# Side by side with the customer

**Activities for customer satisfaction improvement** 



#### Basic quality policy

At KYB, we believe that good quality is our company's life, and we therefore make every effort to provide skilled manufacturing and services of the quality that will satisfy our customers and society. We do this by a variety of activities for quality improvement, including actively promoting the sharing of quality information and faster information delivery within the group.



#### Quality Assurance System

We have built a quality assurance system that complies with the ISO 9001 standard, which places emphasis on the quality of work processes as well as quality of products and quality of services, and we have this system in operation. We also strive on an everyday basis to make improvements in those aspects of quality.

Quality at the development design stage, which includes the development of manufacturing methods and processes for producing our products, are determining factors in the market quality of our products. Furthermore, the degree of completeness of production shop fl oor work procedures and other such rules, together with the level of perfection in operation, will contribute to a reduction in process defects and other such quality losses that occur in skilled manufacturing.

At KYB, we implement what is called a three-step evaluation process for methods of developing and mass producing products, technologies, manufacturing methods, and so on. We make every effort for higher quality throughout the product life cycle, from the product planning stage to improvement of defects and change management after mass production and shipment. At our production bases, we take a variety of quality improvement measures under the leadership of the base managers and plant managers, and we are working to promote the unerring operation of our three-step evaluation system.

## Development of products and technology through a 3-step evaluation process and the Declaration of Quality and Safety

Step	Goal of the 3 steps	Quality assurance steps			
Prior/Model development	Proof of possibility (Description/evaluation of developed quality)	Development quality  Start quality			
DR0 evaluation meeting	,,,,,,,,,,				
Order development	Proof of mass production (Actual proof/evaluation of developed quality)				
DR1 evaluation meeting					
Mass production development/ Production preparations	Proof and serialization of applicability (Actual proof/evaluation of start evaluation)	Mass production quality			
DR2 evaluation meeting					
Mass production	Declaration of Quality and Safety There will be confirmation before the start of regular production that the mass product quality has been built into the design.				



#### What KYB Aims to Be: Quality problem prevention cycle





### Kickoff of Quality Innovation

For the promotion of manufacturing in favor of the customer, quality innovation activities have started. In the beginning, a kickoff ceremony was held with the attendance of plant managers and hub directors of the KYB Group to ensure achievement of the global goal on total defect loss. The secure achievement of the quality goals was considered difficult with conventional efforts. Conse-

quently, the promotion of full participation by everyone and concentrated action for improvement under strong leadership was affirmed to recover unachieved goals.



Explanation of Objectives by Vice President Komiya



## The Activities of Full-Time Improvement Team

After identifying the four worst overseas hubs for defective quality, support for improvement to reduce defective quality problems and education of personnel in improvement methods for an independent hub were implemented. The fundamental process is to prevent the outflow of defects to the customer and the intensification of quality checks (lineup of inspection tools and instruction of inspection methods). As part of the series of training sessions for an independent hub, an investigation of the true causes, verification of permanent measures and effects, and the dissemination of measures for similar processes are issued as instructions on

the production lines. Furthermore, the verification of improvement levels of each hub is implemented through an evaluation of improvement skills.



Study meeting at KAC

### Supplier Award List

Hub	Award	Description	Customer	
KMS	Global Contribution Award	Contributed to supply in India	Yamaha Motor Co., Ltd.	
KYB	Excellent Supplier Award	Sales expansion and reduced costs were commended	Hitachi Construction Machinery Co., Ltd.	
KMSB	Supplier Award	Acquired full scores for quality and delivery	Isuzu Motors Limited	
KIMZ	Best Performance Award	Achievement of no problems for quality and delivery	Jatco Guangzhou Ltd.	
КҮВ	Global Development Award	Contributed to the development of high efficiency vane pumps	Jatco Ltd.	
	Global Quality Award	Zero complaints for 12 months		
KYB Kanayama	Supplier Quality Award	Achievement of goals for quality and delivery	General Motors	
KYB	Supplier Authorization	Excellence in quality, cost, delivery, and development was acclaimed	Mitsubishi Fuso Truck and Bus Corporation	
KMSB	Environmental Convention	Reduction of CO <sub>2</sub> and industrial waste emissions	UMW Toyota Motor Corporation	
KMSB	Excellent Supplier Award	Contributed to quality, delivery and cooperation for cost	Hong Leong Yamaha Motor Sdn. Bhd.	

# KST (Thailand): Winning of Supplier Award for Continuous 3 Years

Awarded the honorary award from Isuzu Motors Ltd. for continuous full scores in quality and delivery for the three fiscal years of 2013-2015. KST delivers pumps for power steering in SUVs and pickup trucks to Isuzu Motors Ltd. The work environment has improved after implementation of the 5S and safety activities. The diligent, continued efforts to reduce in-process defects, improve the skills of workers through cross-sectional team activities, such as Asa-Ichi-Kai\*, and reduce contamination have successfully led to this award.



Awarding Ceremony

### Information supply to customers

We think that exhibitions are precious opportunities to directly hear customers' opinions. We will continue to positively participate in exhibitions.

### **Participated Exhibitions (partial)**

Exhibition	Major Presentation	
The 41st Japan Meat Industry Fair 2016	Piston pumps, motors, etc., for hydraulic meat processing machinery	
Automotive Engineering Exposition 2016 Yokohama	Drive recorders, communication terminals for mobile body, etc.	
Inno Trans 2016	Actuators, semi-active devices, etc.	
FOOMA JAPAN 2016 (2016 International Food Machinery and Technology Exhibition)	Piston pumps, motors, etc., for water pressure driven meat processing machinery	
Automechanika Moscow	Shock absorbers	
China Auto Salon	Shock absorbers	
Automechanika Frankfurt 2016	Shock absorbers	
International Aerospace Exhibition 2016	Wheels/brakes, power brakes, etc.	
China International Agricultural Machinery Exhibition	HTS, various power steering, hydraulic motors, etc.	
Manila Auto Salon	Shock absorbers	
bauma China 2016	Hydraulic products for compact shovels, etc.	
Automechanika Shanghai 2016	Shock absorbers	
bauma CONEXPO INDIA 2016	Concrete mixers, concrete pumps, etc.	
Tokyo Auto Salon 2017	Shock absorbers	
The 8th Vibration Technology Exhibition	Seismic isolation/vibration suppression oil dampers, etc.	

### Plant Tour for Individual Shareholders

In March 2017, a plant tour for individual shareholders was held at the Sagami Plant. First, an introduction to our company was provided to shareholders, along with an overview of the Sagami Plant. Then, the shareholders went on a plant tour in two groups to both the factory and the KYB museum. In the factory tour, the shareholders observed the coating process during production, and in the museum, the visitors were shown the history of our company and its products. After the tour, we received valuable opinions through conversations with the shareholders. We will continuously hold plant tours and will make an effort for deeper understanding of our company.



Explanation of the Production Processes

<sup>\*</sup>Asa-Ichi-Kai: A short meeting held by concerned people at the start of work regarding production, quality, and safety where reports are made on the statuses up to yesterday and mutually confirmed.

# With Business Partners

### **Establishment of partnership**



### Basic policy for procurement

KYB is making an effort to take the corporate social responsibility (CSR) and continue to be a company relied upon by the society. Suppliers are important partners for us to continuously develop through craftsmanship and help realize a wealthy society. Our basic policy for procurement is described below: For detail, see our website

#### http://www.kyb.co.jp/company/csr.html

#### Activity results of 2015

- 1 Procurement activities aiming at the coexistence and mutual prosperity of KYB and our suppliers
- Legal compliance
- Quality First
- 4 Safety and health, human rights and labor
- 6 Continuous cost reduction activities
- 6 Timely delivery
- Protection of natural environment
- 8 Construction of global procurement system
- Risk management
- Olassified information management
- 1 Prevention of corrosion

#### Fiscal Year 2016 Procurement Policy Briefing

In fiscal year 2015, we again held a KYB Procurement Policy Briefing in order to strengthen the collaboration between KYB and our suppliers. (Shinagawa Intercity Hall: Minato-Ku, Tokyo) On the day of the meeting, we welcomed suppliers from 214 companies, 4 more companies than in the previous fiscal year, to whom we presented explanations of company policy, procurement policy, and quality policy.

We also presented commendations to outstanding suppliers who had achieved results from their who have achieved an effect in QCD.

After that, we also held a social reception for the suppliers as an occasion for friendly exchange.



#### Action against conflict minerals

Four kinds of minerals (tantalum, tungsten, tin and gold) produced in conflict areas, including the Democratic Republic of Congo and its neighboring counties in Africa, are defined as conflict minerals. We have been required to confirm that purchasing or using the minerals extracted there will not fund armed conflicts or contribute to the infringement of human rights in the conflict area.

The KYB group companies is well aware of the CSR perspective and of the import of financial regulatory reforms (the Dodd-Frank Act) in the United States. We are acting on that basis to create our own corporate guidelines, and we are collaborating with our customers and suppliers on measures to prevent the use of conflict minerals that have been extracted illegally.

### Survey of status of business continuity plan (BCP) activities

In preparation for three interlocked earthquakes (Tokai-Tonankai-Nankai) and because of the growing concern over such natural disasters, an explanation was provided for BCP action during the procurement policy briefing. Furthermore, a seven category (1) Actions for anticipated risks, (2) Securing the personal safety and emergency evacuation, (3) Disaster task force, (4) Safety confirmation, (5) Property damage confirmation, (6) Instruction for returning home and people who have difficulty returning home, and (7) Re-establishment task force]] 100-item questionnaire was implemented and a self-assessment was conducted in consideration of the value of understanding the BCP activity statuses of our suppliers. We received reports from 411 companies, which made it possible to grasp the status of the suppliers. We asked for scheduled future activities for those items that had not been implemented and asked for grasping the action status of each company.

# Activation of Improvement Activities by Holding a Supplier QC Circle Convention

With the goal of activating improvement activities by suppliers, a convention of supplier QC circles is held every year. Fiscal year 2016 was the 46th convention. Among the 200 persons from 132 suppliers in attendance, six companies gave presentations on excellent improvements among the 33 applicant companies. Hekikai Kouki Co., Ltd., received the highest award (Gold Award) for the third consecutive year.

#### **VOICE**

# On winning the Gold Award in the Supplier QC Circle Convention < Hekikai Kouki Co., Ltd. >

The theme of the circle where we gave our presentation was "Increased productivity targeting the stability of the casting worksite." The best aspect for us after this activity was that all of our members cooperated in analyzing the current situation and offered ideas in responding to the need for improvement despite the busy production schedule of our company. Through verification of effects, we experienced a feeling of accomplishment in achieving zero overtime by significantly reducing the time required for manual operations, and simultaneously secured the safety of



operators. Our members understood that a task that once seemed impossible eventually could be solved by brainstorming ideas, which enhanced our daily motivation for improvement. Encouraged by the Gold Award, we will further increase customer satisfaction through quick and vibrant activities by everyone at the workshop.

# For the Community

#### **Social Support Activities**



### KMSI (India): Support for a Local Elementary School

A support for a local elementary school was provided by the neighborhood companies and KMSI.

In addition to donations of fluorescent lights, wall clocks, and sporting equipment, company support included commemorative tree planting and medical diagnoses. The children performed songs and dances that they had practiced for this day, and a plaque of gratitude was awarded

the elementary school. As a company, we are responsible for contributing to the peaceful education of local children in school. We will continue our contributions to local societies



The Ceremony





Appreciative Dance

Medical Diagnosing

# Joint Comprehensive Disaster Drill with Neighborhood **Medical Organizations**

The Gifu South Plant holds a joint comprehensive disaster drill with the nearby Japan Community Health care Organization (JCHO) Kani Tono Hospital every year. This drill is implemented by the Kani Tono Hospital to simulate a large-scale earthquake and then conduct an emergency response in cooperation with employees, area residents, and local businesses.

In 2016, the company promoted an increased awareness of disaster prevention and confirmed again the cooperative structure in place for a large-scale earthquake through the implementation of a program to observe emergency status reporting with the participation of firefighting teams from Gifu South Plant Headquarters, an emergency evacuation drill using an EVAC+CHAIR (stairway evacuation carrier for injured persons), and a water-discharge exercise.







Water-Discharge Exercise

#### For a Bright Future

As part of a series of social contribution activities, KYB cooperates with various organizations every year. In fiscal year 2016, donations were made to the "Japan Committee for UNICEF", "Keidanren Committee of Nature Conservation", and the "Children's Future Backing up Foundation. Furthermore, a donation was made for the Kumamoto earthquake reconstruction efforts, and an exhibition and sales event provided support for the second time for the Great East Japan Earthquake reconstruction efforts in the domestic devastated areas. We will continue activities to expand the network of support for a bright future.





Certificate of Appreciation from the Cabinet Office

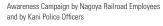
Exhibition and Sale Event for Supporting the Reconstruction of the Great Fast Japan Farthquake



## Campaign for Prevention of Railroad Crossing Accidents

The Gifu South Plant is next to Kanigawa Station of the Nagoya Railroad (Meitetsu) Hiromi Line, and a railway crossing is located in front of the main gate. Many employees travel over this railway crossing, which also serves as a commuting path for the children of the local Dota Elementary School. the Campaign to Prevent Railway Crossing Accidents was implemented with the slogan "Let's Eliminate Railway Crossing Accidents" as an early morning greeting campaign of the Gifu South Plant with the cooperation of Nagoya Railroad and the local police on April 7 when the entrance and opening ceremonies of the elementary school were held. The range of contributions was to ensure the safety of KYB employees and the schoolchildren and residents in the region.







Awareness on Cautions and Greeting Campaign for

### Environmental Conservation Organization of Sagamihara

The Environmental Conservation Organization of Sagamihara monitors changes in the environment during all four seasons of every year in order to prevent pollution, protect the richness of nature, and create a comfortable environment. As a member of the organization, KYB participates in environmental conservation activities. In FY 2016, we participated in a survey of river conditions and riverine biota, observations of the endangered Aster kantoensis and other riverbed plants, and made contributions to the maintenance of the riverbed.



Survey of riverine biota



Observation of the endangered Aster kantoensis and other riverbed plants

#### Set up an exhibit booth at the Industrial Fair in Kani 2016

The Industrial Fair in Kani 2016 was held in October 2016. This fair is a comprehensive exhibition by member companies of the Kani Chamber of Commerce and Industry with the goal of contributing to the revitalization of the area. The Fair this year was the tenth anniversary and was attended by 17,220 participants, the highest so far. We exhibited items for automobiles, motorcycles, and hydraulic excavator. As a company located in Kani City, we will continue to cherish the exchange with local people in the future.



A view of the exhibit booth I





A view of the exhibit booth III

# Distribute seedlings on World Environment Day KCPL (India)

KCPL independently sponsors the Plant-a-thon on World Environment Day on June 5 of every year. Through this event, we build an awareness of the need to protect the environment. On this day, KCPL set up distribution booths at major locations in Vadodara City, distributed seedlings to citizens free of charge, and provided information on how to grow the seedlings as well. We also conduct afforestation activities. In 2016, we distributed over 10,000 of Neem and Royal Poinciana seedlings.

### Utilize recycled compost to flowerbed

The leftover food discharged from the cafeteria at the Gifu South Plant and the Gifu East Plant was reduced by garbage disposal machines and then mixed with weeds and plant trimmings from the plant campus and recycled at the plant as good quality fertilizer. This recycled compost is used in flowerbeds to produce beautiful flowers for 200 meters along the street on the eastern side of the Gifu East Plant. The recycled compost

reduces the use of chemical fertilizer and decreases general waste emissions by up to approximately 4 tons per year.



Flowerbed in front of the plant

### VOICE

### Persimmon growing up in recycled compost

I would like to introduce another example of the application of recycled compost. Are you familiar with the very delicious Diospyros kaki Fuyu (Japanese persimmon) originating in Gifu Prefecture? In the green area of the Gifu East Plant, we utilize recycled compost to grow Diospyros kaki Fuyu. The persimmon trees have produced abundant fruit on the branches in the fourth year after seedlings were planted upon completion of the plant, belying the

truth to the following the proverb "Peach and chestnut seeds take three years to bear fruit, persimmons take eight." I don't think it is inferior to its kind in terms of size and luster even if when displayed in the shop, and the sweetness is outstanding. We look forward to delivering delicious Diospyros kaki Fuyu to customers visiting KYB and the neighborhood.



Yoshitake Sakai General Affairs Division (resident personnel at Gifu East Plant)

### Continue to support the Para-alpine ski national team

As a sponsor and supplier of the Para-alpine ski team of the Japan Para-Ski Federation (Specified Nonprofit Organization), the KYB Group develops products and provides technical support for the shock absorbers on the chair-skis for the Japanese team. In the sixth round of the World Cup in Switzerland in December 2016, Takeshi Suzuki, a member of KYB, won the championship, and other players had great performances. The KYB Group will work together with the athletes to improve the product to win the gold medal at the Pyeongchang Paralympic Games in 2018, and we will continue to contribute to sports as part of our social contributions in the future.





Suzuki in competition

Won the championship in the sixth round at the World Cup

### Mexican Football sponsorship

KYB signed a sponsorship agreement with Club Leon of the Mexican Football League, first division. Although the team competed hard in the first half of the league tournament game, they played even more aggressively to defeat the opponent without losing a point in the second half. The team advanced to the finals of the tournament and managed to enter the Best 4. In addition, during the league season, we held a PR event sponsored by KYB, which led to improvement in the awareness of KYB in Mexico. We will continue to support Club Leon's activities at the local level.





Press conference

Opening game

#### Running class opened by KYB track club

Our running class has its thirteenth anniversary this year, and we have many participants from pupils in grade 5 of the Kani Municipal Hiromi Elementary School. First, members of the club showed how to run and then taught basic knowledge of running, such as the position of the head, the gaze, the way to swing the arms, and breathing method. As a result, the children succeeded in running faster and more easily and enjoyed the experience of running. The running class also won favorable comments from the teachers at the elementary school. Our members had a valuable experience by teaching and feel that their efforts were worth their time.





Running training on a slope

Practice running basics



### Join the blood donation supporters

The Kumagaya Plant is registered as a blood donation supporter\*, and blood is donated twice a year at the plant. On the day of the blood donation, blood donors actively gathered at the venue early to wait in long lines to donate blood. According to the blood donation center, the Kumagaya Plant always achieves the desired blood volume even though the overall number of blood donors is declining each year. When asked why they donate blood, the employees say "I just want to do what I can to help people" or "I want to do something for others." In FY 2016, we received a Certificate of Commendation from the Japanese Red Cross Society for continuous donations for the past 30 years. For those who need blood transfusions, we will continue to cooperate by donating blood in the future

\*Blood donation supporter: This refers to companies and organizations that actively cooperate in stable blood donations in order to secure blood necessary for medi-



The Certificate of Commendation received

# With Employees

Human resource utilization and work environment improvement in cooperation

#### Basic concept

We are engaged in priority initiatives for the development of global human resources, construction of a global platform, and promotion of diversity. These are steps we are taking in order to utilize our diverse human resources to best advantage and to maximize Group capabilities.

Specifically, we are pursuing investigation of themes such as the development of professional human resources, sharing values across the whole Group, strengthening the development of human resources for skilled manufacturing, promoting work-life balance, and managing psychological and physical health. These are to further the creation of a workplace environment that is easy to work in.

### Hold a life-saving training session

When people become injured or sick, if the bystander gives first aid promptly, the lifesaving rate will improve. Each of the Gifu North Plant, South Plant, and East Plant sponsors a lifesaving training session so that we can save as many lives as possible in an emergency. Training dolls and Automated External Defibrillator (AED) trainers are employed to practice chest compressions, cardiopulmonary resuscitation, and the actual use of the AED. We also confirm the rules of emergency responses at each plant, method of guiding ambulances, and the locations of AED installations. Currently, 23 AEDs are installed in the Gifu area, and

everyone can use it when necessary. We will continue to conduct the training sessions so that many people can perform cardiopulmonary resuscitation and use AED with confidence.



Lifesaving training session (South Plant)

# Collaboration Agreement with Companies to Make Kani City a Comfortable Place to Live in

Kani City is working on the Athrill Working in Kani City Project by registering enterprises tackling the review of working styles and realization of a work-life balance. The city is also concluding an agreement with outstanding companies that serve as models for other enterprises in this respect and carrying out PR activities inside and outside the city to ensure that the city, residents, and enterprises develop together. As a company actively working to realize a work-life balance,

we have concluded the above Collaboration Agreement with Kani City.



Signing ceremony of the Collaboration Agreement Gifu Kita Plant manager Hatakeyama

### Human resource development and technical capability improvement

### Global engineer training

We have been conducting global engineer training with the aim of upgrading skilled manufacturing capabilities at our production bases in other countries since 2006. This training is based on lectures in dialogue form, experiential exercises, and study tours of advanced plants, and is conducted on-site with actual equipment and materials for periods of two weeks to one month. After acquiring basic to applied techniques, trainees create proposals for improvements to their own bases and are assigned the implementation of those improvements on return to their countries.

In FY 2016, we had 41 staff members from 14 bases in eleven countries participating in the measurement and material inspection course, centerless grinding course and KPS course.

We intend to continue conducting these training sessions in the future, and will promote strengthening of skilled manufacturing capabilities at our production bases in other countries.





Study tour of the Plant by grinding course

Visit Gifu Castle on off day

### KYB Global Production and Quality Meeting

The KYB Global Production and Quality Meeting for FY 2016 was held over a three-day period from November 9 to 11. There were 42 participants from 19 overseas bases, and case presentations were followed by enthusiastic question-and-answer sessions. On the first day, a KYB global improvement presentation session was held, and 14 topics related to improvements in production and quality were presented by 13 bases. KST won the top prize with its presentation Gold Finding Activity (Contamination Reduction Activity). We are working to share information and issues related to safety, the environment, quality, and production in each production base; improve the respective functional levels; and contribute to future development.



Group photograph of participants (at Gifu North Plant)

# Commendation of Excellent Enterprises and Businesses Engaged in QC Circle Activities (small group improvement activities)

In the Gifu area, we were commended for being an Excellent Enterprise in the QC circle activities (Small Group Improvement Activity). This award is granted to companies that have contributed significantly to regional revitalization for many years. We were elected as one of eleven companies from nine branches nationwide. On the date of the commendation ceremony, the Gifu North Plant manager, Hatakeyama, director in charge of public relations in the Gifu area, received the Certificate of Commendation and a commemorative plaque from the Union of Japanese Scientists and Engineers as the representative of the company.



### Participate in the National Skill Competition

The Skill Competition brings together youth up to 23 years old to compete for the title of the Most Skilled in Japan. At its 54th anniversary this year, 1318 contestants from 41 professions participated in the competition. A second preliminary round was set up in the lathe category, which KYB participated in because it is the most popular one at the competition. A high degree of accuracy is required because the tolerances of the five parts to be machined are set at  $\pm$  0.02 mm uniformly.

The Human Resource Training Center places two contestants in the competition each year to develop the skills of young technicians and upgrade the level of ma-



Sample parts for challenge task





Kagiya in competition

chine work in the company. Yoshimasa Kagiya and Koki Ishihara made it to the final competition in FY 2016.

In addition, the two staff members are currently engaged in training, aiming for participation in FY 2017.

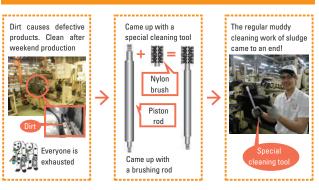
#### Abolishment of regular cleaning of sludge

We improved the sludge cleaning work of the grinding process, which has been an issue for a long time.

We machine to a mirror finish for the sliding surface (outer diameter) of the piston rod of the shock absorber with grindstones. The sludge generated during the machining process accumulates in the receiving jig and results in scratches and defective products; therefore, after the weekend production, we get dirty cleaning sludge. It was hard and exhausting work that took time. After repeated trial and error, we developed a special cleaning tool (a tool with a brush attached). The tool turned out to be excellent in removing the accumulated sludge during machining. Thus, the regular cleaning of sludge came to an end. This is an example of an improvement where all personnel pooled their knowledge to solve a problem under the slogan: Fight to the end and never give up.

> Suspension Manufacturing Department, Gifu North Plant Kenya Iwai

#### Abolishment of regular cleaning of sludge



### **VOICE**

### **Impressions of contestants**

I learned from the National Skills Competition that it is important to develop my own way of doing work. It does not concern superiority or inferiority of a person but only to do what I can to the utmost in work. From now on, I will dedicate myself to the company by taking advantage of my character.



Yoshimasa Kagiya Human Resources Training Center

It was my first time to participate in the National Skills Competition. I made it through the second preliminary round and managed to participate in the national competition. It was a very valuable experience leading up to the next competition. The result of the final competition was not satisfactory, so I am practicing for the championship in the 2017 National Skills Competition.



Koki Ishihara Human Resources Training Center

# The 15th KYB Corporate Sports and Cultural Exchange interactive event

The 15th Sports and Cultural Exchange event was held in Mie Prefecture where the KSM plant is located. A total of 992 contestants competed in 11 categories. All the contestants gathered at the site vigorous, enthusiastic, and exciting battles in all competitions. Overseas employees were leaders in futsal, and the Spanish team achieved victory over the Vietnam team. Participants enjoyed strolling in Koga City, Shiga Prefecture, where the Takako plant is located. Unique regional competitions, such as the Shigaraki ware experience, were also enjoyed by the participants.

Through sports competition and cultural exchanges, employees of the KYB Group can deepen their understanding and strengthen ties with colleagues. The competition has become a valuable annual event.



A view of the competition (after the futsal game)



A view of the opening ceremony (Kagami biraki)

- Date: September 24 (Saturday) to September 25 (Sunday)
- Venues: Mie Prefecture/Shiga Prefecture (KSM, Takako)
- Games: Softball, beach volleyball, futsal, bowling, hard tennis, sea fishing, table tennis, golf, dodgeball, strolling, Hyakunin Isshu (the Hundred Poems)

### The 9th KYB Robot Contest

The 9th Robot Contest was held at the Gifu North Plant on November 12, 2016. The competition task this time was the ball-toss game. At the signal to start, the robot takes a bucket containing balls and throws the balls at the target on the opponent's court competing for total points. As in 2016, a total of 24 teams competed with 17 teams from Japan (including group companies) and 7 from overseas. Spectators and participants together totaled around 600 persons, making it a great success this year. KAC (USA) won the championship and recaptured the throne for the first time in three years. The overseas teams monopolized all of

the top three awards, the President's Special Award, the Technical Award, the Idea Award, and the Maximum Score Award. Robot Contest 2017 will be held at the Sagami Plant.



Members of KAC, the winning team



Participants and Spectators

### **VOICE**

## Recapture the throne for the first time in three years at the Robot Contest

Our Robot Contest Team practiced on our own course with a simple concept and strategy for victory. The final game with the Indonesian team was an incredible fight. In 2016, four teams competed at the same time, and the audience and the players were very excited. We won three times over five years. I definitely want to defend the title in the 2017 contest.





# Occupational safety and health

#### **Industrial health and safety**



#### Aiming for zero industrial accidents

With "Safety Takes Priority Over Everything" as our slogan, all the KYB companies have been working as one on safety activities since fiscal year 2012. An Environment and Safety Committee has been established as the KYB group organization chaired by the Executive Officer for Environment and Safety, and this is a focus for specific activities carried on at each KYB business establishment by its Safety and Health Committee.

In FY 2016 for the various overseas production bases, we expanded the measures of risk assessment; stop, call, wait; repeated safety education; and the safety gate as implemented in Japan the previous fiscal year. As a result, in FY 2016, we were able to reduce the number of occupational injuries by about 12% compared to FY 2015.

We still have much to do before we reach the target of zero, and we are committed to continuing these activities in order to move toward zero industrial accidents in the future.





Safety gate installed at Vietnam Plant (KMV)

Repeated safety education in KMV



### Carry out repeated safety education

In the past, we carried out safety education for new employees and virtual safety education at each plant. However, because each plant provided safety education independently, there was a problem that the contents and methods were inconsistent. Therefore, we gathered the safety officers from throughout the corporation, summarized management methods and the basic concepts about safety and risk assessment, and then created the KYB Safety Basics textbook. By adopting this textbook throughout the KYB group, we were able to start systematic safety education at the same level. The target attendants of the training session are employees whose work experience is considered to be the most dangerous span for occupational accidents. We will expand the scope of the target attendants in the future.



Cover of the KYB Safety Basics textbook



A view of the training session

# Participate in the Asia Safety and Health SAKURA Project KST (Thailand)

We participated in the Asia Safety and Health Sakura Project organized by the Japan Industrial Safety and Health Association for five days from November 7–11, 2016. Experts explained KYT, Risk Assessment, and OSHMS, which were very easy to understand. The project included workshops and study tours of plants, which helped us understand the lectures better. Also, on February 15, we arranged for experts to visit the plant and received specific advice from them. Through this training, we were able to clarify the good points of the activities that we have been working on and points that need improvement. We will try to improve the level of activities and expand the activities to the entire plant, thus making a better social contribution in the future.



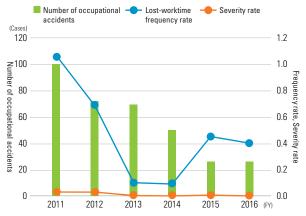


Participants from each company
(Patto san from KST is in the middle of the second row)

A view of the training session

# **\***

# Number of occupational accidents, Frequency rate, Severity rate



Number of occupational accidents

Lost-worktime frequency rate = (Number of employees of lost-worktime/Total Working Hours) x 1,000,000
 Lost-worktime severity rate= (Workdays lost/Total Working Hours) x 1,000