

# ヴォルテージ21



Special topic  
**'USA'**



## The NIPPON

Japanese Eco-Friendly Efforts

### “My-Chopsticks”



Currently, there are a lot of people who are concerned with environmental issues in Japan. This is clear by the recent interest in so called “eco-bags” and the “my-chopsticks” practice (bringing and using your own chopsticks at an eatery). An “eco-bag” is a bag that one brings to a store to carry shopped items home, rather than using the bags the shop provides. Recently many super markets have started offering discounts for those who bring their own “eco-bags”. The “my-chopsticks” trend hasn’t caught on to this extent but its practice is definitely on the rise. There is a growing interest in an “environment-conscious” lifestyle which can be practiced easily, and especially among women, the “my-chopstick” practice is becoming a kind of fashion. Today, many different designs of “eco-bags” and “my-chopsticks” have appeared, in varying colors, shapes and functionality. In Japan we usually use “disposable chopsticks” made of wood in restaurants. Aside from restaurants, these “disposable chopsticks” are used in various places such as department

stores, supermarkets, convenience stores and takeout shops. In Japan 95% of these chopsticks are mostly imported from China. Other than China, they are imported from Southeast Asia, and South America. Only a small percentage of these “disposable chopsticks” are purely Japanese. Recently due to the local media taking up and introducing environmental issues we have come to learn that deforestation is progressing at an alarming rate due to providing these “disposable chopsticks” for Japan. It seems that the “my-chopsticks” way of thinking has appeared as a way to reduce as much as possible the use of “disposable chopsticks” to halt the progress of deforestation. Besides, to reduce garbage reduces the amount of CO<sub>2</sub> emissions, of course. The latter reason seems easier to understand and more practical and real. Whichever the case, it seems that a more practical “environment-conscious” attitude, beginning with using things in a much more precious way and reducing the amount of garbage as much as possible, has begun to take root in Japan.



VoltAge21(ヴォルテージ21), an information bulletin with a circulation of 30,000 in Japan, is globalized, and the English version is now delivered to you. The original version provided customers in Japan with information about the environment and energy saving, as well as our products. It has been delivered to a number of customers and supported by them. We wish to enlarge the boundaries of such communication to the world. Your continued support would be highly appreciated.

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<http://www.hitachi-ies.co.jp/english>

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**Special topic "USA"**

**"Yes, we can."**

**"Change we need."**

The current world financial crisis began last year with the subprime loan problem in the United States. America is now believed to need urgent economic policies to enable it to escape an economic crisis said to be the worst in 100 years. Amidst this crisis, Barack Obama was inaugurated the 44th President of the United States on January 20, 2009, following a presidential election watched closely by people around the world in which his main messages were "Yes, we can" and "Change we need."

emission levels by 80% over 1990 levels by 2050, invest 150 billion US dollars over the next 10 years in the clean energy economy to expand domestic demand for green energy and create 5 million new jobs. This is a complete turnaround from the Bush Administration's halfhearted stance towards global warming countermeasures. In addition, at the end of last year, President Obama's economic team hammered out measures to create 2.5 million jobs through improvements in public facility energy conservation.

A policy of particular note is the Green New Deal, under which President Obama seeks to expand business and reduce its impact on global warming, expand renewable energy resources, such as solar and wind power; develop bio-fuels made from non-edible plants; reduce oil imports; have 1 million plug-in hybrid cars on the roads by 2015; and in order to reduce greenhouse gas

As a manufacturer of products that contribute to energy conservation, Hitachi Industrial Equipment Systems Co., Ltd., wishes to be of assistance, however slight, to the United States in its future endeavors to enhance energy conservation and prevent global warming.



Photos by Osamu Honda



# Peacock

*engineering trust*

## Engineering, Geneva, IL



Peacock Engineering Corp  
Geneva, IL  
1800 Averill Road Geneva, IL. 60134  
Carol Stream, IL  
720 Center Ave. Carol Stream, Illinois 60188

### Interviewee-



**Tony Berger**  
Operations Manager, Geneva



**Julio Rodriguez**  
Maintenance Manager



**Dale Tezlaff**  
IMS-Partners



**Christopher Jordan**  
Sr. Product Specialist, Hitachi America, Ltd.

As a leading provider of processing and packaging services to America's food industry, Peacock Engineering can well appreciate the qualities of a technologically advanced inkjet printer. On its busiest days, over a million product codes are printed on all types of products going through its facility. The printers run almost non-stop in order to maintain this level of productivity. Since downtime is very costly the company needs printers it can depend on.

Flexibility, reliability and speed are key reasons Peacock Engineering uses Hitachi inkjet printers in their production facilities. The company currently uses 20 PB inkjet printers and an additional 10 PXR to keep its operation going at peak performance.

We recently interviewed managers at Peacock to talk about their decision to purchase Hitachi inkjet printers and what they liked most about these products.

Plant Operations Manager Tony Berger said, "With the equipment we had in the past, we had a lot of downtime. Parts often needed to be replaced, and the functionality of the equipment wasn't always what we would have liked. With the new Hitachi equipment, downtime has been reduced, and clear printing on all types of products has become possible. As a result, our productivity has increased by at least 10%. Print quality on all types of surfaces is much clearer, and reliability is greatly improved."

The printer's ability to function in different environments and print on a variety of surfaces was a major selling feature for Peacock. Because it prints product codes on products as diverse as soda bottles, cereal boxes and prepared food packaging, the company needs printers that can print on a variety of surfaces including chipboards, plastics and plastic bottles. Some of these containers are microwaveable so the ink has to withstand a significant amount of heat without giving any heat off.

The company also needed printers that could operate in cold, hot or semi-dusty rooms, and Hitachi's printers delivered without using plant air; a feature that also translated into energy savings for the company as well.

"We have to be very flexible in what we do," Mr. Berger continued. "Given the diversity of customers different standards are required. With Hitachi, we were able to meet all their different needs. More importantly, we have advanced the standardization using the same equipment. In addition, Hitachi's printers are extremely user-friendly and the customer service and the training support we've received has been excellent."

Flexibility and ease of use are two of the features most appreciated by Maintenance Manger Julio Rodriguez. He said, "Hitachi's printers are very versatile. Since we don't have to run an air line, set ups are done quickly. We just unplug it. Move it to the line. Plug it back in and we're ready to start again. I also like that any maintenance can be done very easily. It makes my job much easier." With this printer, Mr. Rodriguez concluded, "Hitachi has pretty much thought of everything a customer would need."

The switch to Hitachi's printers has proved to be a good move for Peacock. Mr. Berger observed, "Our overall goal was to consolidate our printing needs down to one level so we could get the same equipment in the facility. This way we could have spare parts, and we wanted everyone trained on the same equipment. This reduces downtime and everybody knows exactly what they are doing."

Printing up to 3 00 pieces a minute, Peacock demands a lot from the equipment it uses. IMS Salesman Dale Tezlaff said, "With the need to print on the top, bottom or sides of many different types of packaging, the print met all those applications. Additionally, it has provided company standardization throughout all of our operations so the workforce was always familiar with the printers they were getting. With ink that dried almost immediately when it hit the surface, the company could run large volumes and meet its production needs."

Mr. Berger concluded, "We've been very satisfied with this product. Hitachi's reputation and the product's performance and the customer service we've received have all inspired confidence within our operation. Hitachi is a good name and it has a good product. Both of those things are very powerful."

### Company Profile

Company name : Peacock Engineering Corp  
Description of business : Contract Packager  
Location : 4 locations  
Head quarters : 1800 Averill Road Geneva, IL. 60134  
Established : 1946

Hitachi Products(system)  
Products : Ink Jet Printer, PXR-D460W, PB-260U

<http://www.peacockeng.com>

#### Corporate Headquarters



Geneva



Bolingbrook



Carol Stream



Itasca (Meacham Rd)

### Company Overview

Peacock is a leading provider of processing and packaging services to America's food industry. Our business objective is value-add service focused on customer needs. Peacock's full range of services include process design, project management, primary food processing and packaging and secondary packaging.

With over 60 years of experience and performance, our highly knowledgeable staff of packaging professionals can develop solutions to meet clients' specific requirements. Peacock's strength lies in our ability to exceed customer expectations.

With four Chicago area facilities totaling over 1,200,000 square feet and equipped with state-of-the-art packaging equipment, we are in an ideal position to add value to packaging products and getting them into our clients' supply chains efficiently and cost effectively.



# Peacock

*engineering trust*

## Engineering, Carol Stream, IL

### Interviewee-



**Julio Martinez** Operation Manager, Carol Stream



**Arek Grudzien** Maintenance Manager, Carol Stream

The process facility in Carol Stream is the 2nd largest plant operated by Peacock Engineering. Currently 15 Hitachi PXR printers are being used in this facility. The company prints in large volumes and often handles coupons or USDA inspected products where production speed is critical. Therefore, losing time due to equipment breakdown or set up difficulties are not problems the company can afford.

On a typical day, the company prints 62,000-63,000 SKUs per shift. On a busy day, this translates to a total of a million plus units of goods going through the facility on 14 different lines. In fact, printers run almost non-stop, and the reliability and agility of Hitachi's PXR printer have helped Peacock's operations move quickly and efficiently.

We talked with Operations Manager Julio Martinez and Maintenance Manager Arek Grudzien to find out why they chose the Hitachi printer and what they liked most about it.

"The most important thing," said Mr. Grudzien, Maintenance Manager, "is the reliability of the units. This is critically important as we have to minimize downtime, achieve very good service and training from our supplier or dealer and minimize parts breakdown. Cost is definitely saved by reducing downtime."

Mr. Martinez, Operation Manager agreed. "Especially in our business, costs are a big driver in what we do. Every minute we lose translates to 20 people on the floor doing nothing. We have enough headaches to worry about, and that's the last thing I want to think about."

The flexibility to print on diverse products was also a key selling feature. As its customers printing needs have become increasingly more complex, Peacock had experienced difficulties in meeting challenges such as printing bilingual graphics. With Hitachi's printers, Peacock has been able to meet its customers' printing needs and do so at a reasonable cost.

Mr. Grudzien observed, "In the past, I couldn't print as quick or I couldn't print in a given window. I don't have that problem anymore now that I'm using Hitachi printers. It has so many features so I can adjust to meet any requirement."

"Additionally, it has provided us with more flexibility," Mr. Martinez added. "We have capacity we didn't have before, and we can pass that on to our customers. In the past, we may have had to say "we can't do that printing" if something very complex was required. Now we have increased capabilities."

With products moving in and out of its doors very quickly, Peacock has appreciated the flexibility, efficiency, ease of use and remarkable customer service they have experienced with Hitachi. The company had previously used a different brand of printer. They created teams in each of their buildings to evaluate different printer brands, including the industry's major one. In the comparison, Hitachi scored the highest and Peacock decided to purchase from Hitachi even though they had more experience with other companies. When they did, they were very pleased with the end result.

Mr. Grudzien commented, "Hitachi did score the highest and also Dale's service. His company's service was outstanding and a very reliable service. Also, I have to say that the units are very reliable. The units are also easy to adjust; they also met our specifications as far as speed underlines. We do have high speed packaging processes here, 4-lane capability. We actually went with the PXR so we want to build the flexibility for the future and again, good service."

"I think they came out maybe not the least expensive but at least when you add the whole package, service, salesman, history and just what we're looking for, I think it made sense for Peacock," Mr. Martinez agreed.

When comparing Hitachi's ink jet printers to competing companies, Hitachi's ink jet distributor Dale Tetzlaff of IMS Partners said, "Hitachi's inkjets are very sophisticated. The machines drop 60,000 charges of ink per second. Now that's electronics!"

With 15 PXR's on the floor and four more on the way, Peacock is one very pleased customer. The printer has given them the ability to meet their customers' current printing needs and the flexibility to also meet the requirement the company anticipates its clients will have in the future.



### Comments from Dale Tetzlaff, IMS-Partners

\* Peacock Eng. chose Hitachi because of four reasons which include, Reliability of the printer over the competition, Service and support they receive from IMS-Partners, they trust us. Printer is flexible to meet all of their applications and Lowest cost per mark"



# HITACHI *America, Ltd.,*

<http://www.hitachi-america.us>

Hitachi America, Ltd., Industrial Systems Division, supplies a broad range of industrial products and services. The division supplies sophisticated industrial equipment, components and services for application in pharmaceutical plants, food & beverage processing, steel making, mass transit systems, chemical plants, and other manufacturing facilities. The Industrial Equipment Group produces a PXR series inkjet printer that provides lot number and/or expiration date printings on almost anything. Newly introduced oil-free air compressors provide an environmental friendly air solution with its state-of-the-art inverter technology that provides significant energy saving.



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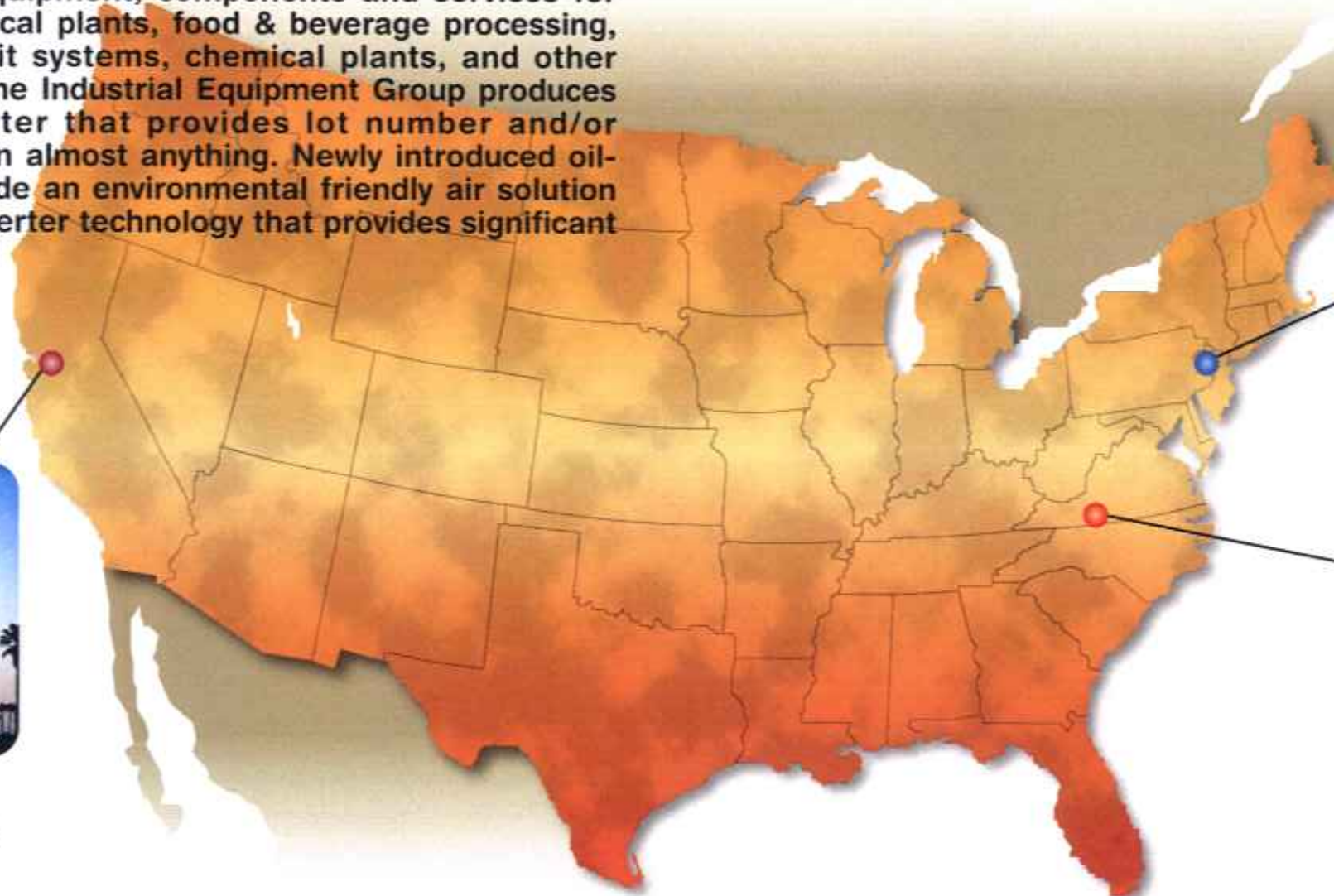
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Compressors



AC Drives (Inverters)



Ink Jet Printers



Submersible  
pump motors



Blowers



Pump



Motors



Industrial Control Systems  
& Products ( PLC )

## Energy-saving Systems

**With total systems, we combine environmental protection with efficiency.**

"To take good care and make good use of limited resources" is an important concept indispensable to future industrial development.

We will save energy with total systems and aim to combine environmental protection with industrial development.

### Low voltage insulation monitoring systems

It contributes to preventive maintenance. It finds indication of insulation's degradation early, therefore, previous control is available.

### Power distribution, utility monitoring system (H-NET)

This system records data about energy consumption results, gas exhaust, and drainage. With this system, users can easily conduct implementations of systems and transmit and edit data.

### Air reflux fans

These fans eliminate temperature waste and reduce air-conditioner loads. They increase energy-saving effects.

### Super-energy-saving transformers (Super Amorphous)

Super Amorphous contain an iron core made of an amorphous alloy to reduce energy losses by up to about 60%.

### High-efficient motors

By optimizing the iron core shape and upgrading the quality of the material, the motors reduce energy losses by about 20-30%.

### Inverters

The rotating speeds of the fan and pump are controlled by an inverter to optimize the power consumption.

### Oil free screw compressors

Our advanced technology enables energy saving and ease of maintenance.

### Multi unit controller

Two or more compressors are efficiently run to eliminate wasteful unloaded runs.

### Nitrogen gas generators N<sub>2</sub> pack

Produce nitrogen gas at purity levels of 99-99.99%, thus greatly reducing the purchase costs of nitrogen gas.

### Very low-temperature air generators

Produce cold air (-10°C to -20°C) for cooling processed items.

### Rope and chain hoists

Abundant types designed to fit any condition.

### Photovoltaic power generation systems

Use natural energy to generate clean power, without exercising environmental impacts.

### Hydraulic energy collection system

A water head is used to recover at least 60% of energy.

### Inverter driven automatic water supply units

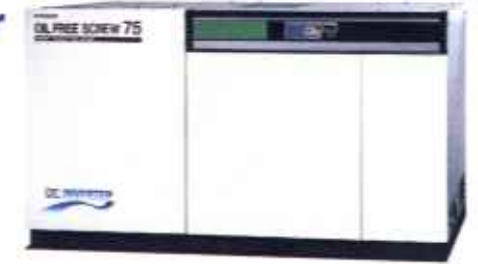
An inverter is used to run the pump with reduced pressure changes. It is also more reliable.



Our company got "Mistior of economy prize" (electric division) as high grade energy control factory  
2002:Narashino factory  
2005:Nakajo factory

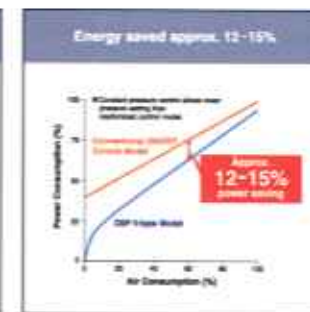
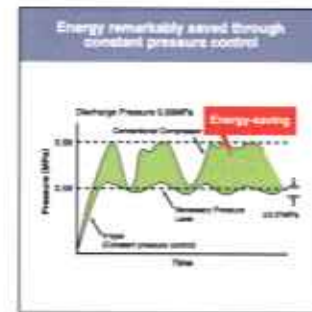


## Further Energy and Power Saving by Built-in Inverter Screw Compressor



### 12-15% Energy-saving

Constant pressure control enables lower pressure setting, compared with conventional ON/OFF control model.



### Easy Control Pressure Setting

Control pressure can be easily set on the panel.



Control Pressure Setting Indication Control Pressure Key-in

### Compatible for High Response and Stability by HITACHI Original Sensorless Vector Control and PID Control (Patent Pending)

HITACHI developed its own system that can control discharge pressure within 0.01MPa and offered excellent response and stability.

## IJP Marking System

Continuous ink jet printer is marking equipment for various products in industry. The features are high speed printing, non contact printing, clear printing and flexible printing.

### Product line up



### Print samples



# Hitachi Industrial Equipment System Exhibition Thank You For Coming!



The exhibition hall was crowded with visitors



Exhibit Map

Thanks to so many visitors to our exhibition, we have finished it with great success. We introduced our various products and system solutions with unique sections. "History Corner" we exhibited the original and current products of motors, transformers, ink jet printers and compressors. "Global Corner" we introduced our overseas factories China (Nanjing) and

Thailand, and strategy of international marketing. "New Technology Research and Development Corner" it will be one of the main projects in the future. And so many visitors attended the executive lectures and the seminars on our products and energy-saving cases. Thank you very much for coming all the way from abroad.



The Executive Lecture



History Corner

# HITACHI Industrial Equipment Products Coming Trade Shows

| 1. Trade Show Name | 2. Date | 3. Place | 4. Trade Show HP address | 5. Products |
|--------------------|---------|----------|--------------------------|-------------|
|--------------------|---------|----------|--------------------------|-------------|

## America

- 1. East Pack**  
2. 9-11, June, 2009  
3. NY, NY  
4. <http://www.deviceink.com/expo/epack08/>  
5. Ink Jet Printer, Air compressor, Controls
- 1. The International Plastics Showcase**  
2. 22-26, June, 2009  
3. Chicago, IL  
4. <http://www.npe.org/>  
5. Ink Jet Printer, Air compressor, Controls
- 1. Design & Manufacturing Midwest**  
2. 22-24, September 2009  
3. Rosemont, IL  
4. <http://www.DM-Midwest.com>  
5. Air Compressor, Controls
- 1. Pack Expo**  
2. 5-7, October, 2009  
3. Las Vegas, NV  
4. <http://pelv2009.packexpo.com/>  
5. Ink Jet Printer, Aircompressor, Controls

- 1. WEFTEC**  
2. 12-14, October, 2009  
3. Orlando, FL  
4. <http://www.weftec.org/home.htm>  
5. Controls

## Asia

- 1. VietFish 2009**  
2. 12-14 June 2009  
3. HCMC, Vietnam  
4. <http://www.vietfish.com.vn/index.html>  
5. Ink Jet Printer
- 1. Propak Asia 2009**  
2. 17-20 June 2009  
3. BKK, Thailand  
4. <http://www.propakasia.com>  
5. Air Compressor, Ink Jet Printer, Controls, Motor, Hoist
- 1. India Packaging Show 2009**  
2. 8-11 July 2009  
3. New Delhi, India  
4. <http://www.indiapackagingshow.com/>  
5. Ink Jet Printer
- 1. INTEC 2009**  
2. 2-7 July, 2009  
3. Coimbatore, India  
4. <http://www.intec.co.in>  
5. Air Compressor
- 1. Electric Indonesia Series 2009**  
2. 14-17 Oct 09  
3. Jakarta, INDONESIA  
4. <http://www.pamerindo.com/>  
5. Air Compressor, Ink Jet Printer, Controls, Motor, Hoist

## China

- 1. Propak China**  
2. 15-17, July, 2009  
3. Shanghai, China  
4. <http://www.propakchina.com/en/>  
5. Ink Jet Printer

## Europe

- 1. Hispack**  
2. 11-15, May, 2009  
3. Barcelona, Spain  
4. <http://www.hispack.com>  
5. Ink Jet Printer
- 1. Achema 2009**  
2. 11-15, May, 2009  
3. Frankfurt, Germany  
4. <http://www.achema.de/>  
5. Ink Jet Printer
- 1. Drinktec 2009**  
2. 14-19, September, 2009  
3. Munich, Germany  
4. <http://www.drinktec.com/>  
5. Ink Jet Printer
- 1. Fachpack**  
2. 29. Sepmeber. - 01. October, 2009  
3. Nürnberg, Germany  
4. <http://www.fachpack.de/>  
5. Ink Jet Printer

## Japan

- 1. TECHNO-FONTIER 2009**  
2. 15-17, April, 2009  
3. Chiba, Japan  
4. <http://www.jma.or.jp/ft/en/index.html>  
5. Motor, Controls, Smart Module
- 1. A Comprehensive Exhibition Electrical Construction Equipment, Materials and Tools (ECEMF)**  
2. 27-29, May, 2009  
3. Tokyo, Japan  
4. <http://www.ecemf.jp/e-index.html>  
5. Transformer, Switches, Breakers, Motor, Controls
- 1. Japan Pack 2009**  
2. 20-23, October, 2009  
3. Tokyo, Japan  
4. [http://www.japanpack.jp/english/e\\_2009/e09\\_idx.htm](http://www.japanpack.jp/english/e_2009/e09_idx.htm)  
5. Ink Jet Printer, Compressor, Motor, Controls
- 1. System Control Fair**  
2. 25-28, November, 2009  
3. Tokyo, Japan  
4. [http://sct.jp/\\_english/index.html](http://sct.jp/_english/index.html)  
5. All Hitachi IES products ( mainly controls)