As a manufacturer of semiconductor and flat panel display (FPD) production equipment, TEL places the highest priority on the safety of everyone involved in its operations. Our objectives include providing safe products, continually improving the working environments, educating them about safety, and eliminating workplace accidents.
Increasing the safety awareness of individual workers is crucial for providing worksites where everyone can work safely. To fully support our “Safety First” culture, TEL has established the equipment safety promotion meeting and the work safety promotion meeting under the supervision of the EHS council. The equipment safety promotion meeting revises TEL’s design rules based on international laws and local regulations for equipment safety. It also determines TEL’s compliance with new regulations and administers corrective measures. The work safety promotion meeting investigates work safety issues at customer sites and TEL Group locations and implements appropriate remedies. These meetings also examine incidents involving personal injury or property damage, determine whether the incidents were caused by equipment trouble or other work-related factors, and take measures to ensure similar incidents do not occur in the future.

**Goals and results for fiscal year 2016**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Goals</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product safety</td>
<td>Comply with local safety/laws and regulations in a timely manner.</td>
<td>Responded to customer inquiries on specifications of emergency stop, material safety standards, remote operations, etc.</td>
</tr>
<tr>
<td>Accident prevention</td>
<td>Prevent accidents. If accidents occur, perform root cause analysis and share this information to prevent similar accidents.</td>
<td>Attained a 38% reduction in TCIR. Number of incidents that could lead to serious injury: 12 in fiscal year 2016 compared to 8 in fiscal year 2014 (figures include incidents that did not result in serious injury or disease).</td>
</tr>
<tr>
<td>Safety education</td>
<td>Improve overall safety skills through practical training, etc.</td>
<td>Provided basic and advanced safety refresher training to all employees globally. Provided web-based accident prevention training to 47,000 employees (cumulative).</td>
</tr>
<tr>
<td>Safety management</td>
<td>Clarify policies and set organizational framework for sustainability program.</td>
<td>Evaluated the current situation of safety at TEL and implemented remedies and improvements through the global EHS Council.</td>
</tr>
</tbody>
</table>

**Framework**

Increasing the safety awareness of individual workers is crucial for providing worksites where everyone can work safely. To fully support our “Safety First” culture, TEL has established the equipment safety promotion meeting and the work safety promotion meeting under the supervision of the EHS council. The equipment safety promotion meeting revises TEL’s design rules based on international laws and local regulations for equipment safety. It also determines TEL’s compliance with new regulations and administers corrective measures. The work safety promotion meeting investigates work safety issues at customer sites and TEL Group locations and implements appropriate remedies. These meetings also examine incidents involving personal injury or property damage, determine whether the incidents were caused by equipment trouble or other work-related factors, and take measures to ensure similar incidents do not occur in the future.

**Percentage of employees completing basic and advanced safety refresher training**

100%
Improving employee safety

Initiatives for safety improvement
To ensure the safety of its employees, customers, and all others involved in its operations, TEL places a strong focus on preventing work-related accidents.

At each TEL factory and office, monthly safety and health committee meetings are held to discuss safety monitoring and to manage any workplace safety or employee health issues. In addition, representatives from appropriate departments monitor safety performance at least once a month at each manufacturing site as part of an overall systematic effort to solve problems at their sites.

Also, TEL has implemented a management system based on OHSMS\(^1\) to identify and analyze potential workplace hazards. The knowledge obtained from this system is shared throughout TEL. Before starting work, all workers discuss the risks involved and the required actions to prevent mistakes. The group leader oversees the work at all times to eliminate any unsafe conditions or behavior that could lead to accidents. In addition, whenever employees perceive that workplace safety is at risk due to lack of preparation or an unplanned event, they are encouraged to stop work and implement any needed corrective action. Additionally, safety managers regularly give advice on how to manage hazards, further raising worker safety awareness.

As a result of these initiatives, the TCIR (Total Case Incident Rate) improved from 0.24 to 0.21.

Safety education
To improve employee safety awareness, TEL provides a wide variety of web-based training.

In fiscal year 2016, TEL provided basic safety refresher training to all employees. Advanced safety refresher training was also provided. This advanced training used actual incidents as learning examples with a goal of preventing similar incidents from happening again.

To eliminate accidents, TEL also provides risk assessment training and 13 additional web-based training courses\(^2\) (statistically proven to be effective) at offices and factories worldwide. TEL also provides safety information to suppliers as part of ongoing activities to prevent accidents.

Response to workplace accidents
When a workplace accident occurs, TEL analyzes the cause, or causes, and takes appropriate countermeasures. In addition to the principal cause, further causes are also identified through multi-faceted analyses of the state of injured persons, facilities, environment, co-workers, and the actual work. The results are shared with the entire company through safety promotion meetings and other forums to prevent recurrence.

Workplace accidents that could lead to serious injuries are classified as critical workplace accidents, and their circumstances, causes, and remedies must be reported to the executive in charge. When concern is high, the accident is also reported to the President. Information about these accidents is shared at the global EHS council meetings to ensure organization-wide prevention efforts.

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\(^1\) OHSMS: Occupational Health and Safety Management System. A management system to reduce the potential risk of work-related accidents and improve the overall level of safety and occupational health. Based on the policy set by senior management, a series of PDCA (Plan, Do, Check, Act) processes for safety and occupational health management is drawn up and implemented on the employees’ own initiative.

\(^2\) Web-based training courses focus on 13 themes: preventing equipment confusion; preventing falls from openings; stop work authority (SWA); preventing being caught in a drive unit; preventing work-related back pain; pointing and calling; preventing exposure to liquid chemicals; work safety rules; detailed work safety instructions; rules for accident reporting; assessing risks; measures against ergonomic incidents; and criteria for SWA.
Improving customer safety

Giving assurance to customers
Because TEL’s products often require the use of hazardous chemicals and high voltage electricity, TEL provides the relevant safety information to customers.

All products supplied by TEL come with a standard TEL Safety and Environmental Guidelines manual. This manual describes the risks associated with the use of TEL products by category, such as chemical, electrical, mechanical, and ergonomic, together with the methods for averting those risks. The manual also describes the safety measures built into the products and the recommended methods of product disposal. The manual is prepared in 10 languages including Japanese, English, five EU languages, and three additional Asian languages to ensure the content is understood by a wide range of customers. Also, each product comes with a manual detailing the procedures for avoiding product-specific risks and securing safe operation and maintenance, thus providing an additional safeguard for customers.

TEL also assists customers in learning how to operate and maintain the equipment. Our training centers located in Japan and abroad offer practical skills training for TEL equipment. TEL also provides on-site training at customer sites.

When we deliver our products to new customer plants and production lines, we check the facilities, equipment, and workplace safety standards beforehand, as dictated by internal TEL rules. This process allows TEL to resolve any safety concerns and secure a safe working environment.

Improving product safety

Initiatives for improving work safety
Taking the entire product life cycle into consideration, TEL carries out product risk assessments as early as possible in the development phase. Based on the assessment results, TEL implements intrinsically safe equipment design to reduce the risks posed to humans. TEL also examines and ensures compliance with changing laws and regulations around the globe, abiding by all safety regulations of the regions where our equipment is shipped, and allowing inspections by safety certification organizations as required.

Safety education
In recent years, it has become increasingly important for TEL to ensure compliance with international safety standards and guidelines early in the equipment design and development processes. Since fiscal year 2008, TEL has been offering its engineers web-based training on safe equipment design. Through risk assessment exercises and examples of actual accidents, the participants acquire basic safety knowledge for equipment design. In fiscal year 2016, we revised the education program using updated information, including new safety standards. In addition to the training for design engineers, we are also promoting equipment safety education for all workers in areas such as manufacturing, start-up, service, and off-site logistics. This allows these employees to apply the knowledge to the handling of equipment as well as assist in the development of safer equipment. For fiscal year 2017, lectures and training by outside experts are also being planned.