



FOR IMMEDIATE RELEASE

OKI and Taiheiyo Cement Succeed in Developing World's First Strain Sensing System Using 13.56MHz Sensor-Integrated RFID - Direct and easy measurement of construction loading and deformation is now possible -

Tokyo, Japan, November 5, 2007 – Oki Electric Industry Co., Ltd. (TSE: 6703) and Taiheiyo Cement Corp. (TSE: 5233) today announced they have succeeded in developing the "Strain Sensing System" to maintain and manage structures using a passive-type sensor-integrated RFID. This RFID connects to various sensors with no need of a battery since it does not emit radio wave on its own. The system will be on display at OKI's booth (East 4 Hall, M-614) at the "Maintenance Techno Show 2007" to be held in Tokyo, Japan from November 6th to the 9th.

There has been a rising need to examine structures easily and appropriately, as efficient maintenance and management of roads, bridges and public housing are required. Concrete and steel structures are constantly under various loads including everyday traffic, wind and earth pressure and earthquakes. Thus, the load bearing ability declines through damage from deterioration until the structure can no longer perform its function. Conventionally, the maintenance and management of structures involved estimating the degree of deformation from outward appearance. For this reason, it has been very difficult to directly measure deformation caused by loading.

OKI and Taiheiyo Cement have succeeded in directly measuring structure load and deformation levels using the Strain Sensing System that includes a sensing function. The two companies decided on this joint development because their views to reduce maintenance costs and to provide new services, such as information management for maintenance and management, conformed. The two companies aim to expand applications in the construction industry.

The Strain Sensing System, based on a passive-type sensor-integrated RFID, measures the changes and deformation caused by various types of deterioration and loading on the structure, without using a battery. By embedding a sensor-integrated steel within the concrete, the system can perform measurements at a strain resolution level of approximately 10X10-6. In addition, with a thermistor, the system simultaneously measures temperature and can account for deformation caused by temperature. OKI provides a sensor RFID LSI, a reader/writer that helps achieve the sensing function, and software.

With this system, Taiheiyo Cement will execute the verification tests on-site and will use the system in its "Concrete Solution," a Taiheiyo Cement's initiative for proposing the most suitable concrete material and technologies. In addition, with a target date of April 2008, Taiheiyo Consultant Co., Ltd. will initiate trial sales of this system in the Japanese market to expand its consultation business by performing services such as examining structures after the system has been installed.

OKI will actively continue to develop this sensing system based on passive-type sensor-integrated RFIDs and aim to provide products that meet the needs of the market.

About Oki Electric Industry Co., Ltd.

Founded in 1881, Oki Electric Industry Co., Ltd. is Japan's first telecommunications manufacturer, with its headquarters in Tokyo, Japan. OKI provides top-quality products, technologies and solutions to its customers through its info-telecom system business, semiconductor business and printer business. All three businesses function as a collective force to create exciting new products and technologies that satisfy a spectrum of customer needs in various markets. Visit OKI's global web site at <u>http://www.oki.com/</u>.

Notes:

- Names of companies and products are trademarks or registered trademarks of the respective companies and organizations.

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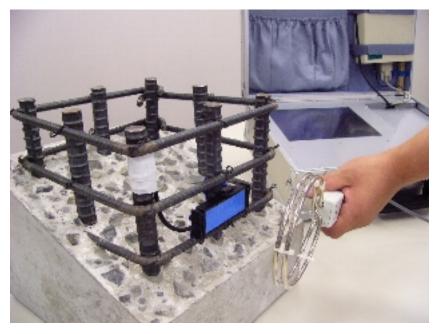
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[Reference Material]

[Measuring image]



Measures the sensor (white taping area on steel) from RFID tag (in blue) with a portable reader/writer with control PC

