

## Health and Safety

We are promoting health and safety for all our stakeholders, including employees and customers, in every aspect of our business operations, believing that we should ensure the health and safety of our employees as the basis for a comfortable workplace and as one of our corporate social responsibilities.

### ■ For the Safety of All

The Tokyo Electron Group believes that it should ensure the health and safety of all employees working for the Group, customers who use the Group's products, and all other stakeholders in its business operations as one of the Group's corporate social responsibilities.

In FY 2006, the Group held a total of six safety seminars for top managers (vice presidents of Group companies) at its plants. The seminars were divided into three sessions. In the "theory" session, participants learned about the necessity of taking an organizational approach to human factors, as well as risk management. In the "practice" session, they listened to the opinions of workers and learned about on-site safety problems, and in the "discussion" session, they discussed how to build a safety culture across the Group.

Managers participating in the seminars commented, "Employees are now more aware of safety, but it seems difficult to keep them committed to safety," and "Managers must first commit themselves strongly to safety and communicate the importance of safety to employees by establishing the appropriate organizational and managerial systems." In FY 2007, based on the results of the seminars, we will hold seminars for middle managers.



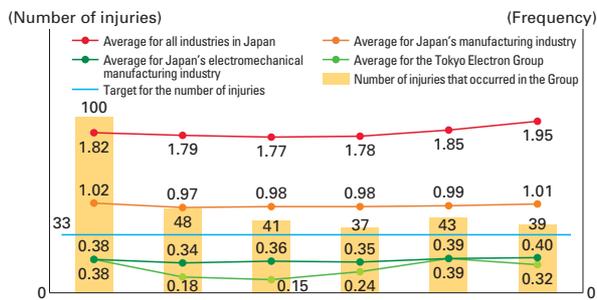
Safety seminar for top managers

### ■ Preventing Accidents

In FY 2006, the number of occupational accidents at the Tokyo Electron Group slightly decreased over the FY 2005 level. The work volume, however, increased in accordance with an increase in production quantities, and factors that can cause occupational accidents are on an upward curve. According to statistics on the trends of accidents in the Group, ergonomic factors\* account for approximately 30% of all risk factors. As equipment becomes larger and more complex, employees are forced to work in unnatural postures and they have to manhandle heavy objects, which bring new risks to employees. We are implementing countermeasures against this problem.

\* Ergonomic factors mean risk factors associated with heavy labor, repetitive movements, and unnatural postures, which may cause musculoskeletal disorders in employees who are engaged in these activities over a long time.

### Frequency of Occupational Accidents and Number of Injuries



\* The number of accidents is shown, taking the number in FY 2001 as 100.

\* Frequency of occupational accidents: Number of occupational accidents per one million labor hours = Number of accidents resulting in at least four days absence/Total labor hours x 1,000,000

## TOPICS

### Safety First Slogan Campaign

In FY 2006, the Tokyo Electron Group asked its employees to propose a slogan under which the entire Group would give first priority to safety while listening to the opinions of on-site workers.

From among more than 600 proposals, we chose the best slogans and also awarded a special prize to a proposal made by a group of employees. We created safety-first posters using the selected slogans, which are now put up at the workplaces. We also printed the prize-winning slogans on the back of the exist-

ing handy "safety first" card, copies of which are distributed to employees, thereby making them more aware of safety in their daily work.



Handy "safety first" card



"Eye Catch Safety" poster

## ■ Example of Safety Measures—Ergonomic Approach to the Wafer Prober

As shown by recent trends in occupational accidents, ergonomic factors account for a larger percentage of occupational risk factors. As the background to this, wafers and circuit boards are being upsized and so the size of production equipment is also expanding. To cope with this, the Tokyo Electron Group is implementing the necessary measures for its products.

For example, we have introduced measures for the wafer prober\*. In recent years, the test head used in conjunction with the prober has been increasing in size and employees have to manhandle this heavy head, which has increased the ergonomic risk during their work. Of late, test heads weighing more than 500 kg are not rare. Employees cannot position such a heavy object easily and their work risks have been rising. In response, we analyzed the risk associated with the traditional attachment and adjustment methods for the test head and fed back the results to the design department and the manufacturers of the testers. In cooperation with them, we devised and implemented measures to eliminate or reduce the associated risks. The specific improvements are shown in the table on the right.

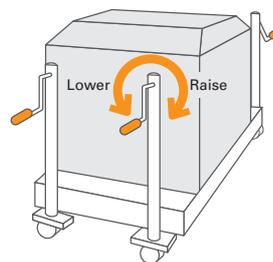
The Group—especially its design section—will continue to cooperate with the manufacturers of various testers to promote safety from the design stage based on risk analysis and other measures.

\* Wafer prober: Connected to a tester (manufactured by an outside company) to electrically test the ICs on wafers by touching their electrodes with a probe needle.

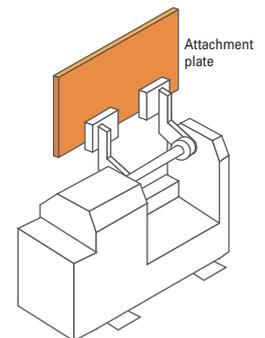
### Improvements Made through Analysis of the Work Risks

Work Details	Improvements
Unload the heavy test head from the cart and load it on the automatic lifter	The tester manufacturer has redesigned the cart so that the test head can be raised or lowered by handles, and workers no longer need to manhandle the heavy test head (see Improvement 1 below).
Install the attachment plate (weighing about 60 kg) on the test head	The wafer prober is now shipped in a different form, and workers no longer have to manhandle the heavy object.
Attach the cable bundle (weighing 30 kg or more per meter) to the clamp part	The lifting weight of the bundle was measured and it was divided into smaller bundles to reduce the work risk.

Improvement [1]  
Redesigned cart with handles to raise or lower the test head



Improvement [2]  
Shipped with the attachment plate installed



## TOPICS

### Team Resources Management Training

As equipment increases in size, the number of workers dealing with the equipment also tends to increase, and as the number of workers increases, it becomes more difficult for them to communicate with each other. Under these circumstances, safety activities and education need to be conducted focusing on human relations, and thus we developed a new educational method called Team Resources Management (TRM) jointly with the Japan Institute of Human Factors. TRM was built on Crew Resources Management (CRM), which was developed to teach flight crew members how to use all available human resources, hardware, and information effectively for high-level teamwork on board an airplane.

The TRM training targets on-site work leaders. In the TRM training, the leaders are trained in communications, team building, and situation assessment. They also practice teamwork within a clean room. The number of participants in the training is limited to

around 10 on each course. Therefore the numbers who have completed this training are still low, but we will continue to provide the courses to train as many leaders as possible so that they will understand the importance and difficulty of communications, teamwork, and situation assessment, something that they have all done without a second thought. The training will also enable them to recognize that they can improve their activities by intentionally modifying their behavior. We hope that this training will improve on-site communications and teamwork.



TRM training