

18 The early recovery of Kashima Steel Works from the aftermath of the Great East Japan Earthquake

The Great East Japan Earthquake on March 11, 2011 caused extensive damage to the facilities at Kashima Steel Works and brought all operations to a temporary halt. In the response and recovery process immediately after the earthquake, our staff demonstrated the benefits of their daily training and emergency preparation programs. Following the earthquake we immediately set up crisis control centers and started up the initial systems. The centers and systems enabled us to send quickly emergency relief supplies and support personnel to the site, as well as formulate a recovery plan. Based on well-defined policies and a chain of command, we resumed operations at the Works, giving a priority to the manufacture and shipment of building materials that will play a role in the recovery of the areas in Japan affected by the disaster. We restarted the operation of the Kashima Power Station at the Kashima Steel Works. The power station is supplying its entire generating output of 475 megawatts to the Tokyo Electric Power Company.

(1) Initial systems

Date	Time	Events
Mar 11	14:46	A huge earthquake halts all production lines
	16:20	Crisis control centers set up at the SMI head office and at each plant
		Situation assessed. Kashima support system put into operation
		The process of mobilizing people who will help out in the recovery of Kashima begins at each plant and at our affiliated companies
	Evening	The sending of relief supplies from each plant to Kashima Steel Works begins
19:30	Safety of all related personnel at Kashima Steel Works confirmed	
Mar 12	Morning	Relief supplies from head office and each plant, our customers and others continue to arrive
		Details of the damage at Kashima Steel Works are gathered. Recovery plan proposed
	From evening to late at night	Support personnel from our plants arrive at Kashima and start work (approx. 300 people from our other plants, plus about 2,500 people from partner companies)

(2) The road to recovery

Date	Response
Mar 15	Shipment of lightweight welded H-beams, pipe piles and steel sheet rolls resumed
Mar 20	No. 3 blast furnace resumes operations
Mar 25	Kashima Power Plant starts generating power again
Mar 26	No. 1 blast furnace resumes operations
Mar 29	No. 2 coke oven resumes operations
Apr 3	No. 1 steel making plant resumes steel making and continuous casting
Apr 5	Plate mill restarts rolling operations
Apr 12	Hot strip mill restarts rolling operations
Apr 24	Large shape mill restarts rolling operations
Apr 25	No. 1 cold strip & galvanizing mill resumes operations, bringing the entire line at Kashima Steel Works back into service
Apr 30	All the tuyeres (hot air nozzles) of the No. 1 and No. 3 blast furnaces are opened, returning both furnaces to a state where they are ready to operate normally