

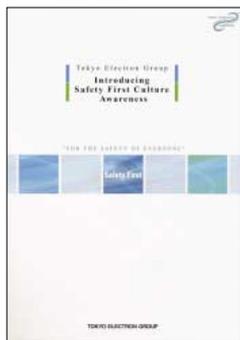
# Health and Safety

Health and safety are corporate social responsibilities and the basis for a comfortable work environment. TEL is supporting health and safety in every aspect of our corporate activities by giving high priority to the health of our employees and customers, and ensuring the safety of our equipment.

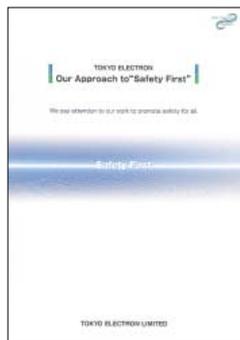
## For Everyone's Safety

TEL believes that health and safety are essential and our Management Philosophy and directives cleave to this principle. It is one of our corporate social responsibilities to see that everyone involved with the company, beyond its direct employees and customers, is able to work with or otherwise use its products without fears for their health or safety. This makes for good business. In other words, the safety of people, equipment and facilities must never be compromised by profits, delivery deadlines or time limitations.

We have published and distributed brochures titled "Introducing Safety First Culture Awareness" and "Our Approach to Safety First" and hope that our customers and other stakeholders will understand our approaches and efforts on this issue. (See "Topics.")



"Introducing Safety First Culture Awareness"



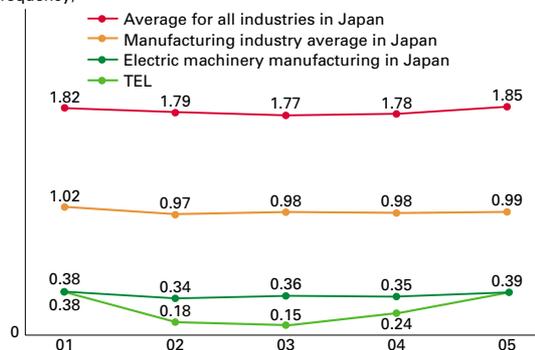
"Our Approach to Safety First"

## Management of Injury Accidents

The rate of occupational accidents at TEL increased from FY 2004 to 2005. Our analysis showed that, as the amount of work increased with our production levels, the severity of occupational accidents and the number of factors involved in accidents increased. We have recently been promoting measures against accidents involving musculoskeletal disorders (such as ruptured disks), since ergonomic factors are of greater and greater importance now. The reason for taking more measures against accidents involving musculoskeletal disorders is, as an equipment maker, we know that these will pay off in terms of improved safety during equipment design, work methods, task management and other realms.

### Rate of Occupational Accidents

(Frequency)



\* Frequency: Number of occupational accidents per one million labor hours  
 Number of accidents that required the employee to miss work for 4 days or more/total labor hours×1,000,000

## TOPICS

### Creating "Our Approach to Safety First"

Generally, TEL's employees work in two kinds of environments: TEL's plants for manufacturing equipment, and customer sites where we start up and maintain our products. In order to maintain a safe environment at the workplace while working in customer sites, it is essential not only to obtain the customer's understanding but also to work in close cooperation with other equipment manufacturers and facility contractors. That is why TEL created "Our Approach to Safety First." It explains TEL's attitudes and details of our activities in four topics: product safety, preparing for safety during an emergency, safety in work tasks, and safety training.

### "Our Approach to Safety First" (an excerpt)

#### Work Safety – 4: Control of Hazardous Energy

In order to prevent accidents due to unintentional release of hazardous energy, we cut off such energy with electrical breakers, valves on hazardous gas sources, and other energy sources such as robots, and put locks and tags on when work is being done.



Lock-out and tag-out Example when multiple workers are at work

### Safety Patrol with Site-driven Approach

TEL carries out safety patrols in order to most effectively secure safety at our customers' plants and offer superior technology to them. Safety is only accomplished when there is both equipment quality and work quality. We see safety patrols as a measure against any kind of improperly maintained work environment and facilities, and also, as a means of improving TEL's equipment by feedback of data from our customers' work locations.

At Higashi Hiroshima FE station, the model for other FE stations, TEL has investigated the risks in customer facilities. In line with our site-driven approach, which emphasizes sharing information among all contractors and workers, we have instituted safety patrols, morning meetings, evening meetings, a "suggestions from the workplace" system and other safety programs. TEL also practices site-driven safety overseas. Tokyo Electron Korea's Kiheung support team promotes task safety activities, and in FY 2005 no injury accidents occurred during the rapid start-up work accomplished at the site.



Hazard forecasting meeting



Kiheung support team (receiving TEL internal award)

### Risk Assessment at Facilities

There are always some risks in the workplace: falling while walking or taking the stairs, burns or scalds during food preparation or serving, and so on. Therefore TEL is taking measures against accidents in the office as well as the plant. We assessed the risks in all our Japanese office facilities in FY 2005. The magnitude and frequency of injuries were assessed by the same methods as used for conventional tasks in other workplaces. Measures were then taken for tasks which were anticipated to have the highest risks. Some specific examples of the measures: bracing to prevent shelving from falling over, installation of handrails to stairways, warning signals at automatic doors, and dome mirrors in corridors.



Newly installed handrail

### Example of Product Safety (SEMI S8) – Ergonomic Assessment and Design of Equipment and Tasks

TEL designs all its equipment according to SEMI S8 guidelines on ergonomics in semiconductor production equipment. It calculates the recommended weight limit (RWL) using the equation developed by the American National Institute for Occupational Safety and Health for the most risky task of lifting heavy objects (assessment of occurrence of back pain) and uses the results in planning the optimal locations of components and the tasks associated with those components. The RWL is calculated using the factors listed below. The specific content of each task is determined by comparing the calculated RWL and actual component weight.

#### Factors for Calculating Recommended Weight Limit

- H: Horizontal distance from midpoint between ankles to position of hands
- V: Vertical distance from floor to position of hands
- D: Vertical distance through which object is lifted, from start point to finish point
- FM: Exponent for frequency
- CM: Exponent for combinations
- A: Angle between start point and finish point

#### Standards for Assigning Tasks

| Calculate result   | Task assignment                    |
|--|------------------------------------|
| $RWL > \text{Actual weight}$                                   | 1 person can perform task          |
| $RWL \leq \text{Actual weight} \leq 2 \times (RWL \times 0.9)$ | Lifting apparatus or 2-person task |
| $\text{Actual weight} \geq 2 \times (RWL \times 0.9)$          | Lifting apparatus shall be used    |

#### Example of plasma etch system

In accordance with the results of the above calculations, the location of the controller for the plasma etch system has been selected so that a single person can handle the controller.

#### Design of the Controller Rack

