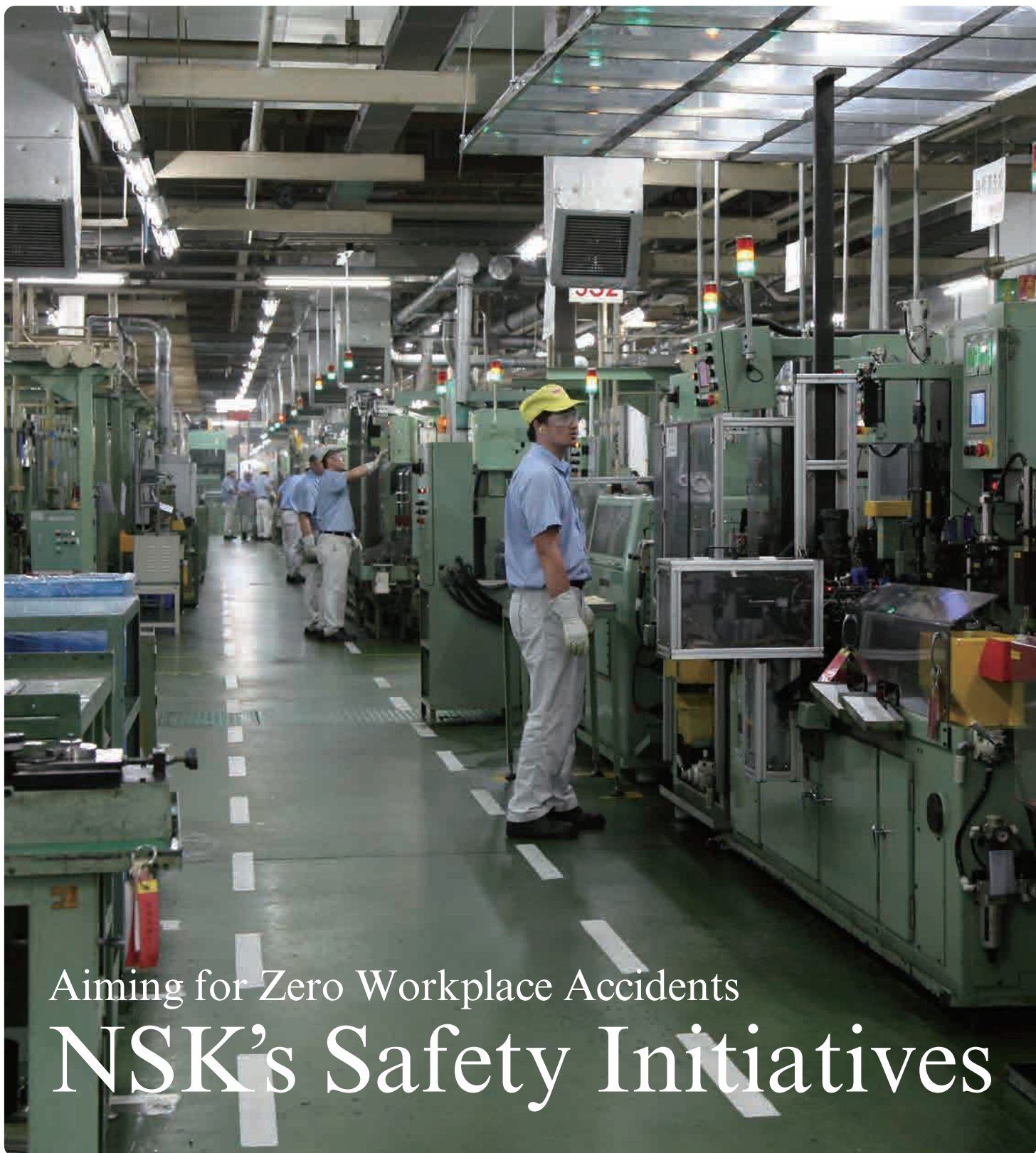


NSK NEWSLETTER

2015  
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# NSK

SETTING THE FUTURE IN MOTION



Aiming for Zero Workplace Accidents

## NSK's Safety Initiatives

# President's Column

NUMBER  
001

Mr. Uchiyama shares his thoughts.

## To “Set the future in motion,” It’s Important to Review the Basics.

Five months have passed since I was appointed President of NSK at the Shareholders Meeting and BOD meeting on June 24. What has changed? Probably the fact that people now look shocked when they run into me in the elevator. Please remember - I’m still the same person, so there’s no need to panic.

Since my appointment, I have been busy greeting customers and visiting our plants in Japan, as well as NSK sites in Malaysia, Indonesia, Korea, the U.S., and Mexico. As I traveled, I came to realize that the way a president communicates their views and intentions is one of the most important parts of the job.

The message I want to stress is that it is important to maintain a healthy sense of crisis about the future. Although we have steadily expanded our sales and profits over the past few years, the economic and business environment is shifting, and we can no longer expect significant growth in the EPS business and in China – the two key areas that have supported us in the past. This is the sense of crisis I am talking about. We need to think about this now, when we still have a strong foothold, so that we can discuss how to “set the future in motion” and achieve the next stage of growth. To give us a strong base from which to embark on new endeavors, we first need consider how to make our current operations as efficient and competitive as possible. Our performance in these areas will determine the amount of resources we can devote to new businesses and technologies.

To determine where our next stage of growth will come from, and to consider our goal of “setting the future in motion” described in NSK Vision 2026, we need to go back to the basics and look at the way we approach our work. If we take on new challenges without a firm grasp of the fundamentals, we will generate green shoots—but they will have weak roots. I have communicated the importance of focusing on the basics to our employees at all the sites I visited. This point was actually a realization of mine during an interesting discussion with one of our customers.

This particular (and well-known) manufacturer is currently working across the company to adopt a new approach to manufacturing. The initiative started several years ago when their newly appointed president delivered



Toshihiro  
Uchiyama  
President and CEO

a message to their employees: “let’s make great products.” The employees at this company already believed they made fantastic products—better than anyone else. “We’ve been making great products for a long time,” they retorted. Needless to say, the reaction to the president’s proposal was lukewarm at best. But when they started benchmarking against competitors, they found some areas in which they were actually falling behind. Looking back, the company had been expanding rapidly before the global financial crisis hit. Its engineers were preoccupied with production increases and making improvements to existing products, focusing only on their own narrow area of responsibility. Their staff were becoming managers without knowing the basics of the manufacturing process. Their solution was to sit down, discuss what makes a truly great product, and rethink the way they approached their work from the very basics. This episode left a deep impression on me, and the policy has apparently transformed the way employees approach their work.

Naturally this principle applies to areas like accounting and human resources as well, not just design and manufacturing. In accounting, for example, this means thinking about the meaning the numbers hold and how they will be used by the people who receive them. Only by doing so will you realize the true meaning of “setting the future in motion.” It is precisely now, when economic and business conditions are starting to turn, that we should review the basics of our work and think about what is truly needed to “set the future in motion”.



Aiming for Zero Workplace Accidents

# NSK's Safety



Mr. Uchiyama leads executives in *point and call* practice

# Initiatives

Safety, quality and compliance have been assigned top priority in NSK's fourth mid-term plan. In this edition, we look at the topic of safety. Safety initiatives at NSK center on the three assumptions described below. To raise awareness of safety, we have extended *point and call* practice to our indirect divisions from April, in addition to our plants. Reciting the phrase "a second for safety - OK!" before starting a task forces us to stop and think of the risks involved. Through this and other initiatives, we aim to reduce workplace accidents across the Group to zero.

## Three Assumptions About Safety

- ① Humans make mistakes
- ② Machines age and will eventually break down
- ③ Despite this, it is possible to achieve zero workplace accidents

What is NSK's safety objective?

“Safe Production”  
performed in  
“Safe Workplaces”  
to build  
“Safe Products”  
that are  
“Safe to Use”

- A culture where employees can define “safety” in their own words.
- Speaking up to warn colleagues engaged in dangerous actions.
- Awareness of safety in all areas of life, even outside the workplace (for example, holding the handrail when using the station stairs during your daily commute).
- Defining safe actions in a clear way that everyone can understand (for example, putting safe practices in writing at manufacturing sites).

SVP and Head of HR Shin Ikeda  
Discusses Safety at NSK

## Safety Includes Ensuring Employees Reach Their Homes Safely



Shin Ikeda  
Senior Vice President  
Head of HR Department  
President,  
NSK Friendly Service Ltd

To ensure employees continue to lead happy and healthy working lives, safety is a must. No matter how strong a company's results, if its employees suffer the distress of workplace accidents it has failed in its duty to society. This is why safety should always be top priority. Just as each of our employees love and care for their own families, we have a responsibility to ensure a safe working environment for our employees, from the first morning greeting to the time they sign out.

But no matter how careful we are, humans inevitably make mistakes or occasionally break the rules—this can lead to accidents. The injured person has already paid a high personal price. At the NSK Group, we empathize with the regret and pain felt by the employee in such situations, and work to adopt measures to ensure that the accident in question is never repeated. We then make sure that all countermeasures taken are fully communicated and followed. Based on a firm belief that it is possible to completely eliminate workplace accidents, we are working to develop accident-free machinery and ensure a safe working environment. In recent years we have also expanded the scope of our safety initiatives to include Group companies and sites outside Japan. We share information on accidents across our global sites, aiming to prevent similar types of accidents.

Over the past century of its history, NSK has passed on the tradition of manufacturing from generation to generation of employees, expanding through pioneering spirit, teamwork, and innovation. To me, a company is not just a “dry” organization where people focus on their own interests, but a cooperative environment based on mutual trust, respect, and humanism. In a sense, it is like a family. This is why I believe it is a company's responsibility to ensure its employees and their families are safe. Going forward, we will work to enhance our manufacturing capability while maintaining a “people first” approach and establishing a culture of safety across the NSK Group.

# The Three Pillars of a Safe Workplace

NSK's safety policy is summed up in the "Three Safety Pillars," shown on the right. These pillars are the consideration of organizational, equipment and work safety in creating a safe and comfortable working environment. In this section, we look at current safety initiatives being undertaken through examples from our plants.



No.1

## Organizational Safety

### Building Strong Safety Awareness

#### Fujisawa's Plant Manager Leads the Way in Improving Safety Awareness

Each plant and office is working on its own initiatives to create a corporate culture where safety comes first. One such initiative introduced by Fujisawa Plant is the display of safety awareness flags, started summer 2014. These eye-catching flags, positioned at various points around the plant, are one reason safety is always at the forefront of employees' minds. Another initiative is utilizing safety-related videos, such as *point and call*, to introduce safety concepts to employees in an easy to understand way. Going forward, Fujisawa Plant plans to continue to instill the importance of safety in all its employees.



At Fujisawa Plant, safety messages from managers, including the Plant Manager, Mr. Ogiso, are displayed on flags.

NSK is creating a workplace culture that prioritizes safety, under the guidance of management. To do this, each and every staff member must identify risks, not only in the plant and office, but also during their commute and in their everyday life, and take measures to control these risks and prevent injury.

No.2

## Equipment Safety

### Developing Safe Equipment

#### The Manufacturing Equipment Development Department Carries Out Risk Assessment in Equipment Safety Design

The Manufacturing Equipment Development Department (MEDD) of the Manufacturing Engineering Center (MEC) is carrying out risk assessment (RA) at the design stage in order to develop safe equipment that will ensure injuries are not incurred by anyone who comes in contact with the equipment, be they operators, maintenance crew, or peripheral workers.

#### What is Equipment Design Risk Assessment (RA)?

RA is the identification and evaluation of risks to people from equipment and machinery during the development and design stages, and the subsequent incorporation of safety design and protection measures in order to minimize these risks. RA is the one safety requirement of international standards and the Japan Industrial Safety and Health Law.

#### Safety Design Initiatives

##### 1. Implementation of RA

RA is to be carried out at three stages, during initial design, detailed design, and at completion, as the standard practice for eliminating or reducing the risk of specific hazards and designing for safety.

##### 2. Creation of Standards

Design standards for safety were previously not specified, but this changed when the MEC and the MEDD started the RA committee in March 2009. The committee designed a set of standards covering fundamental safety design and protection measures based on ISO and JIS standards.

##### 3. Training of Safety Design Experts

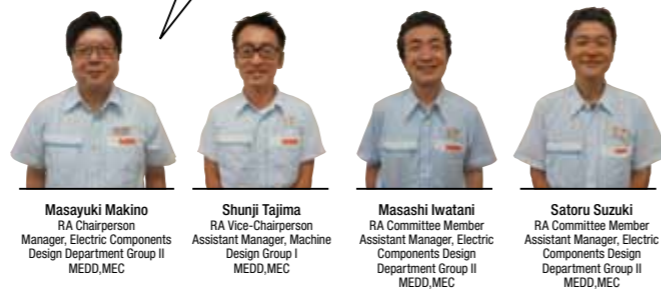
In order to confirm that members of the MEDD possess the knowledge and abilities required to ensure the safety of equipment, safety assessor qualifications are awarded as recognition of their ability to judge the adequacy of safety, and training programs are provided to develop safety design experts.

NSK is building safety into equipment right from the design phase, so that injuries are not incurred even in the event of human error or machine breakdown, known as foolproof and fail-safe devices. In addition, NSK is providing safety training when there are elevated risks from new equipment installations, equipment repairs, equipment transfers and the introduction of new processes.

#### Message From the RA Committee

### Development and Design Comes with Great Responsibility

The MEDD is involved in designing equipment that will prevent injury to operators. While deliberate intent to cause injury is not factored in, we work on the assumptions that people make mistakes and machines break down when developing and designing equipment that will be safe to use, even in the event of unintentional mistakes. Understanding this heavy responsibility, we will work even closer with plants, sharing RA information, so as to design ever safer equipment.



Masayuki Makino  
RA Chairperson  
Manager, Electric Components  
Design Department Group II  
MEDD, MEC

Shunji Tajima  
RA Vice-Chairperson  
Assistant Manager, Machine  
Design Group I  
MEDD, MEC

Masashi Iwatani  
RA Committee Member  
Assistant Manager, Electric  
Components Design  
Department Group II  
MEDD, MEC

Satoru Suzuki  
RA Committee Member  
Assistant Manager, Electric  
Components Design  
Department Group II  
MEDD, MEC

No.3

## Work Safety

### Raising Safety Awareness in Each and Every Employee

When it comes to skills and safety awareness, everyone is on a different playing field. In order to compensate for this, we have been introducing a range of initiatives, from thorough implementation of countermeasures for past issues to "why-why analysis" to identify the root cause of injuries. By reinforcing these initiatives, we are raising the safety awareness of each and every one of our employees.

### Targeting Zero Accidents -The Importance of Safety as Seen in Our China Plants

#### Behind the High Occurrence of Accidents in China

- Safety awareness and related rules unable to keep pace with the yearly expansion in production from growth of the Chinese market.
- High job turnover rate in China means there are always inexperienced workers on site.
- Traffic rules yet to be fully adhered to due to the speed of economic development.

### Kunshan Plant Initiatives

During fiscal 2013, Kunshan Plant was the scene of dozens of accidents, ranging from light injuries treated with disinfectant to serious injuries requiring leave of absence. The vast majority of these accidents occurred on the grinding process or during manual labor, and were caused by inexperienced workers, or experienced workers who had become careless over safety.

In order to address this issue, Kunshan Plant established a safety committee under the guidance of the Manufacturing Strategy Division HQ at China HQ. Each month, plant supervisors inspect the plant and identify potential hazards. The department where the hazard was identified then immediately formulates countermeasures, sets a timeframe for eliminating the risk, and reports on their progress at regular safety meetings. As a result of this and other initiatives, Kunshan Plant is happy to report that, as of October 2015, it has seen zero accidents, including minor incidents, for seven months running, and plans to continue this success through further plant-wide safety activities.

#### Key Activities

- Safety inspections by top management on a monthly basis, managers and assistant managers on a regular basis, and line managers on a daily basis.
- Sharing of information at Safety Committee meetings.
- *Point and call*.
- *Kaizen* proposals.
- Standardization of work instruction manuals, incorporating safety measures.
- New employees training, including a *Safety Dojo* where staff can experience past accidents first-hand.

Safety training for each group is to feature three elements: company-relevant training, department-specific training and operator-specific training, with the objectives of eliminating dangerous practices, preventing injury to others and protecting against injury from others.

### Suzhou Plant Initiatives

The Suzhou Plant, which was a joint venture with the U.S. company Timken until it became a wholly owned subsidiary in 2007, has a unique approach to safety, working on the concept that safety begins with human development. The whole plant—not only departments directly involved in safety, but also human resources—encourages staff to take the initiative on safety awareness. June is safety month in China, but Suzhou Plant has extended this to three months to carry out safety training and drills, as well as have line managers through to the plant manager conduct all-encompassing safety inspections. Another way the plant is increasing safety awareness is by having staff compete over safety, such as forklift safety contests, commending staff who do well, and offering incentives.



(Left) New employees are trained in the *Safety Dojo*, where they can simulate having their fingers trapped in a chain belt and learn about past accidents, as a way to prevent recurrence of accidents. (Top) Point and call is carried out every morning and evening to raise safety awareness.



Yibing Lin  
Safety Supervisor  
Manufacturing Engineering Department  
Kunshan NSK Co., Ltd.

#### Taking the Safety Training Changed My Attitude

At first, I only took the safety training because I had to. However, my attitude changed after experiencing the injury simulator in the *Safety Dojo*, and hearing how easy it is for injuries to occur, just some of the initiatives in the plant's drive to increase safety awareness. Now, I realize that every day is filled with risks. Accidents may have dropped considerably, but there is no such thing as completely safe—it only takes a momentary lapse of concentration for things to go wrong.



#### Safety Awareness through Trial and Error

Suzhou Plant regularly holds events, devised by management, where staff can compete over safety. Just as in the forklift safety contests, colleagues compete over their ability to work safely, and receive a certificate or prize in recognition of their efforts. At the same time as increasing safety awareness, these kinds of events also promote friendship between colleagues and improve team work.



Xiaomin Wu  
Accident Prevention and Safety Officer  
Management Division  
Suzhou NSK Bearings Co., Ltd.

## ▶ Tell us your plans for setting the future in motion! ◀

In this issue, we look at how NSK's sites around the world are working to set the future in motion.



### Mr. Benno Klocke

- Head of HR Department, NSK Europe Ltd.,  
Leader of the Europe Regional Centennial Projects Team



#### Facing the Challenges of the Future

For me, "Setting the Future in Motion" means facing the challenges of the future, and "bring motion to life" also means responding with flexibility to the changing economic environment and realizing the NSK Vision 2026.

"Making affected parties involved"—my goal is to actively utilize this vision to motivate and inspire employees. By implementing this vision, we hope to also convey our transformation to customers, suppliers, and other stakeholders as well.

Part of being "Dedicated to uncovering society's needs" involves "being open for diversity." Respecting and valuing individual differences in and outside NSK brings many benefits to our workplaces. NSK in Europe has about 4,400 employees, representing a rich diversity of people, including employees at NSK offices in the United Arab Emirates and South Africa. We are proud that employees of so many different nationalities are able to work effectively

together. It is this diversity of backgrounds and perspectives that helps us to achieve a high level of innovation, and it also strengthens our relationships with a wide range of customers. We will continue to draw upon our diversity in order to set the future in motion.

#### Ratingen Office in Germany

Established in 1963, NSK Deutschland GmbH (NSK Germany) was the Group's first base in Europe. It now includes a technology center and a division to oversee NSK's European operations. NSK in Germany is located in Ratingen, which is about 20 minutes by car from Dusseldorf, a city where many Japanese companies have set up offices.



### Ms. Feihong Zhao (Chloe)

- Manager, HR Department, NSK (China) Investment Co., Ltd.,  
Leader of the China Regional Centennial Projects Team



#### Assembling a Professional HR Team to Drive Business Expansion

While NSK has a history of almost 100 years, I have been with NSK for only a year. However, as a new employee I want to bring fresh ideas to the company. In order to help expand NSK's operations in China, I am working to recruit highly qualified people, while strengthening human resources development. The goal is to create a corporate culture where employees can demonstrate their abilities even more fully.

My dream is to help raise NSK's profile in China within the next five years, so that we can attract more people. If we can do this, even more highly qualified people will want to join NSK. People are the key to the growth and development of a company. Although we have many rivals in the struggle to recruit the best talent, if we strengthen our people, NSK will become an even more attractive and unbeatable company.

I aim to assemble a professional HR team that can effectively support NSK operations in China, a market that is still growing at a remarkable speed. In order to make changes for better NSK and better life, I help support changes so that we will have as many people as possible who can set the future in motion.

#### Head Office and R&D Center in Kunshan, China

It has been 20 years since NSK established its first base in China. NSK (China) Investment Co., Ltd. oversees all NSK operations here. It is located in Kunshan City, Jiangsu Province, close to Shanghai. The famous Shanghai crab is farmed here in Kunshan.



If you have any comments or questions,  
please e-mail to the PR Dept. (pr-dept@nsk.com)  
Thank you.

