On-Site Earthquake Early Warning System

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In Japan, Semiconductor industry aimed at a strong factory to an earthquake after the Great Hanshin/Awaji Earthquake in 1995. We have carried out the correspondence by earthquake-resistant reinforcement of factory, fixing of equipment, shaking stop of the pipes, using expansion joint, etc. On the other hand, as effective use of JMA-EEW this information is adopted as life safety and factory production continuation.

In our company, an earthquake prediction like JMA-EEW is being carried out using On-Site seismometer. This On-Site system has functioned effectively, when we did not receive a prediction of JMA-EEW and we received a wrong prediction.

At present, We use this system combined by JMA-EEW, On-Site EEW and the actual measurement. We pile up much improvement after introduction in 2005 and have obtained many results. The secondary disaster by leakage of dangerous chemicals and special gases is prevented and the reduction in operation loss by early re-operation was achieved.

In 2011 The Great East Japan Earthquake, this function is done effectively and early re-operation was achieved.

Using this outcome, we aimed at practical use expansion of On-Site EEW System. We developed a MEMS seismometer and the exclusive controller which does the announcement and the external equipment control and use. The Development aiming at effective use of neighborhood information system is expanded by network building of On-Site EEW System as the next stage.

Keywords: Earthquake Early Warning, On-Site