

# CSR Mind of Employees

## Enhancing Safety and Comfort in Trains through Use of Railroad Inspection Equipment



**Keishin Hamaoka,**  
**Hitoshi Matsuo**

(from left in photo)

Social Systems Department  
Fine Technology Products Business Group  
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The safety, reliability and comfort of Japan's railroad transportation is at a world-class level, and is underpinned by inspection trains, the so-called "doctors of the railroad." Inspection trains incorporate many types of equipment, of which we manufacture equipments and devices for measuring the displacement in longitudinal level and undulation of rails, as well as the height and wearing-out of overhead contact wires (trolley wires). Bent rails affect passenger comfort, while abnormal wearing-out of contact wires hinders stability at high speed and, in some cases, can lead to accidents. Consequently, railway companies regularly carry out inspections, and conduct maintenance based on the data obtained.

The equipment we have developed enables inspection at operating speed. For example, our equipments for Shinkansen (bullet train) inspection trains can accurately and reliably measure a distortion of 0.3 mm in rails and contact wire wearing-out of 0.2 mm while running at 270 km per hour. They can do so even under other severe conditions such as vibration, noise, high voltage and bad weather. We are continuing to make further improvements in our equipment to support safe transportation on the railroads, which people entrust with their lives. In this we are guided by a conviction that our mission is to manufacture the most reliable products possible.



Inspection equipments and  
Shinkansen (bullet train) inspection trains

## Making Life Safer and More Comfortable by Providing Maximum Security



**Alfred Duemlein**

Electronic Component Department  
Munich Branch Office  
Hitachi High-Technologies Europe GmbH

Hitachi High-Technologies Europe provides leading technology products of benefit to society, based on the slogan "Every day we strive to make life a bit more pleasurable." One business here at the Munich Branch Office in Germany is the supply of microcontrollers (IC chips), which are required in Smart card manufacturing. I have been responsible for sales in this business for 12 years.

Nowadays Smart cards are used in many applications worldwide; people use them in telecommunications, finance and many other fields of their daily life. Our company provides IC chips to card manufacturers in the communications (mobile phone) and finance sectors.

There are many ways we contribute to society through our IC chip business. For instance, users of our IC chips benefit from maximum security protection against fraud or forgery. In addition, IC chips are more reliable and stable than magnetic materials, therefore, through long-term use important resources can be saved.

I am proud of my work and I will continue doing my best to make people's lives safer and more comfortable through IC chips.



IC chips embedded in a Smart card  
and a mobile phone SIM card

# Employee Practices Support CSR Activities

## Refining and Handing down of World-Class Skills Supporting Advanced Manufacturing Technologies



**Takeshi Seki**  
Semiconductor Systems  
Manufacturing Department  
Naka Division  
Nanotechnology Products Business Group  
Hitachi High-Technologies

\*CNC: Computerized Numerical Control

At the 39<sup>th</sup> international WorldSkills Competition held in 2007, all three employees sent by our company won medals. In the run-up to the competition I was responsible for instructing them in CNC\* Turning and CNC Milling machines.

Combining cutting-edge technological development with the world-class skills that make such development possible is indispensable in manufacturing new electron microscopes, semiconductor inspection equipments and analyzers. That is why we are focused on handing down technical skills and set ourselves the challenge of competing in the WorldSkills Competition. I believe it is our role as a corporate citizen to maintain the traditions of manufacturing while creating new value for customers and society, by improving and passing on our skills to the younger generation.

### The three medalists and their aspirations

**Komei Osuga** (left) : In a contest where the time constraints are severe I am competing against myself. During training I cultivated the ability to stay humble, calm and collected, and I intend to apply that when I am working. (Mechanical Engineering/CADD: Bronze medal)

**Akira Fujimoto** (center) : The competition taught me the skill of efficiently identifying the best way to improve my performance, and I will use that in my job. (CNC Turning: Gold medal)

**Akitomo Ebine** (right) : In the competition I had to perform in terms of both speed and quality simultaneously, and that experience is something I can draw on back in the workplace. (CNC Milling machines: Gold medal)



## Responding Rapidly to Disasters and Helping to Ensure Peace-of-Mind at Home and at Work



**Nobuyuki Suguro, Ichiro Sato**  
(from left in photo)  
Customer Support Center  
Hitachi High-Tech Fielding Corporation

\*JWA: Japan Weather Association

Hitachi High-Tech Fielding provides maintenance services and sells component parts for industrial, scientific and medical instruments, as well as semiconductor equipments manufactured and sold by the Hitachi High-Technologies Group. Our Customer Support Center has established a fully-fledged global support system, which operates 24 hours a day, 365 days a year. The support we provide to our customers ensures the optimal running of our products with minimal or no down time.

Prompted by the Great Hanshin-Awaji earthquake in 1995, we have been focusing on earthquake disaster response. When an earthquake with a lower 5 or higher seismic intensity (on the Japanese scale) occurs, we receive information from JWA\* and send automatic messages to the president and other staff responsible for earthquake response. In the case of an earthquake with a lower 6 or higher seismic intensity, we set up a disaster countermeasure task force. In the Niigata Pref. Chuetsu earthquake in 2004, enormous damage was incurred at "lifeline" facilities, such as the water supply department and hospitals. Immediately after the earthquake, we initiated a companywide response, working to restore operation of water supply equipment and recommence testing at hospitals as soon as possible. We will continue working to provide services that support peace-of-mind for our customers and society.



A service engineer preparing to set off for a maintenance inspection