



# Corporate profile

## Anywire Corporation



# Concept

## ■ Ecology Conserve Wiring [Sho-Haisen]

**Labor Saving**  
The efficient automation  
Achieve environmental monitoring

**Resource Conservation**  
Cable resources, reduction of material, for renewal of reuse

**Shortening Construction**  
The wiring design, reducing the manpower establishment



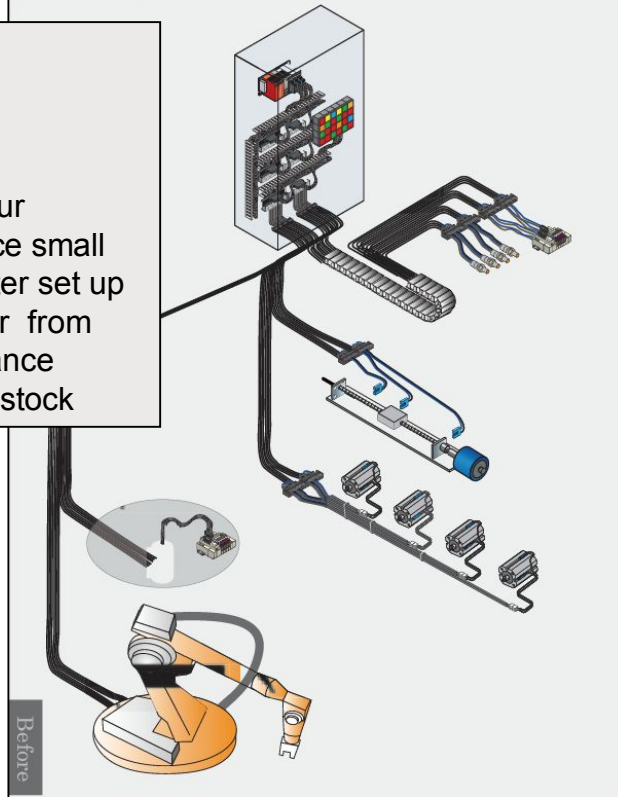
# What is the conserve wiring [Sho-Haisen]?

## ■ Overview

Hundreds of signal wires

Conventional

1. Big control panel
2. Wiring ducts filled
3. Check wiring hard
4. Required grounding
5. Wiring mistakes occur
6. PLC expansion space small
7. Difficult to modify after set up
8. Increased manpower from installation to maintenance
9. Many materials and stock

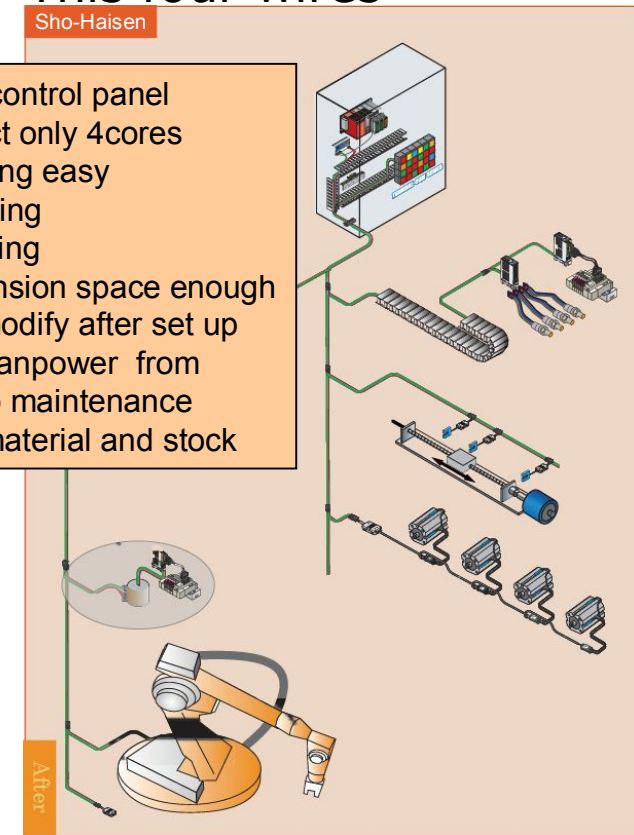


This four wires

Sho-Haisen

1. Compact control panel
2. Wiring duct only 4cores
3. Check wiring easy
4. No grounding
5. Simple wiring
6. PLC expansion space enough
7. Easy to modify after set up
8. Reduce manpower from installation to maintenance
10. Reduce material and stock

Used AnyWire  
Sensor Network



# AnyWire Technology

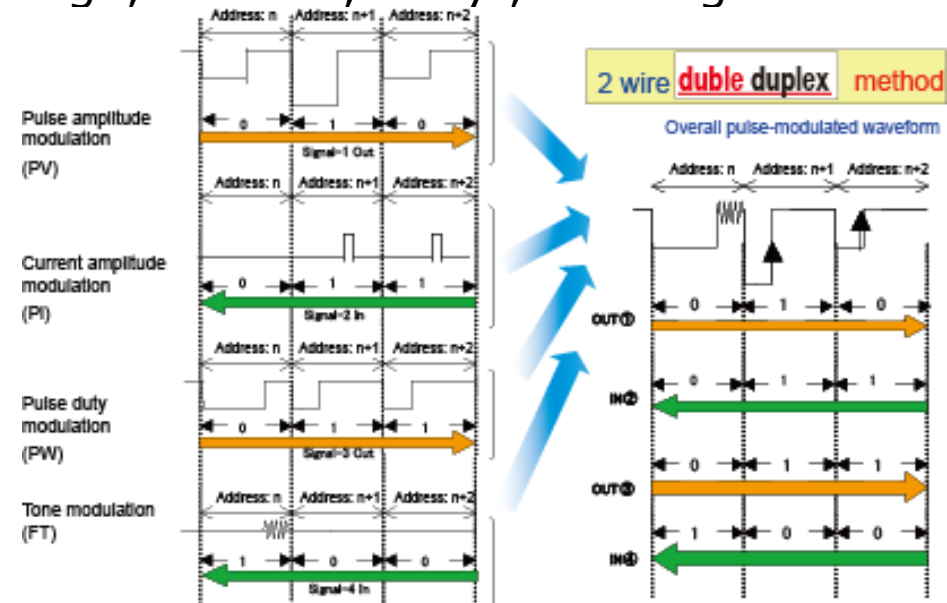
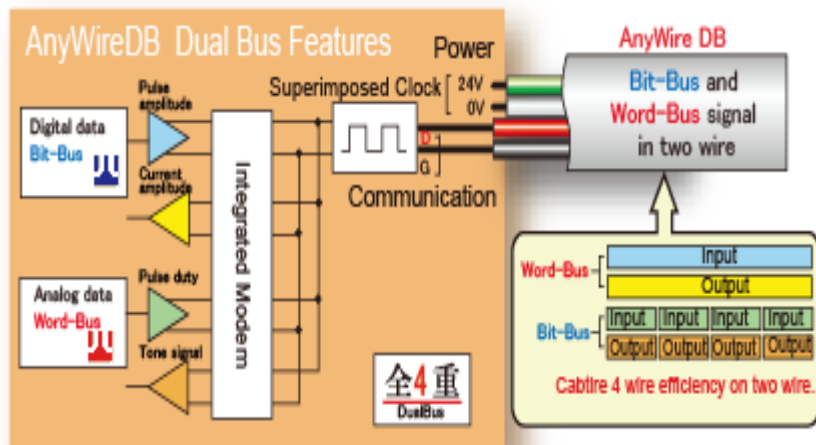
## ■ 4 signals transmitting in 2 wires

■ 4bit information per 1 clock

■ 2 wire transmission method (Double duplex)

If half duplex communications assumes load, it is one lane. Double duplex is Highway has Round trip and 2 lane.

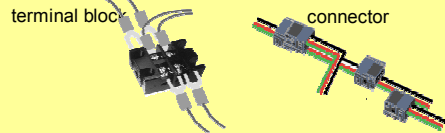
2 wire cable Overlay 4 signals, Voltage, Current, Duty, Tone signal.



# Feature of AnyWire Sho-Haisen

## ■ Flexible Sho-Haisen

### Unrestricted branching



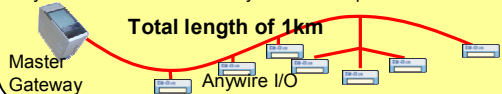
### Focus on Field

without Computer settings, the DIP switch OK



### For long distance

In cabtire cable, can be wired up to 1km.  
If you connect a theoretically unlimited repeaters.



### Cable Free

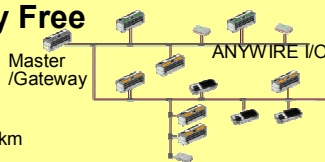
Cabtire Cable  
Shielded Cable  
Non-shielded cable  
Flat Cable  
Slip Ring

Just use the cable that was  
used until now!



### Topology Free

Multidrop  
T-branch  
Tree  
Stars  
Ring  
Total length of 1km



### ■ Fast I/O response noisy field

Ethernet clock system, such as high transmission in high noise environments such as welding lines, repeat the transmission retries, the effective transmission response is extremely slow, fast response I/O impossible. But the clock is 60kHz AnyWire I/O transmission protocol that allows for fast response, which has bear field noise. Currently, as the wiring system of the welding line has been designated as Japan's top automobile manufacturers.

### ■ Dual-Bus to achieve real-time transmission capabilities

AnyWireBus transmission line is one of the two digital and analog signal to I/O data independent of data transmission uses the world's first Dual-Bus feature, while analog transmission data simultaneously I/O, I/O achieve fast response.

### ■ Rough watershed conditions low cost of laying transmission lines

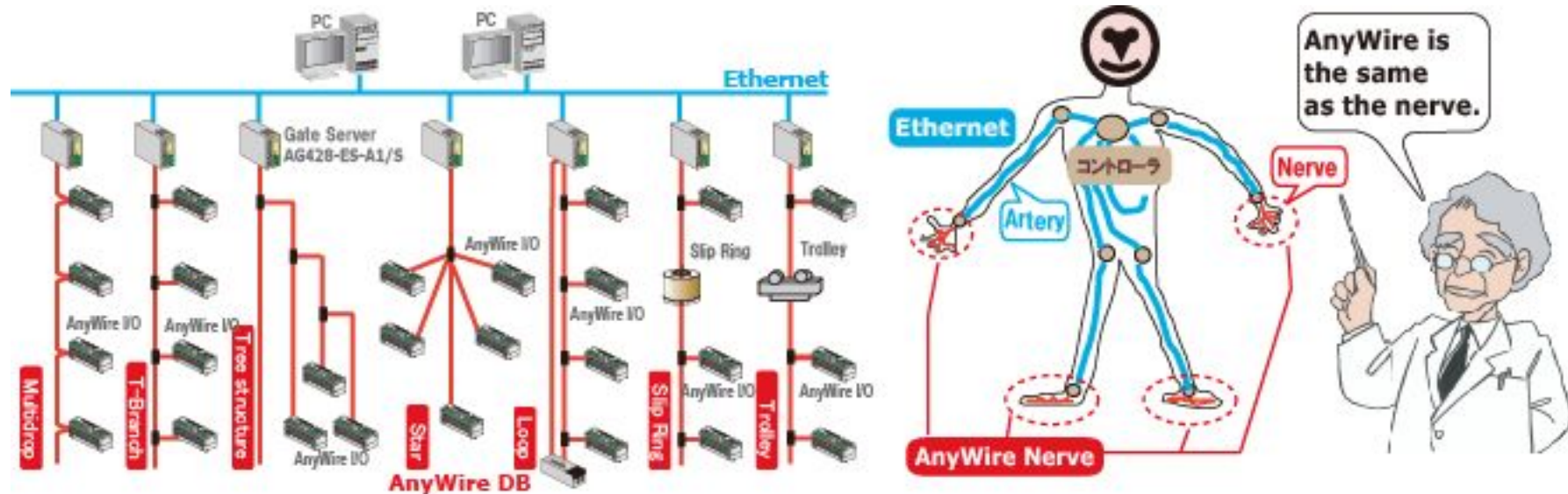
AnyWireBus is generic wire and cable transmission media, wiring, compact maneuverability, provide low-cost wiring system.

Cable laying on the scene already, so you can use the transmission line, shortening the construction period laid, and unnecessary expenses by laying, Significant engineering cost savings. Moreover, there is no need to worry about the troublesome branch condition.

# AnyWire Flexibility

## ■ Media Free & Topology Free

AnyWire is "Terminal nerves". if it says by man. It is a general-purpose electric wire as for the decentralizing I/O node, and it is possible to connect it by many kinds topologies with an existing transmission line if it uses it as a branch line of OpenNet and Ethernet AnyWire. AnyWire flexibly **supplements OpenNet and Ethernet**, and offers an easy, cheap I/O ministry wiring system.



# Three traits

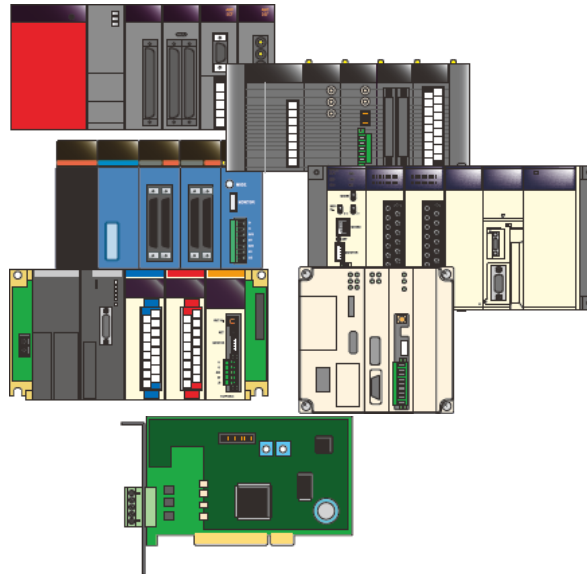
## ■ What are three Any?

**Any Networks Any Controllers Any Applications**

Corresponding Ethernet  
Open Network

CC-Link  
DeviceNet  
MECHATROLINK  
RTEX (Realtime Express™)  
Ethernet

Corresponding various  
PLC & PC controller



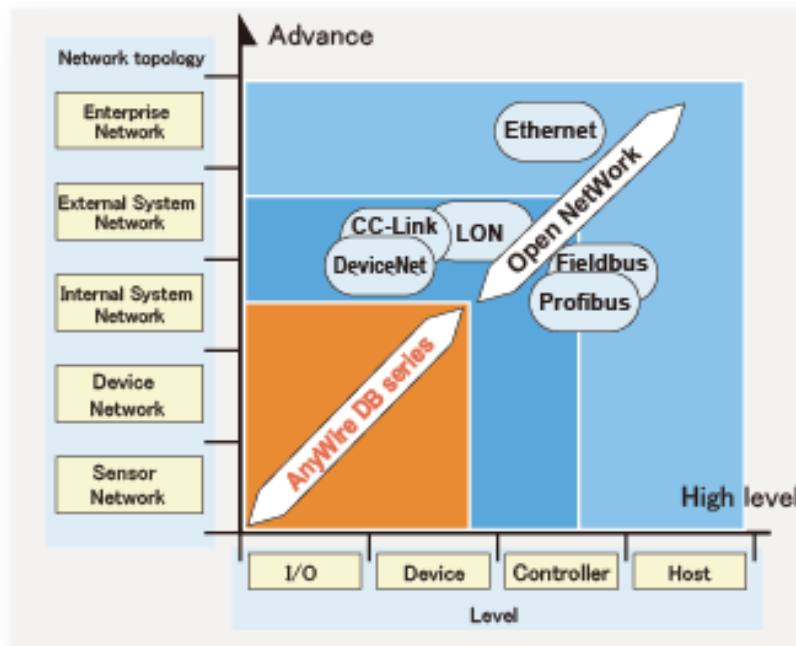
Corresponding various  
Applications



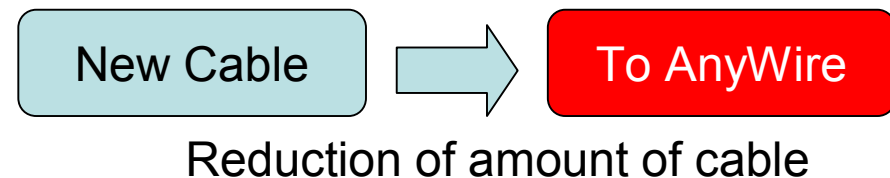
# For ecology

## ■ To the resource saving

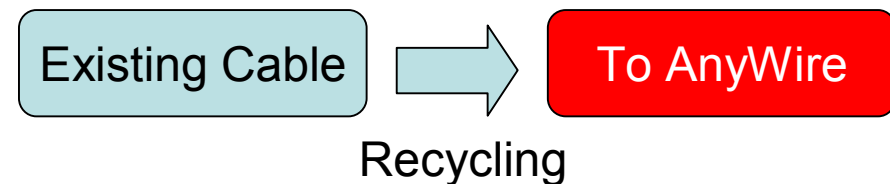
The location of the AnyWire ministry wiring system is a part where a lot of amounts of the cable are used the near the sensor. If the AnyWire ministry wiring is used, recycling the cable used with the reduction and the existing system of the cable resource newly set up is also possible. It is effective for the resource reduction in a variety of automation fields and the achievement of the recycling society.



## ■ New establishment construction



## ■ Renewal construction





# AnyWire Advantage

## ■ If you use the wiring AnyWire ...

### ■ **System configuration reduces the initial investment**

IO reduce the initial investment required can be set up only as needed where needed, it is possible to construct an efficient system.

### ■ **Construction, short construction**

Measurements were wiring terminals can be installed efficiently distributed wiring point measurements are needed. The construction period is shortened, so the system can be extended without having to power down.

### ■ **For renewal, can extend the power stop**

AnyWire wiring can be connected to T-branch or tree-branch can be separately installed and turn left. To establish the T-branch can be easily available and safe construction and insulation displacement connectors to connect the branch.

### ■ **Various options**

More than 1000 different species I / O terminals select the features you need.

### ■ **Anomaly detection**

The wiring I / O error occurs when the terminal can detect the cause of the occurrences.

### ■ **Operation and Monitoring**

Monitoring equipment, system configuration from small to large as to cover the control software.

# Product series

## ■ Product Catalog

### ■ iT@series



iT @ series is, AnyWire wiring systems and information technology (iT) is a system combining effectively. Recently iT utilizing the company's business processes, sales, procurement and production logistics, etc. is more efficient to do so is considered the norm. Wiring system products can be introduced for the purpose of monitoring this business process automation.

[Japanese]

### ■ Factory Automation



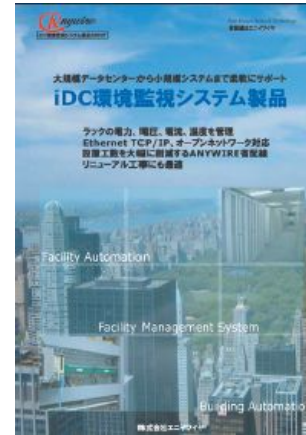
[Japanese]

### ■ Machine



[Japanese]

### ■ iDC environmental monitoring system



iDC / wiring systems for environmental monitoring of the machine room. Scattered around the floor temperature, humidity, current, wire-saving features that can measure the power point wiring efficiency, reduce engineering costs, you can build a flexible system. Green IT energy measurement in the realization of "visibility" is ideal.

[Japanese]

### ■ Picking System



[Japanese]

### ■ FPD Sensor



[Japanese]

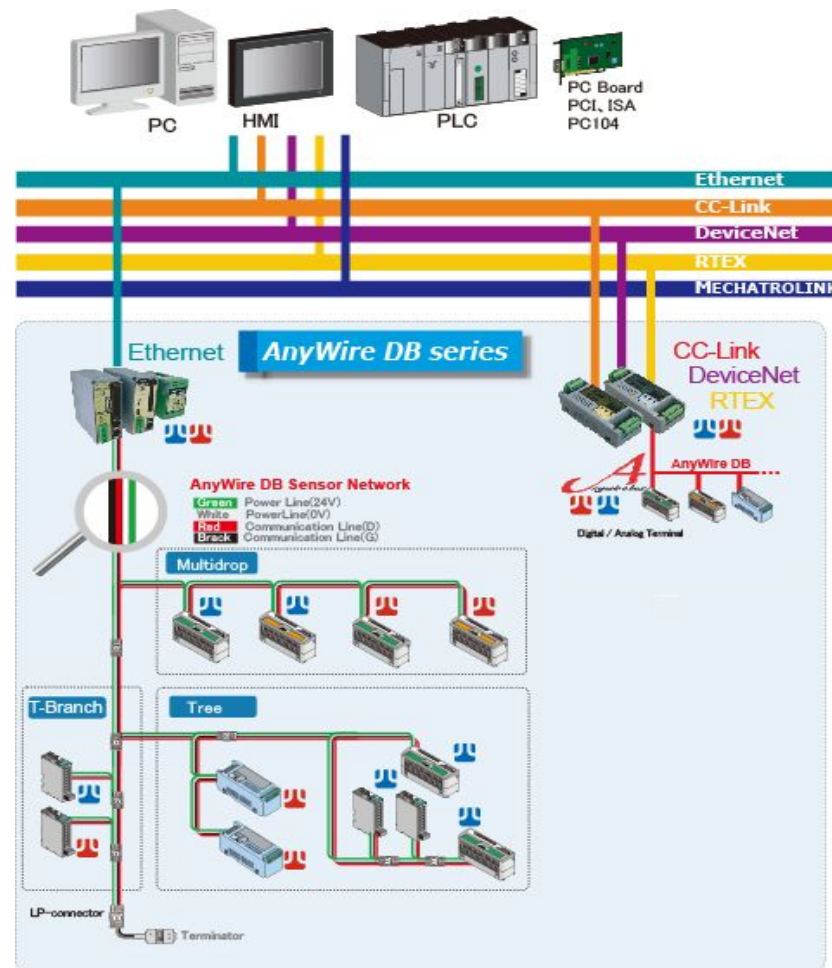
# Product specification

## ■ DB series Specification

Item	Content
Data transmission speed run	183kbps/ 256 point
Transmission	Double Duplex Total Frame / Cyclic
Synchronous	Frame / Bit Synchronous
Topology	Bus Topology Multi-drop, T-Branch, Tree , Star
Protocol	Original Protocol AnyWire DB
Error control	Double data check
I / O points maximum	Bit-Bus In/Out 256/256[bit] Word-Bus In/Out 64/64[word]
Maximum number of connections	128 devices
Cycle Time [62.6kHz]	0.85ms/128bit, 1.4ms/256bit, 2.4ms/512bit, 4.4ms/1024bit
RAS	Transmission line disconnection, Short-circuit
Transmission Media	Cable Free 0.75-1.25sq
Maximum transmission distance	1km/7.8kHz, 500m/15.6kHz, 200m/31.3kHz, 100m/62.5kHz

# System Outline

## ■ System Structure



# Seminar

Conducted in Tokyo, Kyoto or the specified location on your site [Japan].

## ■ Seminar

- Two courses in Semimonthly
  - “A Basic course on technology seminar”
  - “An applied course on technology seminar”
- Location
  - West japan office (Kyoto)
  - or
  - East japan office (Tokyo)



# Patent & International Standard

## ■ Acquisition of intellectual property rights application status [current 9/2008]

Patent:	34 [domestic]
	26 [foreign patent]
Design:	10
Trademark:	21

## ■ ISO International Standards

July 2002 Obtained ISO9001

August 2007 ISO14001 certification



# Applications

## ■ Introduced in various applications



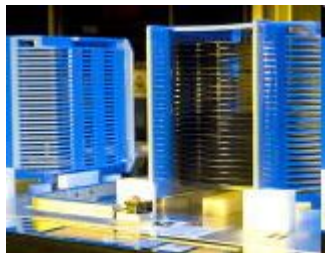
**Automotive**



**Transportation  
logistics  
warehouse**



**Media,  
Communications  
iDC**



**Semiconductor,  
FPD**



**Transportation**



**Building,  
Security**



**Robot &  
Handling**



**Petrochemical ,  
Food &  
Beverage**



**Amusement**



**Industrial  
Machinery**



**Water**



**Agricultural**

# Delivery Results

## ■ Electric Maker

Toshiba, Hitachi, Mitsubishi, Panasonic, Omron, Olympus, Epson, Casio, Sony, Daikin, Yokogawa, TDK

## ■ Automotive

Toyota, Nissan, Mazda, Suzuki, Yamaha, Fuji Heavy Industries

## ■ Semiconductor

Murata, Samsung, Sanyo, DAINIPPON SCREEN , Sharp, Ebara, ULVAC, Kyocera

## ■ Chemical, Food & Beverage

Fuji Film, Nitto-Denko, Kao, Terumo, Glico, Asahi Glass, Toppan

## ■ Steel & Power device

Kawasaki Heavy Industries, Nippon Steel, Nisshin Steel, Mitsubishi Heavy Industries, Tokyu Car, Sumitomo Metal Industries

## ■ Communications, Media, iDC

Thomson Reuters, WOWOW, internet Data Center

## ■ Transportation, Material Handling, Shopping Center

Murata Machinery, Toyo Kanetsu, Sanki Engineering, Daifuku, Ion, Daiei

## ■ Traffic, Electric power, Drainage

Ministry of Land, Infrastructure, Transport and Tourism, Tohoku Electric Power , Kansai Electric Power, Kyushu Electric Power, Bureau of Waterworks

## ■ Amusement

Singapore Flyer, Huis Ten Bosch, EXPO 2005 AICHI