis of the accident rate prior to and after certifying 6 establishments that can be compared with and analyzed statics of industrial accidents among certificated establishments, there were 22 companies or 33.8% of the total companies that have had no accidents at all, and even the average accident rate has dropped to 0.18% as compared with 0.20% posted prior to certification.

This is only 1/6 of 1.21%, the average accident rate of the manufacturing industry last year. This proves that the KOSHA-OSHMS 2000(voluntary safety management certification) contributes to the reduction of the corporate accident rate, while the overall safety management status of the corporations introducing the certification system is good.

In actuality, Obok Foods Co., Ltd., a food producer operating in Busan area, has decreased accident rate from the existing 3.97% to 0.75% or a reduction by 5.3 times through the active facility investment by the management pursuant to KOSHA 2000 program. and the promotion of safety consciousness. During the settlement process of operating the voluntary safety management system , this company improved productivity by 33.3% through promoting business efficiency and readjusting the utilization of technical staff.


- Soun-sik Chang, Presidentn of the Elevator Safety Center selected as the awardee of the prize presented by the Safety and Health Hall of Fame International.

Sun-shik Chang, President of the Elevator Safety Center has been selected as an awardee of the prize presented by the Safety and Health Hall of Fame International (SHHOFI) sponsored by the National Safety Council (NSC) for the first time for an Oriental person.

The Safety and Health Hall of Fame International was established in 1987 by NSC to commend, on a yearly basis, leaders and pioneers who have significantly contributed to, and have offered services related to the safety and health and environment.

There are 61 persons who have been selected by SHHOFI as the awardee up to 2000. To break down by the nationality, there were 45 persons from the U.S., 6 persons from Britain, 2 persons from Brazil and Canada respectively, and 1 person each from Australia, South Africa, Italy, Germany and Sweden respectively. By field, there were 48 specialists in the industrial safety and health, 9 specialist in traffic safety, and 4 specialist in aviation safety.

Safety+Health

 **National Safety Council** August 2001


Three Inductees Named To Safety Hall of Fame

ITASCA, IL — Three safety and health professionals will be inducted into the Safety and Health Hall of Fame International at the 89th Annual National Safety Council Congress and Expo in Atlanta. The ceremony will take place Sept. 24. The new members are Soun-shik Chang, Daniel E. Della-Giustina and James W. Brinkley.


Soun-shik Chang was instrumental in the development of the Korean Occupational Safety and Health agency, and designed the Industrial Safety and Health Law, South Korea's first legal structure for the protection of workers. Chang also worked to establish a research arm to study accident prevention techniques, statistics and prevention of occupational diseases, now known as the Occupational Safety and Health Research Institute.

Daniel E. Della-Giustina, PhD, is credited with building the graduate program in safety and environmental management at West Virginia University, Morgantown, into one of the top programs in the country. He has written seven text books, and many corporate safety professionals have used those books to guide them in developing, implementing and maintaining company-wide safety and health programs. In addition, the Department of Transportation implemented his recommendations to improve the safe transportation of handicapped students. Della-Giustina also is a member of the *Safety+Health* editorial advisory board.


James W. Brinkley has been a pioneer in many aspects of safety and health. He was active in the development of the space shuttle for NASA. During the Vietnam War, Brinkley designed Air Force systems that reduced jet-ejection spinal cord injuries from 50 percent to 12 percent. His research in the field of automobile transportation established the basis for the production of air-bag restraints. He also is a founding member of the International Society for Fall Protection in Keswick, Ontario, and the author of "Fundamentals of Fall Protection."



Chang



Della-Giustina



Brinkley

- 'Children's Safety Park' to be opened

The opening of a children's safety park in Songpa-Gu, Seoul is expected to considerably contribute to the prevention of accidents.

The 'Children's Safety Park' was constructed following the tragic fire at Sealand to enhance children's sense of alertness with respect to accidents and to foster their ability to effectively cope with such accident. The Park will open at the end of this month.

According to Songpa-Gu, Seoul, the 'Children's Safety Park' was completed on a site of 883 pyongs inside the Chonma Park located in Seoul. Opening ceremony will be held on the 30th of the month, the 2nd anniversary of Sealand fire.

Following the tragic fire at Sealand, the Seoul City government and Songpa-gu felt that it was necessary to train children so that they can effectively react and take necessary measures in case of accidents. That is why they had poured 1.5 billion won and built this Children's Safety Park. The Children's Safety Park completed after 1 year and 7 months since its construction began features a plaza, walkway, green land and a monument bearing the names of 19 children who were victimized in the Sealand fire. The monument measures 1.4m wide and 4.7m high.

The 300-pyong safety experience training field and the 275-pyong safety playground installed within the park provide 4 categories of training-family safety, social safety, fire safety and emergency rescue operation. The park houses a variety of facilities and sets by which children can learn the technique of effectively coping with the situation in an emergency such as fire.

The Songpa-gu disclosed that they will first concentrate training on the Kinder Garten and primary school students and teachers in its area of jurisdiction and neighborhood. They will then expand the area of training on a gradual basis.

(Safety News, September 1, 2001)

- "Learn safety while enjoying camp life" The Citizens' Coalition for Safety plans to hold one day safety camp for 6 days starting on August 20.

A pleasant summer camp where traffic safety and other safety matters are learned was held for 1 week until the 25th of the month sponsored by the Citizens' Coalition for Safety.

The Citizens' Coalition for Safety (Co-representative: Song Cha, Choi Byong-yul and Kim Chun-gang) held the 5th Children's Traffic Camp from the 20th to the 25th of last month at the Stagio Traffic Park of Samsung Traffic Museum and the Everland park located in Yongin Gyeonggi Do Province.

Some 1,500 children and mother safety instructors across the country attended this camp. The event focused its efforts on teaching correct traffic safety culture by visiting traffic museums and based on experience-based traffic safety training. "Even though the weather was extremely hot, I had fun because I was able to learn something with my friends and solve quiz, too." said one child who came from Incheon. One mother safety instructor who attended the camp every year said " This camp was very helpful in enhancing children's safety awareness."

In connection with this, the Citizens' Coalition for Safety has been holding one-day camp since 1997. The camp grafts the summer vacation camp with safety training. Meanwhile, Daegu & Gyeongbuk Citizens' Coalition for Safety (Co- representative: Pak Se-hyon and Yum Hong-chol) and Ulsan Citizens Solidarity for Social Safety (Co-representative: Kim Kwang-tae, Kim Bok-man and Jung Yeong-ja) held a safety camp attended together with fathers and mothers for 1 night 2 days from the 11th to the 12th of last month respectively.

The safety camp was held at the International Hall of Yeungnam College, construction safety experience center and the West campus of Ulsan Scientific College respectively. "Safety awareness must be fostered from the childhood. In that respect, we can see the safe future Korean through our children who are here today." said Choi Byong-yul, the co-representative who visited Daegu, Gyeongbuk area camp. "Let us adults participate in the safety campaign so that children are not exposed to accidents and grow strong." added Choi Byong-Yul.

(Safety News September 1, 2001)

- KOSHA selected as an innovative, superior enterprise in the public sector.

The dangerous equipment and working improvement technologies developed by the Korea Occupational Safety & Health Agency (KOSHA) to prevent accidents at industrial sites have been selected as a superior example in the public sector innovation contest.

President Kim Dae Jung on June 28 at Chong Wa Dae (Blue House) inspected the results of the reform movement, and supervised the 3rd public sector reform meet to seek the future promotion directions.

President Kim then presented awards to 11 agencies including KOSHA for their superior examples among the 632 cases of reform implemented by the government and its subordinate institutions during the last year.

The dangerous equipment and working environment improvement technologies developed by KOSHA for which KOSHA received a prize from the Minister of Planning and Budget that day have saliently improved death accident rate, promoted competitiveness by improving productivity, and

saved economic loss resulting from accidents.

The Examination Committee composed of citizen organizations and private experts examined the 632 cases of reform submitted by the central government, subordinate agencies and lower governments in order to select cases featuring superior reform results.

"We will provide the safety equipments and working environment technologies developed so far to companies operating same types of equipment . At the same time, we will develop and supply new accident prevention technologies after selecting development projects each year according to the frequency of accident occurrence." disclosed Nak-Mun Baek General Manager of the Planning and Coordination Department of KOSHA.

According to Chong Wa Dae, in the meantime, the Presidential Prize was presented to the Public Procurement Service that has constructed an electronic procurement system, while the Prime Minister's prize was presented to the correction administration that opens the future of the correction bureau of the Ministry of Justice and the small-medium enterprise financing system developed by the Gyeongnam Province.



- **UPDATE in KOSHA**

- 'Dust protective mask electrostatic filtering materials' developed by the domestic technical staff for the first time in the country.

- This has an effect of substituting imported materials worth 2 billion won while activation of the personal protective equipment industry is expected.

In the past, Korea used to import total quantity of this materials. Now that the for dust protective mask electrostatic filtering materials have been developed by the domestic engineers, it carries an effect of substituting import worth some 2 billion won as well as of improving domestic protector manufacturing technologies.

Korea Occupational Safety & Health Agency (KOSHA)(president Moon, Hyung Nam) has disclosed that it, jointly with the Korea Institute of Machinery and Materials (KIMM), had spent 1 year and 5 months for research activities before developing technologies related to the manufacture of electrostatic filtering materials used for the dust protective mask after for the first time in the country, and the patent is pending.

The dust protective masks are used in dusty places such as the coal mines, construction or welding sites. The electrostatic filtering materials used for the dust protective masks require high-degree precision technologies. For this reason, only the U.S., Germany and Japan carry manufacturing technologies, and Korea used to import all quantity required.

The filtering materials developed this time effectively suck in fine dust measuring 0.3 micrometer that can induce pneumoconiosis to field workers. KOSHA expects this will significantly contribute to the prevention of pneumoconiosis to the workers at the coal mines, construction sites and welders.

In addition, KOSHA believes that if this technology is applied to the mass production of the materials, unit price will be about half the import price, saving 2 billion won annually as well as protecting workers at the same time.

"The electrostatic filtering material manufacturing technology developed this time is the practical technology that can contribute to the protection of the workers' safety and health and the prevention of occupational disease." said KOSHA chairman Moon, Hyung Nam. "We plan to transfer industrial property rights, such as the technology patents owned by KOSHA to related industries free of charge to lay a technical foundation to prevent industrial accidents occurring in Korea." added Mun.



- KOSHANET provides video training materials starting in August, and conducts Cyber training starting in September.

As there are more common people including the persons related to safety and health who take interest in safety and health, KOSHA plans to strengthen the safety and health information service provided through the KOSHANET(<http://www.kosha.net>).

KOSHA revealed last June that the number of real-name subscribers of KOSHANET of the general safety and health information service operated by KOSHA has exceeded 60,000 indicating that the number of common people and related experts looking for the safety and health information has increased recent.

Operation of KOSHANET started in July 1996. It is the nation's largest information memory containing enormous safety and health information of some 170,000 cases equivalent to 480,000 pages of A4 paper. In particular, the web server was developed and operated since last year, KOSHANET assumed an aspect of portal service that internally and externally provides latest information, mail service, member home page, and Internet search service.

KOSHA president Moon, Hyung Nam said "Now that the number of the KOSHANET subscribers reached 60,000, KOSHA intends to provide Cyber safety and health training along with video service to faithfully play the roles of an information guide in the safety and health sector."



- School safety seminar held for the principals of the elementary, middle and high schools in Yoesu area.
 - Offering an opportunity for the younger generation to recognize the importance of safety training and induce the establishment of safety culture -

KOSHA held a seminar to induce the establishment of safety culture at schools and activate safety training while the principals and assistant principals of the elementary, middle and high schools located in Yeosu area are attending.

KOSHA's Yeosu branch office held on July 13 a seminar to activate the school safety training. Some 100 persons including KOSHA chairman Moon, Hyung Nam, Yeosu mayor Joo Sung-yong, superintendent of education at Yeosu Education Administration Na Sung-Ok, related persons, and the principals and assistant principals of safety model school attended at the seminar.

Following the special lectures given by KOSHA chairman Moon, Hyong-nam, Ewha Women's University professor Lee Myong-sun presented a theme titled "Safety training activation program for middle schools", and the Daegu Inji Primary School assistant principal Jo Hee-tae, a theme titled "Practicing safety awareness through safety training provided at schools.". In addition, there were many other themes presented at the seminar.

The seminar held that day was attended by large number of the related persons of the school designated by KOSHA as a model safety training school and members of civilian organizations.

The designation of model safety schools is started in 1996 by this KOSHA to establish safety culture at schools ranging from kinder garten to high schools. This year, KOSHA selected 64 schools.

Once designated as a model safety school, subject of safety is included in the school research projects, and the school receives subsidies amounting to 5,000,000 won per year. "We plan to increase the number of model safety schools designated by KOSHA so that the students can have correct awareness with respect to safety from childhood." said a KOSHA official.

According to the Korea Statistics Yearbook issued by the National Statistical Office, there were 2,242 young boys who died in traffic accidents last year, which accounted for 47.61% of 4,709 fatalities.



- Briefing session held on "S" mark for Japanese machinery and tool makers.

To effectively expand the system of the S mark being recognized as a world-class certification system, a local briefing session was held for Japanese makers and related persons.

The Ministry of Labor and Korea Occupational Safety & Health Agency (KOSHA) held a briefing session on the S mark system. The briefing was held on the 26th of last month at the conference room located on the 3rd floor, New Stage building, Yokohama, Japan attended by some 100 machinery and tool makers including Tokyo Electron Limited, Hitachi, and Nikon.

As the interest in the domestic S mark system increases among Japanese makers and other related persons, this briefing session was held to induce more makers to apply for certification by providing information on overall S mark system.

"64 Japanese companies applied for certification of 167 cases in the past, and letters of certification have been issued for 53 cases among them." said an official from KOSHA. " There were many Japanese makers inquiring about the S mark certification up to now. Therefore, this briefing session was held to present detailed information and expand S mark certification services." added the official.

What is S(Safety) mark certification?

This is a system under which KOSHA (Center for Safety Inspection, Testing & Certification) confirms the safety related to the materials, structure and strength of certain products (machines and tools, in particular) and the reliability of the production and quality management process satisfy the certification criteria. Once certification is issued to a maker, the maker is allowed to put S marks (refer to the mark) symbolizing Safety on the maker's products, packages or in advertisement.

In general, the certification system is classified into unification, standardization, quality and safety

certifications depending on purposes, and into the product certification, new technology certification and system certification depending on the object of certification.

- Industrial Chemical Research Center acquires GLP (Good Laboratory Practice) certification in the testing of subacute suction toxicity

In March 2000, the Industrial Chemical Research Center of the Industrial Safety and Health Research Institute was designated by the National Environment Research Institute of the Ministry of Environment, the GLP certification agency of Korea, as "Chemical toxicity laboratory" handling 3 test sectors - acute suction toxicity, acute oral toxicity and reversion.

- On August 7, 2001 subacute suction toxicity testing was added. With this addition, the items to be tested by the GLP (Good Laboratory Practice) of the Industrial Chemical Research Center were increased to 6. - In the case of acute/subacute suction toxicity, in particular, the Center was designated as GLP institution for the first time in the nation, which means that the Center can now issue test reports satisfying the requirements of the OECD GLP.

The subacute suction toxicity test is an experiment carried out to determine the toxicity of the test sample by repeatedly sucking and exposing the test piece in and to the test objects for 1~3 months. The Center has thus become a GLP capable of conducting tests according to international levels utilizing the toxicity testing facilities of the Industrial Chemical Research Center.

This indicates that the quality level of the chemical suction toxicity test and research carried out by the Industrial Chemical Research Center of the Industrial Safety and Health Research Institute has been recognized.

- **NEW MATERIALS**

- 34 industrial accident prevention slogans and posters selected as the final winners

Due to the recent, rapidly changing industrial forms and repeated works and the rapid increase in the occurrences of occupational lower back pain, VDT syndrome and occupational muscle skeletal disorder, a seminar was convened in order to prepare aggressive countermeasure policies.

Especially, the KOSHA held the "International seminar for musculoskeletal disorders prevention" which was held at the COEX on April 19, with the participation of over 250 related persons, in order to expand the supply of advanced prevention techniques and inform of the international trends.

The occupational muscle skeletal disorder stemming from work had been on a decreasing trend from 1996 until 1998, but in the year 2000, the number was 814, showing an increase of 471 persons compared to the same period last year, or a 137% increase rate.

The increasing trend of these disorders causes to more interest in the recent increasing operation rate of the manufacturing industry, workers' aging, repeated works, workers' recognition changes, and industrial injury-related medical treatment.

Accordingly, subject presentations were held by inviting Korean and foreign experts in order to aggressively responding to the occupational muscle skeletal disorder that have been occurring due to the repeated works, the handling of heavy-weight commodities and the inappropriate postures caused by the recent diversified changes of the work process and the rapid increase of the use of the computer.

Meanwhile, during the seminar this time, such experts from the advanced countries as Chairman Waldemar Karwowski International Human Engineering Academy (IEA) and Chief Kazutak Kogi of Japan's Labor and Science Research Institute gave their presentations on the subject of "The Human Engineering Program of America's Ford Motors."



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