Two Years of Reconstruction Efforts

Taking lessons from its experience of natural disasters, Akebono is reinforcing its manufacturing structure while deepening ties with local communities.

Fukushima Manufacturing: Creating a Safe and Comfortable Workplace

After the Great East Japan Earthquake struck on March 11, 2011, Akebono Brake Fukushima Manufacturing Co., Ltd. (Fukushima Manufacturing) was forced to suspend production due to damage suffered by its plant buildings. Nevertheless, the company was able to resume operations after only a week.

Since then, Fukushima Manufacturing has reinforced damaged buildings and facilities, working to make sure that they could endure a similar disaster should it occur at some future date. At the same time, associates' emergency contact lists were updated, incorporating maps of their residences to facilitate prompt confirmation of the safety of both them and their families.

In addition, on October 15, 2012, Fukushima Manufacturing conducted a disaster drill from 07:10 p.m. with a focus on being prepared for an emergency situation where there is no lighting available.

Reinforcement Work and Other Disaster Countermeasures Implemented at Fukushima Manufacturing

Damage	Countermeasures	Details
Collapse of walls	Repair of walls and reinstallation of braces	Braces with improved strength were installed in the walls to withstand seismic vibrations
Displacement of equipment	Reinforcement of anchor bolts for all plant equipment	All plant equipment was secured using anchor bolts to prevent them from falling
Fall of molds	Installation of improved fall prevention devices at mold storage	Improved devices installed in roller shelves to prevent metallic molds from falling
Breakage of sewage treatment tank	Reinforcement of the structure surrounding sewage treatment tank	Constructed steel-reinforced concrete walls around an underground sewage treatment tank
Absence of food and drinking water stocks	Stock food and drinking water	Stocked three days' worth of food and drinking water

Lessons Learned from the Great East Japan Earthquake and Thai Flooding

Dealing with the repercussions of the Great East Japan Earthquake and flooding in Thailand in fiscal 2011, although we managed to avoid significant shortfalls in our product supply to customers, these emergencies revealed that our risk management initiatives with regard to parts and material procurement must be greatly reinforced. In particular, supply sources for input materials were found to be available from only a limited number of companies. Also, the Thai flooding showed us that a natural disaster that strikes a single country may trigger global supply chain problems. To address these issues, we began collecting information on our global supply chain, confirming the interchangeability between parts and materials and developing an integrated database.

Ultimately, we aim to establish a structure that ensures the prompt recovery of production capacity—no matter what the problem and no matter where in the world it occurs—by employing the resources retained by the Akebono Group members worldwide. We intend to use the collected supply chain data not only for risk management but also to improve selection and procurement process of parts and materials in terms of global cost optimization. Specifically, in pursuit of "Commonization and Standardization" (C&S) and "design manufacturability," we will closely cooperate with suppliers and the Engineering Department to eliminate factors—such as complicated designs or materials—that hinder interchangeability. We will also accelerate our efforts to standardize as well as localize parts and materials for global platform (GPF) business with the main focus put on cost competitiveness and risk reduction.

Addressing Management Issues Needing BCP Coverage

We recognize the maintenance and reinforcement of our Business Continuation Plans (BCPs) to be a crucial management issue. Carrying on with efforts made since the Great East Japan Earthquake, we began drawing up action plans to further strengthen our disaster response capabilities. These plans address the risk of supply chain disruption, a growing cause of concern among our customers, and envisage such events as large-scale natural disasters and pandemics.

Taking into account the guidelines issued by Japan's Cabinet Office and Japan Auto Parts Industries Association (JAPIA), we will step up our efforts to enhance our BCPs for locations worldwide while encouraging our suppliers to formulate such plans.

Management Issues Identified in the Wake of the Earthquake

Issues	Initiatives
Review of crisis management structure	•Conduct drills focused on early response and recovery •Review crisis management structure and disaster response manuals, expanding their scope to cover such events as weather and traffic accidents that may impact safety and product delivery. Other issues for discussion include rules for the setup and management of response headquarters, the means of ensuring greater information visibility, and equipment needed for disaster response
Clarify roles and responsibilities	•Review the scale of response headquarters as well as emergency response measures •Clarify matters to be confirmed at times of emergency (the safety of associates, the status of shipments, etc.) as well as persons in charge
Visualize working conditions of associates	•Track the attendance and absence of each associate •Establish a real-time update and share system
Prompt communication	•Collect information on the status of customers, etc., to forecast order trends in the medium and long terms •Collect information from external information sources •Ensure controlled sharing of information, appointing a person in charge to facilitate communication among bases
Review of purchasing	•Collect information on the supply chain on a global basis, confirm the interchangeability of parts and materials and develop an integrated database •Enhance C&S and design manufacturability to eliminate factors that hinder parts interchangeability •Drive C&S and localization activities for GPF operations
Reform of production systems	•Reorganize global production systems (avoid overconcentration) •Promote C&S+t* initiatives (enhance compatibility of production facilities)
Facility check-ups and reinforcement	•Continued implementation of anti-seismic reinforcement work •Establish a back-up functions for the response headquarters at Ai-Village (see page 27) •Install emergency power supply systems at each site •Update satellite phones

*"C&S plus topping (t)." See pages 4-9.

Test Course Restored and Renamed “Ai-Ring”

In November 2012, we completed the restoration of the test course in Iwaki City, Fukushima Prefecture, which suffered damage in the wake of the Great East Japan Earthquake. The test course again came into service under the new name “Ai-Ring.” “A” and “i” were taken from initials of “Akebono” and “Iwaki,” respectively, while “Ring” represents the circle of Akebono associates worldwide as well as the shape of the test course and is pronounced in the German manner. The reopening ceremony was attended by the vice governor of Fukushima Prefecture and the mayor of Iwaki.

The Ai-Ring reopening ceremony

■ Supporting Restoration: Co-Sponsored LFA Test Driving Event

Seeking to encourage young people in Fukushima to have dreams and hope for the future in the post-earthquake world, on October 20, 2012, we held a Lexus Future Advance (LFA) test driving event at Ai-Ring in tandem with Toyo System Co., Ltd., an Iwaki-based company that organized the event, and Toyota Motor Corporation.

A luxury car marketed by Toyota under the Lexus brand name, the LFA boasts extremely high performance and no more than 500 vehicles have been manufactured and made available around the world. A total of 108 students from local universities and vocational schools were invited to the event and displayed great interest in these luxury cars that many were seeing for the first time. Five LFA vehicles were readied for the course and the students were given the chance to ride in the navigator’s seat as a professional motor sports driver took the wheel. At the event, Akebono demonstrated its products and technologies, such as an Anti-Lock Braking System (ABS). We also presented visual materials showing the extent of the earthquake damage the test course suffered. The event was successful, providing young people with a fun day and good opportunities to learn about Akebono.

An LFA test car

Passing on Lessons Learned from the Disaster to the Next Generation

■ A Diorama Created to Preserve the Memory of the Earthquake

Although the test course suffered considerable damage from the Great East Japan Earthquake, Akebono associates have worked as “One Team” to restore it, achieving the re-opening of the site in November 2012. We created a diorama that replicates the damage as a means to preserve the memory of the earthquake and pass it to future generations.

■ Looking Back at the Earthquake—Remembrance Lunch Menu

Two years after the earthquake, on March 11, 2013, rice balls were served at the cafeteria of Fukushima Manufacturing for lunch. During the period in which Fukushima Manufacturing was struggling in the turmoil after the earthquake, the kitchen of the cafeteria was out of service due to the breakage of a sewage treatment tank. Because of that, nothing but rice balls could be served for lunch every day. During the crisis, scholarship students working at Fukushima Manufacturing volunteered to wake up earlier and prepare 350 rice balls every morning, which they kept doing for a month until a temporary sewage treatment tank was installed.

Comments of associates recalling those days:

“I still remember the fear induced by a six intensity seismic shock.”

“Remembering how much support we were given those days, I feel a renewed sense of gratitude.”

“I was so panicked, but then I heard a colleague asking me if I was alright and it calmed me down a lot.”

“I suppose we should gather and talk over the earthquake at least once a year.”

“I will remember the support given to me by Akebono ever after. I will, in turn, support creating ‘One Team’ to enhance the Company’s value.”

Preparing rice balls while recalling those days

TOPICS

2011 Graduation Ceremony for Vocational School Students Who Worked at Fukushima Manufacturing

■ A Memorable Graduation Ceremony in Nihonbashi

Fukushima Junior College suffered damage to its school buildings in the Great East Japan Earthquake. This led to the cancellation of the graduation ceremony scheduled for March 17, 2011, which would have included some students who attended the junior college while working at Fukushima Manufacturing. Instead, Akebono held the graduation ceremony for these students on April 10, 2011, at its Global Head Office in Tokyo, inviting their families, who were joined by President Nobumoto and other directors. Thanks to the cooperation of dress rental shops and beauty salons, all of the students were well coiffed and dressed, wearing Hakama, the traditional Japanese formal clothing for such celebrations. The event was followed by a farewell party filled with tears and laughter.

Graduation ceremony in Nihonbashi, Tokyo (April 10, 2011)

Comment from a 2011 Graduate

Risa Kamekawa (Tagajo City, Miyagi Prefecture)

I was so moved at the graduation ceremony, for many people from Akebono, including Mr. Nobumoto the president, were so very kind. It was a heartwarming event that I will never forget. I am now working at a nursery school in Tagajo City, where I grew up, and am currently taking care of 12 one-year-old children. I feel that my days at Akebono, working there while studying, have made me who I am today, providing me with great confidence. I am so thankful that Akebono helped me achieve my dream.