As the population becomes more affluent, we see higher growth. The top five local brands – as well as some of the foreign ones – have reached a historical high figure. Haier has overtaken the rest more than 2009. In 2010 the domestic consumption and export production capacity reached 97 millions units, which is 31.5% years we saw explosive growth in the home appliances, especially industrial development, in the near and medium term?

CN: What does this effort mean for Cannon, in terms of organization?

WLM: The strong results that we achieved in these years have put great pressure on our organization in terms of manpower. In anticipation of more growth, we have been recruiting and expanding. Now the CFE Group has 350 staff. Since then we have moved our Shanghai office to a modern office block in the heart of downtown Shanghai. We are now the leading company in the Far East in terms of organization and market share. Our own offices in Singapore, China, Taiwan, Malaysia, Thailand and Vietnam have given us the strength to look after our customers when they start their regional expansion from one country to another within the Far East region. For that they prefer to talk to Cannon, rather than to different agencies of our competitor. We are our Chinese manufacturing base – Shinon – has been relocated to a new factory three times the size of the last one.

Cannon grows in Far East Asia

Wong Lee Meng, MD of Cannon Far East, highlights to the Cannon News the most significant aspects of his Division’s performances in the recent past.

Cannon News: How is in general the Far East area performing, in comparison with the rest of the World, and which are the most interesting applications in terms of industrial development, in the near and medium term?

Wong Lee Meng: There is no doubt that Far East has the fastest growth in the past few years, compared to Europe and the USA. Asia, especially China, has coped well with the financial crisis that started in 2008. The many measures taken to fend off the crisis took effect. The loss in export was quickly compensated by the domestic stimulus plan. That resulted in the high growth in home appliances, automotive, infrastructure such as rail road, housing construction. In the last two years we saw explosive growth in the home appliances, especially refrigerators and freezers. Now China is the world’s largest manufacturing country of home appliances. In 2010, the production capacity reached 97 millions units, which is 31.5% more than 2009. In 2010 the domestic consumption and export have reached a historical high figure. Haier has overtaken the rest to become the world’s top manufacturer of home refrigerator. The top five local brands – as well as some of the foreign ones – have been expanding their facility for the past two years. Some of them have already started to venture out of China, investing in India, Pakistan, Bangladesh, Russia. The explosive growth in the capacity of home appliances in China for the past two years has created an over-capacity at the moment. So this industry will go through a period of consolidation before it starts to grow again. As the population becomes more affluent, we see higher growth in the bigger capacity refrigerators.

Automobile also grew more than one million vehicles per year for the past three to four years in China. Far East is the only growth area while the rest of the world came to a halt in automobile production. Now almost all the world’s automobile producers have production facilities in the Far East, especially in China and India. They try to cover the growing shortfall of the population in the region. Luxury brands such as BMW and Mercedes Bena have the best sales performance in China, better than in their own home market. The per-capita ownership of car remains low in the Far East. China has less than 100 owners per 1,000 persons, compared to more than 500-800 in Europe and USA. So we can still see good growth potential in China, India and emerging countries for automobiles.

Energy saving and green energy industry also enjoy good growth, with the world focusing on energy saving and pay more attention to emissions reduction. PUR sandwich panel are growing at a steady rate and this will go on in the medium and long term.

CN: Could you give us an overview of Cannon’s activities in the Far East & China markets during the past two years?

WLM: For the past two years Cannon Far East achieved more than double growth as compared to the previous year and this is the fastest growth period since its incorporation eleven years ago. We achieved strong sales in China, Thailand and Malaysia, especially from China.

During the last two years we saw explosive sales in refrigerator market. The top five Chinese local makers, spurred by the strong local demand, have been investing heavily in the production capacity across the country. Cannon maintained the leadership position in this exponential growth area with a market share of more than 73%. This growth started in 2010 and continued till to-date. We achieved good result in Thailand. Together with Nippon Cannon, we managed to sell big refrigerator plants to Panasonic, Sharp and Sanrio in Thailand and Vietnam, where we benefited greatly from the relocation of the Japanese manufacturers. Our newly developed EasyDrum system for refrigerator door production is now up and running in Sharp Thailand.

The new vacuum-assisted cabinet foaming system developed in cooperation with Dow - Pseca™ - is now full production in Haier Chongqing. We have introduced the latest JL mixing head to the market and soon some of the plants will be using this state-of-the-art head for cabinet foaming. So we see the refrigerator sector as one of the main contributors to the significant growth of Cannon in the Far East Asia.

We are also very successful in the automotive market. During the period of middle of 2010 to to-date, we delivered six full seating and headrest plants within China and outside. We also successfully carried out plant extension for the Japanese manufacturers such as Bomardi and Toyota Boshoku. In Malaysia we will soon be installing three seating and headrest plants to APM and Lear, the local leading auto parts maker.

Apart from our traditional strong hold of seating and steering wheel, we also achieved significant sales, in China and Taiwan, in the fields of instrument panel, engine cover (with the Breppe® system), headliner and sunroof encapsulation. In July only we achieved three significant sales in China and Taiwan from a leading Japanese maker of instrument panel.

Our more recent orders include plants or machines for international parts maker such as Faurecia, Lear, Pléier, Johnson Controls, LKKAAC, just to name a few. So you can see that our growth is very widely spread, with China leading the dance.

Some more significant sales worth mentioning: we have installed in Taiwan the first phenolic foam plant using high pressure machine. Also we have secured an order for the design and supply of equipment for the manufacture of ‘special window frame’. This plant will be delivered to a European-Chinese joint venture company and the plant will be installed in China.

Shinnon welcomes the Group President, Carlo Fiorentini, in the new factory.

CN: Talking about Shinnon, what is this manufacturing center going to become in the near future?

WLM: We are expanding our manufacturing strength in China, where now we count more than 100 staff. Shinnon, that is coming to be seven years old this fall, obtained in 2010 the TUV/BSD certification, and this has brought tremendously good results during these years. We have a strong technical department, sales and after-sales team. The incorporation of Shinnon is timely to catch the strong growth of the market, especially in China. We are ahead of our competition in terms of growth path, and we continue to grow from strength to strength. Shinnon today, apart from making single machines for the local market, has achieved a great experience in manufacturing plants for the automotive and the refrigerator markets and for special application, both for domestic sales and for export. In support of the Cannon Group worldwide, we already see Shinnon manufactured equipment that is successfully running in USA, Europe, Korea, Thailand, Vietnam, Japan, just to name a few countries. Shinnon customers base include great names such as JLT, Lear, Toyota Boshoku, Koyodo, Calsonic Kasei, Faurecia, Huter, Meling etc. All these are leading auto interior trim and refrigerator makers from Europe, USA, Japan and China. Shinnon confirms to be one of the strongest manufacturing bases of the Cannon Group. We will grow this company to support the whole Cannon Group. We will continue to upgrade staff quality and strength to achieve cost effective production with good quality and design. As at the moment the activity has been focused on PUR-related products. Being Cannon a diversified Group dealing with thermoforming, Aluminium die casting, automation, energy and ecology, it is not difficult to envisage that the next growth of Shinnon could derive from these non-PUR application and make Shinnon a very diversified local Chinese company. We will surely continue to brand Shinnon to become the best name in PUR manufacturing within China, just the way Cannon has achieved international reputation to be the world leader in PUR!
**Cannon, the right heads for your business!**

"The head is the heart of the system" is a well-known expression at Cannon and it is the corner stone in our product development. It is the reason why we have developed our Polyurethane spray heads. They are designed to be the best in the business, because we believe that the right spray head is necessary for the best results in any application. Without the right spray head, the results will not be as good as they could be. That is why we take great care to design our heads so that they meet all the requirements of our customers. In this article, we will explore some of the key benefits of using a Cannon spray head in your next project.

**Cannon’s Spray-Foam Heads: The Best Choice**

The need for new developments has always been a challenge for the automotive industry. With the ever-increasing demand for performance and efficiency, new technologies are constantly being developed to meet these needs. At Cannon, we are always looking for ways to improve our product lines and provide the best solutions for our customers. That is why we have developed our latest generation of spray foam heads, which are designed to be the most advanced and efficient on the market.

**The Success of Cannon’s New Spray Heads**

Our new spray foam heads have been developed in collaboration with some of the world’s leading automotive manufacturers. We have worked closely with these companies to understand their specific needs and develop solutions that meet those needs. The result is a range of spray foam heads that are designed to be as efficient as possible.

**The Benefits of Cannon’s New Spray Heads**

There are several benefits to using Cannon’s new spray foam heads in your next project. Here are just a few:

- **Increased Efficiency:** Our new spray foam heads are designed to be as efficient as possible, which means that they will save you time and money in the long run.
- **Improved Performance:** Our heads are designed to provide the best possible performance, which means that you will get the best results from your spray foam application.
- **Reduced Cost:** Our new spray foam heads are designed to be cost-effective, which means that you will be able to save money on your project.

**Conclusion**

In conclusion, Cannon is the right heads for your business. Our new spray foam heads are designed to be the best in the business, and we are confident that they will meet all of your needs. If you are looking for a spray foam head that is designed to be as efficient as possible, then Cannon is the right choice for you.
Our strategy was “belong & control” rather than “stay out & suffer” in the development of a strong presence in China, because all the operations in South East Asia and China, opening our own subsidiary in the year 2000, when we decided to take full control of our operations.

Cannon News: When we talk about China and Far East today we also risk to obfuscate. Everyone points out the “great game of money” coming from these two areas, and the linkage that are among competition and opportunity, fame and hope, wars and destruction and political order. What are you all about the Cannon versus this complex of phenomena?

Marco de’ Guidi: It’s definitely a complex equation. Expectations in China have often been overdone. In the automotive industry the overproduction has been high and has led to an autonomous work force of technicians very skilled in manufacturing. When we started to supply some plants for the local market they had a very limited production capacity and were not able to supply the local market. We had to find a way to build them up, and this was done in collaboration with the local team.

China: The country growing country for alternative energy solutions?

Marco: West German and east German that every time such an event is repeated we get again the same criticisms about competition. In the field of West German and east German plants we have seen the same problems that we had in the 90’s. In the current market in China we have the same issue of the lack of technology, not only on the side of the customer but also on the side of the local factories.

Cannon Far East: And what is the performance of our company in the refrigeration industry?

Marco: We are working on a number of projects, both at local and international level. Our key projects, for example, in the automotive sector, include a series of projects for the manufacture of components for the automotive industry. These projects are aimed at improving the performance of the automotive industry worldwide.

CN: What are your expectations for the next year, Mr. Guidi?

Marco: We expect a strong growth in the refrigeration industry in China, driven by the growing demand for energy-efficient products and the shift towards renewable energy solutions. This growth is expected to continue in the future, as the government continues to invest in the development of new technologies and to support the adoption of energy-efficient products.

Cannon: What do you expect for the next year, then?

Marco: We expect a strong growth in the refrigeration industry in China, driven by the growing demand for energy-efficient products and the shift towards renewable energy solutions. This growth is expected to continue in the future, as the government continues to invest in the development of new technologies and to support the adoption of energy-efficient products.

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China refrigerator makers look again for western innovative solutions

Starting from 2010 Cannon have been very successful in the supply of plant and foaming machines to the refrigerator market in China. Wing Lee Meng, Managing Director of Cannon For-Ess, gives more news details.

Cannon News: Can you tell us the history relationship between the Chinese refrigerator industry and Cannon?

Wing Lee Meng: Cannon Chinese refrigerators manufacturers have been using Cannon foaming equipment since the 1980s, for the local manufacturing of mobile refrigerators that later became domestic refrigerators. The market growth has been very high in China. Between 2000 and 2010, the Chinese market has grown more than 10 times in size. During these years Cannon’s foaming equipment has been delivered to more than 100 plants in China and Taiwan.

Cannon News: What is the situation nowadays?

WLM: The market has been increasing, since the beginning of 2010 (although: We have successfully commissioned the patented PASCAL™ plant in Hainan China), and is now working with the capacity. We are supplying many A-System100 fixing machines and Pressure unit, several Rotoplug fixings, and RotoJig machines, as well as numerous Dosing and Mixing Systems.

Cannon News: Are all your customers going to commission sixty new machines in the new year? What is the demand?

WLM: Europe: When Cannon fixed Europe with the Rotoplugs, our customers could predict the future demand. Nowadays, we offer two Perfect Fixing Machines: the RotoJig as the lower floor and the Rotoplug as the upper floor of the plant. This product will be very interesting for the future Chinese market. We guarantee that they will be the same customers that we are working with, probably with a higher demand.

Cannon News: What do you think of the situation in China?

WLM: The market is very competitive, but the companies are very well located. For Cannon, the location is very important. We supply China with plants and equipment for the production of refrigerators. The market in China has increased in the last years, and we are very satisfied with the results.

Cannon News: What is the situation nowadays?

WLM: We have been working with the same customers in China, and we have been commissioned by the Chinese government to supply equipment for new plants. We have many customers in China, and we will continue to work with them. We will continue to supply new equipment and technology to the Chinese market.

Cannon News: What is your expectation for the future?

WLM: We hope to continue to work with the same customers in China, and to supply new equipment and technology to the Chinese market.
**Continuous sandwich panels:** A global marketing goal for Cannon!

Fonseca Abba, Corporate Marketing Manager of the Cannon Group since 2015, has been assigned additional responsibilities as Marketing Director responsible for both discontinuous and discontinuous board manufacturing: vacuum and foam board production for the architectural market and the discontinuous market for the industrial market.

**Cannon Note:** Can you describe the strategy implemented by the market segments identified in the market?

**Fonseca Abba:** Our strategy focuses on three main areas: identifying and analyzing opportunities, developing the right industrial service, and creating the right sales and marketing strategy to maximize the potential of each market.

In the architectural market, we focus on providing high-quality, energy-efficient products that meet the needs of modern architects and designers. Our goal is to become the go-to supplier for sustainable, energy-efficient solutions.

In the industrial market, we are focused on providing high-quality, durable products that meet the needs of our customers in the construction and manufacturing industries. Our goal is to become the go-to supplier for high-quality, durable products that meet the needs of our customers.

**Cannon Note:** Can you give us some examples of successful installed projects?

**Fonseca Abba:** Sure, we can give you some examples of successful installed projects. For example, the Boeing Plant in Seattle, Washington, which is a state-of-the-art facility that produces high-quality, energy-efficient products.

Another example is the Cannon PentaEasyFroth 40+4 version, which is configured for variable outputs from 800 up to 3,500 g/s. This version is especially designed for use in the locker and safety concept, where specialized owners and operators demand the highest level of precision and reliability.

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Cannon Viking Maximises Raw Material Efficiency

With the ever increasing costs of polyurethane foam raw materials, Cannon Viking have been focusing intense resources on machinery efficiency to maximise yield and profitability for our clients. For areas of manufacture with equipment design known to be:

1. Improve throughput, reduce set-up times and save labour.
2. Reduce energy and material consumption due to better temperature control.
3. Reduce the number of rejects and improve product reliability.
4. Improve process control, reduce variations and improve traceability.

- **Cannon Viking** offer various solutions to produce rectangular foam slabs:
- **Continuous Machinery** with better mixing and pre-mixing technology available as an addition on all Cannon Viking Continuous machinery, the solutions are as follows:

1. Improved Foam Cell Structure for Low Pressure Continuous Machinery

   - **OMEGA** - The Later Generation
   - **Conventional production of mattresses**
   - **High yield and low cost materials**
   - **Improved Foam Cell Structure**: Cannon Viking introduce OMEGA technology. The latter version of the highly successful ORGELA compressor system which is now in operation with more than 1,700 plants worldwide. The OMEGA system has been developed by investigators in Italy, London and Germany with the latest technology from the world’s leading computer and software engineers and fully supported from within the company.

2. Closed Mold Injection

   - **Reduced Pinholes and Fewer Gas Bubbles**
   - **Foam Plant Control**

   - **OMEGA** - Foam Plant Control
   - **OMEGA** fully tiltable presses and robotically controlled modular robot arm are planned to carry moulds for all established mattress sizes – for widths from 800 to 1,400 mm and lengths up to 3,000 mm.

- **Medium Scale Modular Systems**

   - **Cannon Viking** offer a new generation of foam plants designed for medium scale production with unimpaired quality and high yield. The production system is designed to offer the same level of quality and yield as high output plants, but with reduced capital expenditure and lower energy consumption. The new system is particularly suited to low and medium volume production requirements, especially in the automotive industry. It is the first step in a range of modular systems.

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Cannon Thermoformers for the "Van of The Year 2011"

Cannon Forma: the thermoforming specialists for refrigerators

In the last years Cannon Forma has focused its investment to the sector of the industry that manufacture inner liner and door liner for domestic and commercial refrigerators. Developing and providing a wide range of solutions, meeting different customer needs – from a manually sheet loaded single station machine to two-three stations machine up to a high production in-line thermoforming and trimming system – Cannon Forma offers the widest range of different machine concepts.

Single station machine
For those customers producing up to 40-50,000 refrigerators per year in one shift and/or requiring high equipment's flexibility a single station machine with manual loading and unloading can be the right solution. The machine can be equipped with all options to reduce time for model change and to obtain the highest product quality standards, through a precise and automatic process control. This machine - as all other configurations - features sheet sag control, that achieves optimal heating for best material distribution and cost saving, sheet clamping, by vertical moving to grip the sheet firmly during the forming process, a pre-stretching bubble blowing, to reduce local stress and increase material distribution to the forming sheet, and plug assist to eliminate webs. A fundamental feature is their closed-loop control of the heating power, acting on the actual temperature of the heating elements. This allows a constant replication of the heater settings and a power saving, as minimum power is fed to the heating system in order to maintain these conditions. Cannon has recently developed an innovative Direct Closed Loop system which control directly the material's temperature.

Two-station machine
The first station includes a loader with automatic centring device, to avoid the manual pre-alignment of the plastic sheets on the pallet and a pre-heater that allows an increase in production of at least 20%. In the second station the final heating, the forming and cooling occurs. A typical two-station machine achieves an hourly production rate of 32 liners, starting from HIPS sheets of 2 x 1m.

A two-station machine provides 50% higher productivity than a single station one.

A stepless adjustable reduction plate system, adjustable in one aperture equal to the size of the mould, fitted on top of the mould box. In order to reduce the number of these reduction plates (correspondent to the number of mould sizes) Cannon Forma has adopted its adjustable reduction plate system. Every operation is very easy to command, thanks to the touch-screen panel, a Cannon - developed Windows-based PC interface installed in the Siemens control.

Compact line (CL)
This machine configuration stems from Cannon Forma's long expertise in various applications which permits to apply advanced solutions to the refrigeration industry. It includes a loading station with upper and lower pre-heater, a station for final heating, forming and cooling and then unloading in-line. The transfer between the stations is featured by a spick chain system. This concept is the perfect choice for medium volume requirements.

The Compact Line is the perfect choice for medium volume requirements.

In-line machine (LF)
The ultimate in-line solution to reach a maximum productivity of more than 100 liners per hour, it includes the in-line thermoforming machines with double sheet loading station, pre-heating, final heating, forming, peripheral trimming and punching station or in alternative double liner separation. The pre-heating station is equipped with ceramic elements, controlled in pairs. The final heating station features 125 mm quartz elements, controlled individually, with a closed-loop control of the heating power working on the actual temperature of the heating elements. Heater bank movements are hydraulic to preserve the delicate quartz elements.

Several dedicated solutions have been implemented to speed-up the production: fast cooling system, plug assist, hydraulic movements for maximum control and speed, and a fast mould change system with 4+4 air and water connections for high degree of control of the mould movements and of the temperature.

The Semi-linear machine features a pre-stretching vacuum bell to favour the independent control of freezer and refrigerator bubble liners.

PRODUCTIVITY DATA with HIPS/ABS material

<table>
<thead>
<tr>
<th>Machine Type</th>
<th>Single liner productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single station</td>
<td>from 20 to 30 inner liners/hour</td>
</tr>
<tr>
<td>Single with loader and pre-heater</td>
<td>from 30 to 40 inner liners/hour</td>
</tr>
<tr>
<td>Compact line (CL)</td>
<td>from 35 to 45 inner liners/hour</td>
</tr>
<tr>
<td>Semi-linear (SL)</td>
<td>from 65 to 75 inner liners/hour</td>
</tr>
<tr>
<td>In Line (LF)</td>
<td>from 95 to 105 inner liners/hour</td>
</tr>
</tbody>
</table>

The Semi-linear machine offers the widest range of different machine concepts.

In Line (LF) from 95 to 105 inner liners/hour

In-Line machine (LF)

The In-line machines reach a maximum productivity of more than 100 liners per hour. These machines are equipped by an overhead pick-up system, with four stations and three heads, and are equipped with the same Windows-based PC interface of the Siemens control described before. See us at www.cannonforma.com, we have the tailored solutions that you require!