

Examples of “New Era Lifeline Support Solutions” Businesses

Railway Systems

A

As Japan's only systems integrator in the railway systems field, Hitachi provides solutions for customers' various new-era needs in a broad range of fields, extending from rail vehicles, operations management and signaling systems, and substation systems to information services.

In the field of rail vehicles, Hitachi boasts experience and a proud track record over many years in the design, development and manufacture of bullet trains. In addition, the A-train concept, established with ground-breaking structures and methods, has won the support of many customers.

Leveraging its years of experience and proven capabilities, Hitachi is vigorously expanding its railway systems business overseas, as well as in Japan. In June 2005, Hitachi won the contract to supply rail vehicles to operate domestic services on the Channel Tunnel Rail Link (CTRL) and local lines in the U.K. This line is scheduled to open in 2009.



A Hitachi train, which will operate domestic services on the Channel Tunnel Rail Link (CTRL) and local lines in the U.K.

Finger Vein Authentication Systems

B



An ATM equipped with Hitachi's finger vein authentication system

In recent years, there has been a growing need for biometric authentication, which offers an inherently higher level of security, in order to prevent the loss of trust that can be caused by the leak of personal information, a problem that can affect a company's ability to survive.

Seeing this need, Hitachi developed an authentication system that reads a finger's vein pattern. The use of a vein pattern makes forgery, falsification or impersonation extremely difficult, affording a high level of security. Hitachi has already deployed over 5,000 units of the finger vein authentication system in Japan and overseas for PC login and room access systems. Compared with other biometric authentication systems, this system has more accurate certification as well as a shorter authentication time thanks to the smaller volume of data and compact size of hardware. These advantages put the finger vein system at the front of the pack when it comes to applications in fields requiring outstanding security. Hitachi has also developed an ATM incorporating this technology, which banks and other financial institutions in Japan are starting to adopt.

Biomedical Business

C

The biomedical market today is being shaped by a number of dynamics, including the increasing sophistication and performance of medical equipment, the growing application of biotechnology in medicine, and the diversification of services targeting medical institutions.

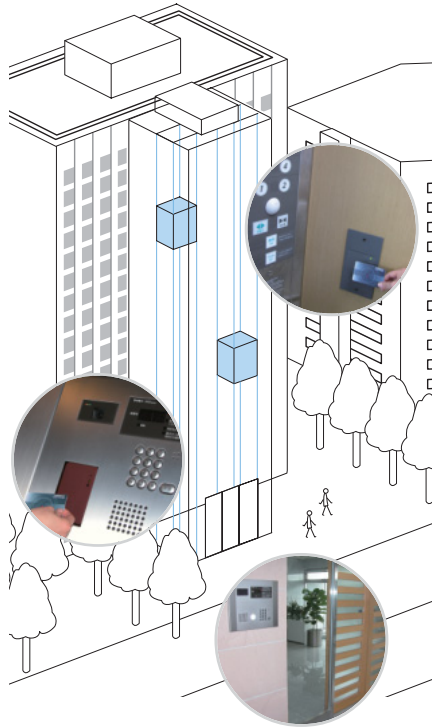
Hitachi is boosting resources for the development of competitive products in the imaging diagnostics and treatment areas, including Open Magnetic Resonance Imaging (MRI) systems, ultrasound equipment and proton beam therapy systems. Hitachi is supplying a proton beam therapy system to M.D. Anderson Cancer Center, one of the largest hospitals specializing in the treatment of cancer in the U.S. In the biometric diagnostic field, Hitachi is expanding its clinical diagnostic equipment and DNA sequencer businesses. Hitachi commands a world-leading share in the latter business. At the same time, it is pushing forward with the development of next-generation DNA diagnostic devices. In the medical information and services fields, meanwhile, Hitachi is aiming to expand its medical finance services business and strengthen solutions businesses targeting pharmaceutical and medical organizations. Moreover, Hitachi is engaged in concerted efforts to foster businesses in the functional imaging field, including magneto cardiograph systems and optical topography systems.

Magnetocardiograph MC-6400



Urban Planning and Development Systems

D



IT condominium systems

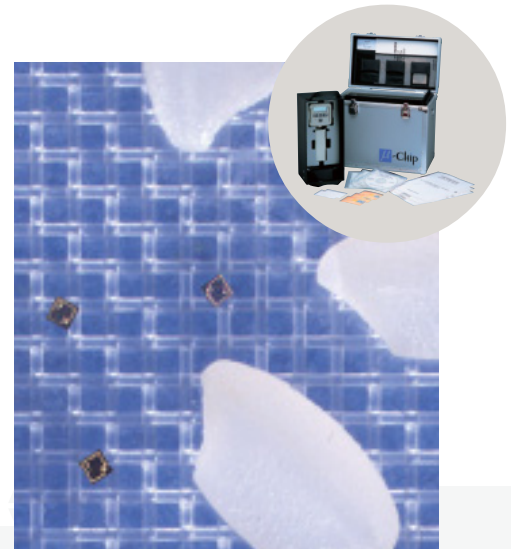
Hitachi is developing into a new business pillar the provision of "Urban service infrastructure" that supports the creation of cities that are safe, comfortable and convenient. The foundation of this business is Hitachi's service network for comprehensive building management that was created as part of the elevator and escalator business. This foundation also incorporates the collective strengths of the Hitachi Group, including motion and intelligent sensing technology and financial services. By incorporating IT in apartment security systems, for example, Hitachi can allow residents to check whether doors are locked or control home appliances using a mobile phone, making apartment living more safe and pleasant.

Through various solutions grounded on technology assembled to date, Hitachi will provide services for safe, comfortable and convenient lifestyles.

μ-Chip Solutions

E

Hitachi's μ-chip is one of the world's smallest contactless Radio Frequency Identification IC chips, measuring a mere 0.4mm square. Each μ-chip has a unique 38-digit ID number that cannot be overwritten. By attaching a μ-chip to a product, various data, including product information and production history, can be stored on a host computer under tight security, with the unique ID number functioning as a key. Compared to rewriteable ID tags, μ-chips can be linked to a larger volume of data. Hitachi is promoting various applications for the μ-chip on top of product management and product authentication. Hitachi is offering progressive business solutions to develop new businesses involving services that deliver comfort, security and peace of mind to consumers and maximize efficiency for companies. Examples of these services include supply chain management (SCM) and traceability. The collective strengths of Hitachi, with its in-depth knowledge of industries and markets, can change how business is conducted. Hitachi's μ-chip solutions promise to do just that.



A μ-chip field testing kit (top) and an enlarged photograph highlighting the relative sizes of μ-chips and grains of rice (bottom)