



China's Packaging Machinery Market Research Report



**The Findings of a Market Research Study
Conducted by SunFAITH Ltd, exclusively for the
Packaging Machinery Manufacturers Institute
February 2001**



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TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
0.1. DOMESTIC PACKAGING MACHINERY VS. IMPORTED MACHINERY.....	5
I. SUMMARY OF THE CHINESE ECONOMY	7
II. HISTORY OF THE CHINESE PACKAGING MACHINERY INDUSTRY.....	8
III. DEVELOPMENT OF THE CHINESE PACKAGING MACHINERY INDUSTRY	9
3.1. SUMMARY.....	9
3.2. BAGGING-FILLING -CLOSING MACHINERY.....	11
3.3. VACUUM PACKAGING MACHINERY.....	14
3.4. STERILE PACKAGING MACHINERY:.....	16
3.5. BEVERAGE PACKAGING MACHINERY	19
3.6. BEER FILLING MACHINERY	21
3.7. CORRUGATED CARDBOARD BOX MACHINERY	23
3.8. STACKING MACHINERY.....	26
3.9. CODING MACHINERY.....	28
3.10. LABELING MACHINERY.....	29
IV. BRIEFING ON THE CHINESE FOOD INDUSTRY	31
4.1. THE BEVERAGE INDUSTRY.....	31
4.2. THE BEER INDUSTRY.....	36
4.3. THE DAIRY INDUSTRY	37
4.4. THE CONVENIENCE FOOD INDUSTRY	38
4.5. THE QUICK FROZEN FOOD (QFF) INDUSTRIES	39
V. ANALYSIS ON MAJOR DOMESTIC SUPPLIERS	41
VI. ANALYSIS ON SEGMENTED END USERS	42
6.1. THE FOOD INDUSTRY	42
6.2. THE ELECTRONICS INDUSTRY.....	42
6.3. THE BEVERAGE INDUSTRY	42
6.4. THE PHARMACEUTICAL INDUSTRY	42
6.5. THE PERSONAL CARE INDUSTRY	43
6.6. AN ANALYSIS ON THE SAMPLE ENTERPRISES OF THE FIVE INDUSTRIES	43

VII.	MARKET SIZE OF CHINA PACKAGING MACHINERY INDUSTRY (CPMI).....	44
7.1.	MARKET SIZE OF CPMI BETWEEN 1997~1999	44
7.2.	TURNOVER OF CPMI BETWEEN 1997~1999	44
7.3.	OUTPUT OF CPMI BETWEEN 1990~1999 N.....	45
7.4.	EXPORT VOLUME OF CPMI BETWEEN 1997~1999.....	45
7.5.	IMPORT VOLUME OF CPMI BETWEEN 1997~1999	46
7.6.	TOP COUNTRIES IMPORTS OF PACKAGING MACHINERY 1997~1999	46
7.7.	COMPARISON OF DOMESTIC & IMPORTED PACKAGING MACHINERY BETWEEN 1997~1999	48
VIII.	SEGMENTED IMPORT & EXPORT ANALYSIS	49
IX.	DOMESTIC PACKAGING MACHINERY VS. IMPORTED MACHINERY	52
X.	FACTORS AFFECTING CHINESE END USERS' PURCHASES	54
XI.	SALES, DISTRIBUTION, AND TERMS OF PAYMENT	56
11.1.	SALES AND DISTRIBUTION.....	56
11.2.	TERMS OF PAYMENT AND DELIVERY.....	59
11.3.	GUIDE FOR PMMI MEMBERS TO ENTER CHINA AND PROCEDURES FOR EXPORTATION	60
XII.	TARIFFS ON PACKAGING MACHINERY.....	67
12.1.	TYPES OF TAXES AND TAX RATE.....	67
12.2.	ASSESSMENT	67
12.3.	IMPORTING TARIFF RATES FOR PACKAGING MACHINERY.....	68
XIII.	LEGAL ISSUES.....	69
XIV.	QUESTIONNAIRE ANALYSIS	71
14.1.	SUMMARY.....	71
14.2.	THE FOOD INDUSTRY	74
14.3.	THE BEVERAGE INDUSTRY	105
14.4.	THE PHARMACEUTICAL INDUSTRY	120
14.5.	THE PERSONAL CARE INDUSTRY.....	142
14.6.	THE ELECTRONIC INDUSTRY	155
14.7.	DOMESTIC SUPPLIERS	165
14.8.	OVERSEAS SUPPLIERS	180

0. EXECUTIVE SUMMARY

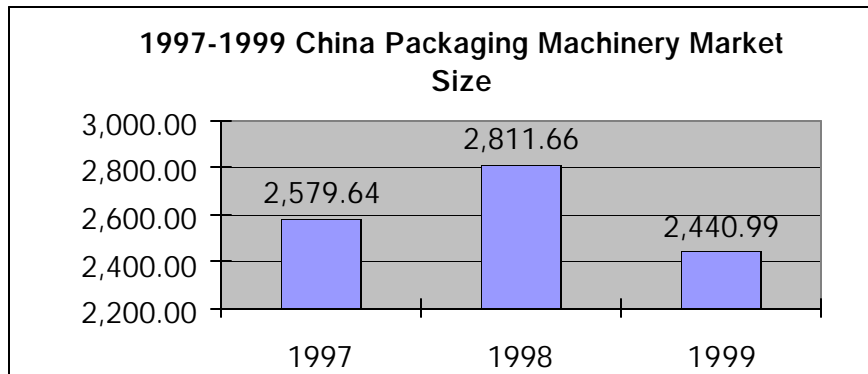
The substantial development of almost all industries in the Chinese economy has produced enormous market potential for packaging machinery. It is magnificent timing for PMMI Members to enter the Chinese market. Overseas packaging machinery is extremely attractive to domestic end users wanting to take advantage of foreign technology, quality performance, and reliability. However, the price for imported packaging machinery is about 5 to 10 times higher than similar domestic products. This indicates that the target market potentials of PMMI members are the market leaders in respective industries, large-scale businesses, and foreign-invested or joint ventured enterprises, which have adequate financial resources to back the desire to purchase imported packaging machinery.

<u>Items (1999)</u>	<u>Quantity</u>
Overall Market Size	US\$ 2,440,998,000
Domestic Production of Packaging Machinery	US\$ 1,674,698,000
Import of Packaging Machinery	US\$ 813,634,000
Export of Packaging Machinery	US\$ 47,344,000
Market Share of Imported Packaging Machinery	33.33%
Packaging Machinery Manufacturers	2000 companies
Growth Rate of Packaging Machinery Output	10-15%
Average Annual Growth Rate of Packaging Machinery Market Size as of the Latest Ten Years	15-20%

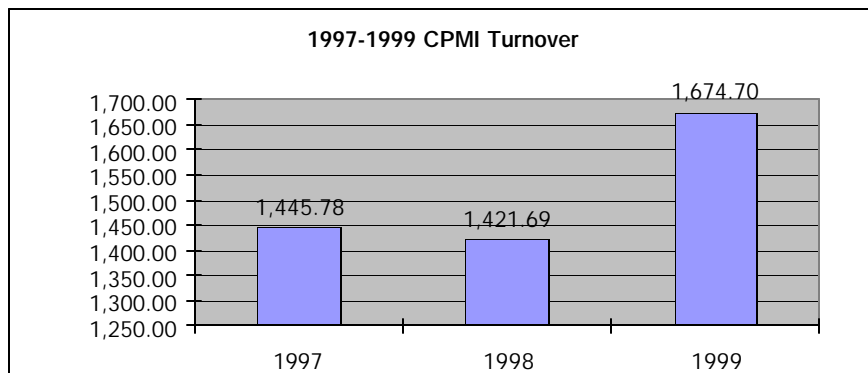
In general, there is still a substantial gap between Chinese and foreign packaging machinery in terms of product quality, performance, technology, research & development, as well as product structure and scale.

From 1997 to 1999, China's packaging machinery industry (CPMI) underwent rapid growth. With a sudden sharp import decrease in 1999, the overall market size shrunk in comparison with 1998 and 1997.

US\$ in million

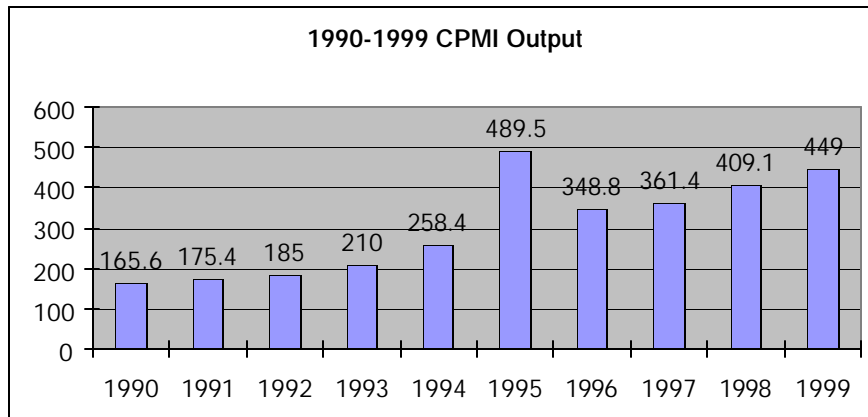


US\$ in million



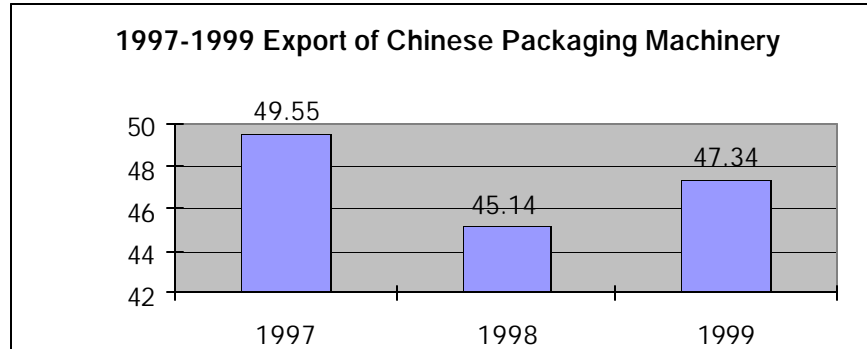
Output of CPPI during 1990~1999:

Thousands of Machines



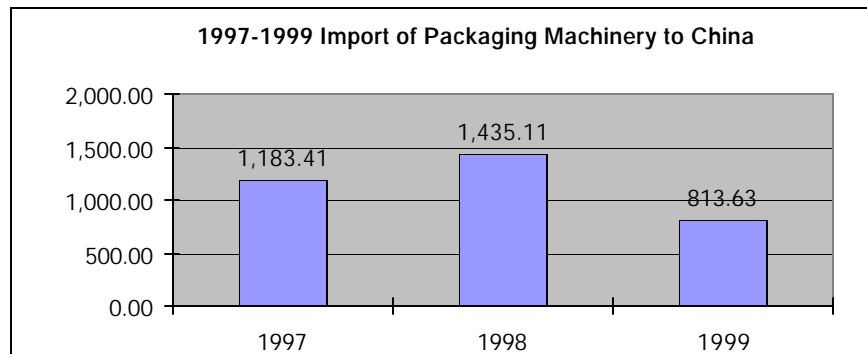
This is the chart of exported volume of CPMI during 1997~1999:

US\$ in million

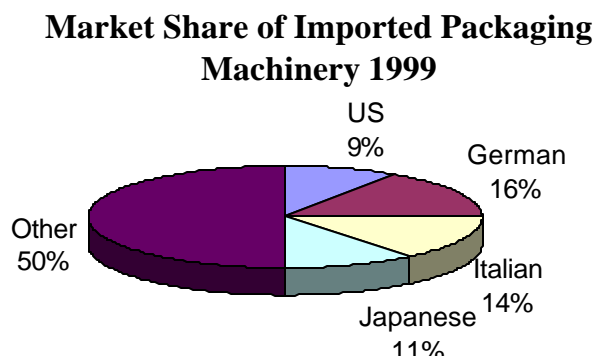


This is the chart of imported volume of CPMI during 1997~1999:

US\$ in million

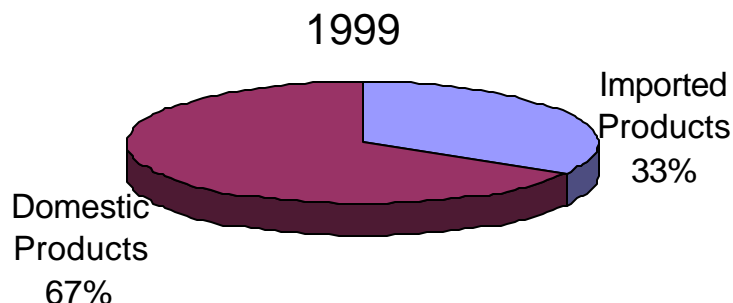


U.S.A, Germany, Italy, and Japan are the top 4 most powerful packaging machinery manufacturers in the world. China's imported packaging machinery chiefly comes from these countries. The following chart shows their respective market shares.



0.1 Domestic Packaging Machinery Vs. Imported Machinery

The chart illustrates the market proportion of China's self-made and imported packaging machines in 1999:



In the coming years of 2001~2005, the imported packaging machines are expected to hold a share of 40%~50%, and the domestic 50%~60%, according to the forecast of the Association of CPMI and the market research.

At present, there are 1,600 local packaging machinery manufacturers, 25% of them are considered large with over 1,000 staff, 35% are medium ones with 300~1,000 staff, and 40% are small ones with fewer than 300 employees.

Factors Affecting Chinese End-users' Purchase

By and large, China's end users take into account the following factors when choosing packaging machinery:

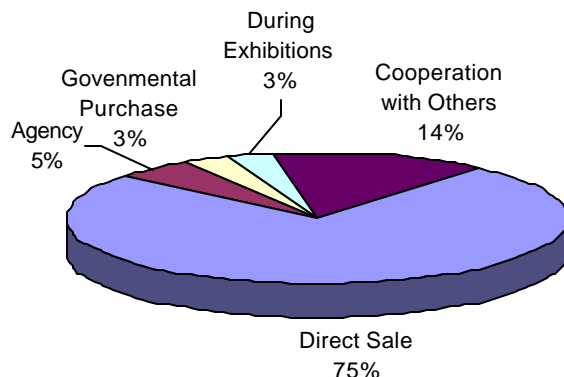
- Price
- Quality
- After Sale Service
- Compatibility
- Brand
- Durability
- Easy Operation
- Non-business factors

Sales, Distribution, and Terms of Payment

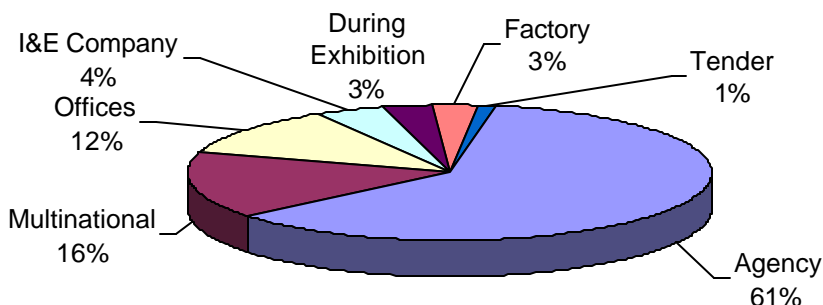
Seventy-five percent of domestic machines sold in China are done so through direct sales, with the other twenty-five percent sold during exhibitions, through agencies, to the government, and a variety of other channels. Conversely, imported equipment sales are largely completed through agencies and other third party methods. A

quantitative analysis is performed to illustrate the detailed circumstances. Payment and delivery methods also differ between the sales of domestic and imported machinery.

Proportions of sales channels for domestic manufacturers



Proportions of sales channels for overseas manufacturers



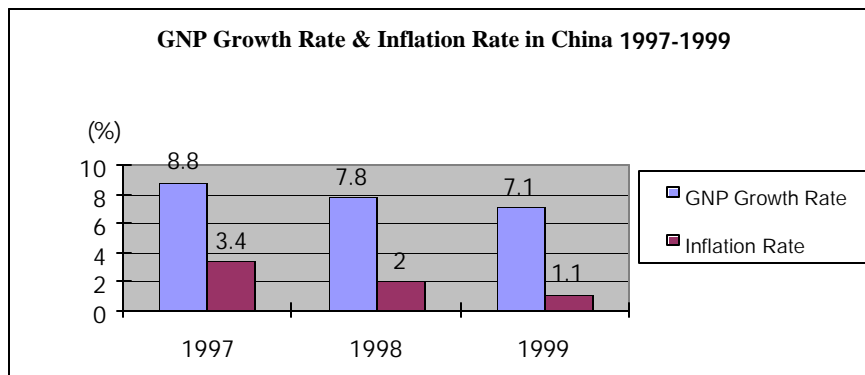
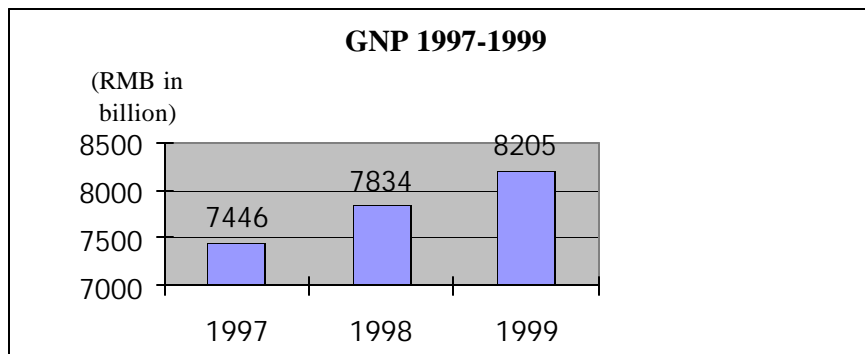
It is necessary to point it out that an import and export company (I&E) has to be involved in the selling procedure, since Chinese companies are not allowed to do business directly with foreign enterprises. It is also important for PMMI members to understand that there is great cultural difference between American and Chinese businesses. In China, familiar things are often expressed in unfamiliar ways, and the non-business factors play a significant role in doing business in China.

The top ten packaging machinery importers in China are listed in the report as well as the most important buyers by type of machine.

1. SUMMARY OF THE CHINESE ECONOMY

China has become one of the fastest developing countries, enjoying an economic boom since 1978. The Asian Crisis in 1997 and the severe flood in 1998 seriously stunted China's development, resulting in substantial reduction of exports, severe lack of domestic demand, and sharp increase of unemployment.

Listed below are the major economic indicators of China from 1997 to 1999.



A revival of the Chinese economy in 2000 put an end to the continuous 7-year-decline of the growth rate. Such revival is attributed to two major factors: China eventually recovered from the Asian Crisis, which resulted in substantial increase in exports; and the government decided to employ large investments to develop Western China, which stimulated domestic demand. The State Bureau of Statistics has estimated that the annual growth rate of the Chinese economy will maintain around 7 – 7.5% or even reach 8% from 2001 to 2010. The reformation of state-owned companies, the development of the West, and the entrance to WTO will ensure the stability of the Chinese economic growth.

2. HISTORY OF THE CHINESE PACKAGING MACHINERY INDUSTRY

Before 1949, there was literally no packaging machinery industry in China. Some simple manual packaging tools were manufactured in very few factories or workshops, which mainly provided repair, and replacement services for imported machinery. Today, however, the packaging machinery industry has become among the ten major mechanical industries in China.

The development of the Chinese packaging machinery industry is normally divided into the following four stages.

(1) Stage of Slow Development (1950's and 1960's)

The demand for packaging machinery was quite small due to the sluggish market and inadequate attention the government paid to the industry. Some packaging machinery was developed as parts of the production lines of the light industry, the pharmaceutical industry, and the chemical industry.

(2) Stage of Imitation (1970's)

With the introduction of imported machinery, some domestic machinery factories imitated the new foreign models of packaging machinery with the assistance of research institutes.

(3) Industry Establishment Stage (1980's)

The Reformation resulted in the booming of the Chinese commodity economy. Increasing exports greatly stimulated the development of the packaging machinery industry. The sales of packaging machinery products increased from RMB 191 million in 1981 to RMB 268 million in 1990, with the product categories booming from 182 to more than 1000.

(4) Stage of High-Speed Development (1990's)

The sales of the Chinese packaging machinery industry was remarkably enhanced during the 1990's, reaching RMB 13.9 billion in 1999. More than 3,200 categories of packaging machinery products formed a relatively complete product system that reduced the gap between Chinese and overseas packaging technology.

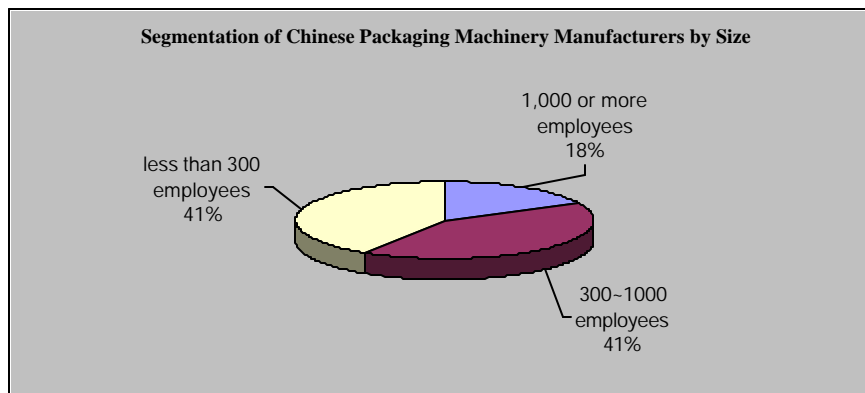
3. DEVELOPMENT OF THE CHINESE PACKAGING MACHINERY INDUSTRY

3.1 Summary

3.1.1 Sizes of China Packaging Machinery Manufacturers

At present, there are about 1,600 packaging machinery manufacturers in China, of which those with more than 1,000 employees account for 18%, those between 300 and 1,000 account for 41%, and those less than 300 account for 41%.

Most manufacturers of packaging machinery in China are medium-small-scale businesses with less than 1,000 employees, which account for 82% of all packaging machinery manufacturers. These medium-small-scale manufacturers are confronting various problems, such as inadequate financial and other resources, and thus lack the capacity to research and develop new machines. The current product system is incomplete, and can hardly compete with similar products manufactured abroad in respect to quality, reliability, maintenance, and durability.



3.1.2 Overall Comparison of Chinese & Overseas Packaging Machinery

In general, there is still a substantial gap between Chinese and overseas packaging machinery industry in terms of product quality, performance, technology, research & development, as well as product structure and scale, etc.

- (1) In respect to Product Quality, Chinese packaging machinery has a lower efficiency rate, a high energy consumption rate, poorer stability and reliability, is old-fashioned, has a poorer appearance, shorter durability of basic and spare parts, malfunctions more frequently, and has a shorter

overhaul interval.

- (2) In respect to Product Categories, Chinese packaging machinery lacks high-accuracy and large machinery. In the categories of two-piece steel can forming equipment, high-accuracy electronic measuring devices, high-speed resistance welders, and large hollow container forming machinery, etc., there are no manufacturing companies of such machinery in China at present. A bigger gap is found in the aspects of new product development and application, and technique innovation.
- (3) In Technology, the Chinese packaging machinery industry lacks the application of new and advanced techniques and has little automation.

3.1.3 Quantity Analysis on Chinese Packaging Machinery

According to the figures provided by China Food & Packaging Machinery Industry Association in 1999, the packaging machinery industry had become one of the top ten mechanical industries. The following table shows the overall status quo of the China Packaging Machinery Industry.

<u>Items (1999)</u>	<u>Quantity</u>
Output of Packaging Machinery	449 kilo sets
Overall Market Size	US\$ 2,440,998,000
Domestic Sales of Packaging Machinery	US\$ 1,674,698,000
Import of Packaging Machinery	US\$ 813,634,000
Export of Packaging Machinery	US\$ 47,344,000
Ratio of Domestic to Imported	2.058:1
Market Share of Imported Packaging Machinery	33.33%
Packaging Machinery Manufacturers	2000 companies
R&D Institutes for Packaging Machinery	35 institutes
Colleges with Related Majors	21 colleges
Growth Rate of Output	10-15%
Average Annual Growth Rate over past 10 years	15-20%

3.1.4 Market Entrance Opportunities for PMMI Members

- (1) The five industries surveyed (food, beverage, pharmaceutical, personal care products, and electronics) are all estimated to grow steadily in the coming decade due to the increasing market demand, which accordingly stimulates the market demand for the related packaging machinery products.

- (2) Domestic businesses that are seeking to better their competitive strength in the international market in order to expand exports have to ameliorate the packaging conditions. The backward domestic packaging machinery does not help achieve greater exports. Large-scale businesses and foreign-invested enterprises tend to purchase imported equipment.
- (3) The market leaders in the respective industries tend to purchase imported packaging machinery to maintain the superiority and popularity of their products in the market.
- (4) The government has paid very little attention to the packaging industry and it is extremely difficult for the domestic packaging machinery manufacturers to research and develop advanced equipment to compete with overseas products. The imported packaging machinery products therefore have absolute superiority in technology in the Chinese market.

To sum up, the substantial development of almost all industries in the Chinese economy has produced enormous market potential for packaging machinery. It is magnificent timing for PMMI Members to enter the China market. Overseas packaging machinery is extremely attractive to domestic end users wanting to take advantage of their technology, quality performance, and reliability. However, the price for imported packaging machinery is about 5 to 10 times higher than those similar domestic products. This indicates that the target market potentials of PMMI members are the market leaders in each industry, large-scale businesses, and foreign-invested or joint ventured enterprises, which have adequate financial resources and strong demand for imported packaging machinery.

The Chinese packaging machinery industry began growing in the 1980's. Currently, the industry status still substantially lags behind international competitors. According to the unique national situation and range of application, China has formed its own standard of classification. The major categories include: Bagging-Filling-Closing Packaging Machinery, Vacuum Packaging Machinery, Sterile Packaging Machinery, Beer Filling Equipment, Paper Packaging & Corrugated Paper Box Equipment, Stooking Production Line, Coding Machinery, and Labeling Machinery.

3.2 Bagging-Filling-Closing Packaging Machinery

3.2.1 Product System of Bagging-Filling-Closing Packaging Machinery in China

At present, the Bagging-Filling-Closing packaging machinery in China is classified into three categories according to the differences in respect to the

forming principles, measuring methods for filling, and types of closing.

- Forming-Filling-Closing machinery for bagging
- Forming-Filling-Closing machinery for cartons (boxes)
- Heat Forming-Filling-Closing machinery

China has already begun to develop Bagging-Filling-Closing Packaging Machinery with a capacity of 1000g – 5000g.

3.2.2 Comparison of Chinese Bagging-Filling-Closing machinery with similar overseas products

- Insufficient types of domestic machines are available
- Low Packaging Accuracy
- Low Packaging Speed
- Lack of Multifunction
- Lack of the models integrating measurement, controlling, inspection, and adjustment into one, and carrying Closed Loop Controlling Systems

3.2.3 Status of Chinese Bagging-Filling-Closing Packaging Machinery

<u>Items (1999)</u>	<u>Quantity</u>
Manufacturers	40 companies
Percentage of all packaging machinery manufacturers	4%
Domestic Output	2,000 sets
Import Volume	10,850 sets
Import Amount	US\$ 160,269,000
Trend of Import 97-99	Declining
Export Volume	141,488 sets
Export Amount	US\$ 13,473,000
Trend of Export 97-99	Increasing

3.2.4 Expectation of Market Demand and Trends of Chinese Bagging/Filling/Closing Packaging Machinery

- (1) Approximately 200 sets of pillow-type packaging machines were imported in succession since late 1980's. These machines will need to be replaced in the near future, creating market potential.
- (2) The boom of self-service stores in various sizes rising up in the major cities

of China, whose commodities are mainly packed by horizontal pillow -type packaging machines, will create great market potential.

- (3) Along with the diversification of commodities, the application fields of horizontal pillow -type packaging machinery will be substantially widened, producing more market potential for such machinery.
- (4) The filling and closing packaging machinery under vacuum or sterile circumstance are required in China at present, while no domestic manufacturers are capable of such production. This indicates substantial market potential for PMMI Members.

3.2.5 Major Potential End Users in China

- China Salt General Corporation
- Shandong Ocean Chemicals (Group) Co., Ltd.
- Jiangsu WeiWei (Group) Corporation
- Shanghai Bright Dairy Co., Ltd.
- Zhejiang Nice-Hawk Washing Powder Company

3.2.6 Major Domestic Manufacturers

Among the domestic Bagging-Filling-Closing packaging machinery, approximately 75% are applied to the packaging of small packages. Most products are well established domestically, and manufacturers have already begun exporting some of these products in small batches.

Manufacturer Name	Products
Guangdong Shantou General Machinery Factory	SZB-16A Vertical Bagging Packaging Machine
Wuxi Naite Mechanic-Electric Integration Technology Co., Ltd.	Digital Measuring, Automatic Error Detecting, Correcting, Automatic Aggregate Display
Jiangsu Rugao Food Machinery Factory	WZB Pillow-type Packaging Machinery
Guangdong Foshan Xinxing Packaging Machinery Factory	PM340 Pillow -type Automatic Packaging Machine
Beijing Dasong Machinery & Electronics Co., Ltd. and Guangdong Zhongshan Dasong Machinery & Electronics Co., Ltd.	Vertical Three Sides Seal Interval-Type Flat Bag Packaging Machine
Jiangsu Jiangyin Salt Company	EFB-II Automatic Grain Packaging Machine

3.2.7 Major Overseas Suppliers

The major overseas suppliers of Bagging-Filling-Closing packaging machinery to the China market include:

- German: ROVEMA, Hassia, Bosch
- Japanese: Kawashima Factory, Tokyo Fur Machinery Factory
- American: MATTER—BURT
- British: AUTOPAC
- Italian: UNIVERSALPACK

3.3 Vacuum Packaging Machinery

3.3.1 Status of Function of Chinese Vacuum Packaging Machinery

<u>Model</u>	Single Room, Double Room, Conveyer Type, Spile vacuum Type, Revolving Vacuum Room, Heat Forming, Inflation of Mixed Gas.
<u>Operation</u>	Mainly semi-automatic, with few categories of automatic and large vacuum room equipment, and some vacuum packaging machinery for liquids.

3.3.2 Comparison of Chinese Vacuum Packaging Machinery with Similar Overseas Products

Chinese vacuum packaging machinery shows:

- Insufficient types of domestic machines are available
- Non-standardization of Specifications and Systems
- Poor Quality of Fittings
- There is also an apparent gap in the compatibility and standards of spare parts.

3.3.3 Status Quo of Chinese Vacuum Packaging Machinery

- (1) There are very few manufacturers in China specializing in vacuum packaging machinery. Mostly, other machine manufacturers have other main products and offer vacuum packaging machines as a smaller part of their primary business.
- (2)
- (3) Many domestic manufacturers are engaged only in the assembly work while purchasing the basic components from abroad and contracting the structural parts to other businesses.

3.3.4 Market Demand & Trends for Chinese Vacuum Packaging Machinery

- (1) Vacuum packaging machinery is widely applicable and has great market demand. It is applied to the protective packaging for foodstuffs, pharmaceuticals, electronic components, chemical materials, precise instruments, textiles, and garments. The application possibilities are constantly increasing. There is substantial market potential for such machinery.
- (2) According to the figures of the China Packaging Machinery Association, domestic products cannot meet a considerable proportion of Chinese market demands, which indicates the enormous market potential.
- (3) At present, more medium to small-sized Chinese users choose domestic equipment due to price concerns. However, for those larger users with large output and assured quality, imported machinery are preferred due to the lack of qualified and special-purposed vacuum packaging machinery in China.

3.3.5 Major Potential End Users in China

The following companies are listed as most probable potential buyers of imported vacuum packaging machinery according to our market research and survey on the domestic suppliers and end users.

- Shanghai Dajiang (Group) Co., Ltd.
- Shanghai Zhongmu-Huaan Meat Products Co., Ltd.
- Shanghai Meat Products Factory
- Guangzhou Huang-Shang-Huang Meat Products Factory
- 999 Enterprises Group
- Xi'an Janssen Pharmaceuticals Co., Ltd.

3.3.6 Major Domestic Suppliers

Manufacturer Name	Products
Shanghai Machine Tool Factory	Developed on the basis of TVP-B2 of Japan Toyoh Automation Company
Anhui Tunxi Plastic Machinery Factory	Heat form, filling, vacuumizing, inflating, and sealing of packaging containers utilizing core stocks
Shenyang Liming Machinery Factory	ZB-86A Vacuum Packaging Machinery
Chengdu Technique Service Center	Fixed ratio blending and fixed quantity exchange of 2 or 3 types of gases.
Wenzhou Packaging Machinery Factory	MCP400/2 Double Room Vacuum Packaging Machine. Double vacuumization and double replacement qualified.
Shanghai People's Instrument Factory	Vertical Vacuum Packaging Machine

3.3.7 Major Overseas Suppliers

According to our market research and survey on domestic suppliers and end users, the major overseas suppliers of vacuum packaging machinery to the China market include:

- German: MOTICVOC, INTERVAC, WEBMATIC
- Taiwanese: Yang Zhan Machinery Industry Co., Ltd.
- Japanese: CNO Sokki Machinery

3.4 Sterile Packaging Machinery

3.4.1 Comparison of Chinese Sterile Packaging Machinery with Similar Overseas Products

Chinese Sterile Packaging Machinery shows:

- Backward Methodology of Packaging Equipment
- Unitary Sterilization Method
- Backward High-Speed Automatic Measuring System

3.4.2 Quantity Status of Chinese Sterile Packaging Machinery

Sterile packaging machinery was introduced to China in the 1970's. The current quantity status is shown as follows:

<u>Items</u>	<u>(1999)</u>	<u>Quantity</u>
Manufacturers		13 companies
Proportion of all machinery manufacturers		0.813%
Number of sterile packaging machinery currently applied in China		300 sets

3.4.3 Expectation on Market Demand & Trends of Chinese Sterile Packaging Machinery

- (1) The shape of sterile packaged products is brick-like, and the material is paper, which results in full space utilization and low costs.
- (2) Sterile packaging fits with the popular concept of environmentalism. The development trend of food packaging in the 21st century is "Safe, Healthy, and Natural," which sets forth stricter requirements for the food industry while producing great market potential for sterile packaging equipment that can meet such requirements. Since 1996, the demand for sterile packaging machinery has increased sharply in China, but the existing domestic equipment and similar overseas equipment are simply beyond comparison. Larger domestic users tend to purchase imported machinery.
- (3) The on-going "Milk for Students" project will substantially promote the market.
- (4) In the next decade, all brand name food manufacturers in China will feel the need to enlarge their productivity or replace their existing equipment. Some new large to medium-sized food businesses will also be established. These will all act as the basis of the market demand for sterile packaging machinery.
- (5) Along with the increasing production of milk, juice, and beverages in China and the widening application of sterile packaging machines, it is estimated by the China Packaging Technology Association and China Packaging Research Institute that 80 to 120 sets of sterile packaging machinery will be needed from 2001 to 2005, most of them being high-speed automatic equipment and non-heat sterilization packaging machinery.

3.4.5 Major Potential End Users in China

The market research and survey on the end users and domestic suppliers indicates that the following are to be the major domestic purchasers of sterile packaging machinery:

- Bright Dairy
- Huiyuan Juice
- Guangdong Robust (Group) Co., Ltd.
- Beijing Sanyuan Foods Co., Ltd.
- Hangzhou Wahaha (Group) Co., Ltd.
- American Heinz United Co., Ltd.

3.4.6 Major Domestic Suppliers of Sterile Packaging Machinery

According to the market research and survey on the domestic end users, the major domestic suppliers of sterile packaging machinery include:

<u>Manufacturer Name</u>	<u>Products</u>
Shenyang Automatic Instruments Institute	WDE Series Sterile Packaging Equipment for Large Packages
Beijing Aviation Technology Institute	Sterile Packaging Line for Large Packages
Guangdong Fareast Food Packaging Machinery Co., Ltd.	Sterile Packaging Equipment for Brick Boxes
Shanghai Light Industry Equipment (Group) Corporation	Roof Type Sterile Packaging Machinery
Anhui Keyuan Group	APM-2000 Automatic Sterile Packaging Machinery
China Packaging & Food Machinery General Corporation	Automatic Sterile Packaging Machinery for Plastic Bags

3.4.6 Major Overseas Suppliers of Sterile Packaging Machinery to the China Market

According to the survey results of the domestic suppliers and end users, the end users of sterile packaging machinery import mainly from the following overseas suppliers:

- Swedish: Tetra Pack
- Italian: SASIB



-
- German: Hassia
 - Norwegian: Elopak
 - Dutch: Stork

3.5 Beverage Packaging Machinery

3.5.1 Quantity status of imported beverage packaging machinery

After 20 years of hard work, the Chinese beverage industry is now equipped with improved machinery. Some advanced machinery was imported to update over 350 filling machinery assemblies, producing more than 3.5 million tons of extra capacity.

According to Ministry of Industry statistics, since 1978 the following have been imported:

- a) 158 carbonated beverage glass-filling assemblies.
- b) 18 metal can filling assemblies, with the filling speed of 150~500 cans per minute, and an annual filling capacity of 267,708 tons.
- c) 42 Tetra Pack flexible packaging filling assemblies, with the packaging speed of 75~150 packages per minute, and an annual filling capacity of 113,400 tons. (Tetra Pack Company from Sweden states that more than 100 assemblies have been sold to China.)
- d) 6 standing pouch filling assemblies, with the packaging speed of 30~160 pouches per minute, and an annual filling capacity of 11,604 tons.
- e) 2 roof-type filling assemblies, with the packaging speed of 20 packages per minute, and an annual filling capacity of 1,400 tons.
- f) 12 Tetra Package filling assemblies, with the packaging speed of 75~83 packages per minute, and an annual filling capacity of 34,560 tons.
- g) 13 sets of Aluminum two-piece can manufacture machinery.
- h) Aluminum pop-up manufacturing machinery.
- i) 2 sets of manufacture machinery for compound materials applied to Tetra Packages.
- j) 2 sets of manufacture machinery for standing pouch compound materials.
- k) 38 sets of crown cap manufacture machinery.
- l) More than 40 condensed fruit juice assemblies were imported to process over 400 thousand tons of raw fruit annually.

3.5.2 Comparison of Chinese beverage packaging machinery with overseas products

Chinese beverage packaging machinery shows:

- Incomplete product specifications
- Low level of automation and controlling
- Low reliability of individual machinery
- Little application of advanced techniques

3.5.3 Market demand of Chinese beverage packaging machinery and expectation

- (1) At present, the hotspot of Chinese market demand for beverage packaging machinery is multifunctional and automatic equipment with high speed, low wastage, accurate measuring.
- (2) China lacks the high-speed sterile filling machinery that utilizes laser control, electricity, magnetism, and light. There is a considerable market demand for such equipment.
- (3) According to the China Beverage Industry Planning, China Food & Packaging Machinery Industry Association, and the results of the market research:
 - a. The total output proportion of the soft drink beverage is slightly declining; carbonated beverages are still the main products in the beverage industry, accounting for 46% of total beverage production.
 - b. Pure water is developing very well among bottled water beverages.
 - c. Tea is expected to be the fastest growing beverage.
 - d. Other local beverages show good development potential.

3.5.4 Major potential end users in China

The following is included as major potential purchasers of beverage packaging machinery in China.

- Zhejiang Wahaha Group
- Guangdong Robust (Group) Co., Ltd.
- Jianlibao Beverage Company
- Coca Cola (China) Co., Ltd.
- Pepsi Cola (China) Co., Ltd.
- Sichuan Yibin Wuliangye (Group) Co., Ltd.



3.5.5 Major domestic suppliers and their products

There are more than 100 manufacturers of beverage machinery in China at present, mainly engaged in the business of medium-small-sized glass bottle filling machinery.

<u>Manufacturer</u>	<u>Main Products</u>
Nanjing & Hefei Light Industry Machinery Factories	30,000 bottle/h glass bottle filling line for carbonated beverages
Langfang Packaging Machinery Factory	8,000~12,000 bottle/h glass bottle filling line
Nanjing No. 2 Business Machinery Factory & Ministry of Machinery, General Machinery Institute	Horizontal compound paper box forming filling machinery
Shenyang Songling Flexible packaging Machine Factory	Automatic single head flexible packaging machine (2,200 bags / h)
	Automatic multi head flexible packaging machine (4,800 bags / h)

3.5.8 Major overseas suppliers

- Japanese: Sumitomo Heavy Industry
- Swedish: Tetra Pack

3.6 Beer Filling Machinery

3.6.1 Status of Functions of Chinese Beer Filling Equipment

The development of the Chinese beer filling lines was relatively late compared to international advances. The development and manufacturing started in the early 1970's. At present, Chinese manufacturers can only produce small batches of the beer filling lines equivalent to those with the technology adopted by overseas manufacturers in the early 1980's.

<u>Valves of Fillers</u>	<u>60 valves</u>
Number of Capper Heads	12
Filling Velocity	60

Filling Pressure	0.3
Filling Capacity (K bottles)	20
Beer Loss Ratio (%)	3
Bottle Loss Ratio (%)	2

3.6.2 Comparison of Chinese Beer Filling Equipment with Similar Overseas Products

- Insufficient types of domestic machines are available
- Low Level of Mechanic-Electric Integration and Automation
- Unstable Quality
- Little Application of New & High technology Techniques
- Low Capability of Research & Development
- Domestic equipment is suitable for medium-sized breweries while overseas filling lines suits large-scale breweries.

3.6.3 Market Demand & Trends of Chinese Beer Filling Equipment

- (1) Since 1990, China has imported 72 filling lines from Germany, Japan, the United States, and Italy. Considering the commissioned date and the average durability of 10 years, approximately 60% of the above said imported lines can perform normally till the end of 2000, and 40% of them may operate until 2005. Therefore, the demand for upgrading or replacing beer filling lines in China will be substantial in the 21st century.
- (2) According to the estimation of the China Food & Beverage Industry Association, approximately 800,000 tons capacity of beer filling equipment in China need to be upgraded or retrofitted each year. There is a greater demand for the medium-small-sized equipment with the annual production capacity of above 50 thousand tons. Due to a late start in development, Chinese domestic equipment can only reach the international level of the early 1980's. This creates great market potential for the overseas beer filling equipment manufacturers in China.
- (3) Draft beer has become increasingly popular in China in recent years, while the bottling of draft beer has just gotten started. At present, all filling lines for draft beer are imported. According to the predictions of the China Food & Beverage Industry Association, bottled draft beer will account for 40% of total beer output by 2005. Therefore, the filling lines for draft beer has great market potential in China.

3.6.4 Major Potential End Users in China

The following are the major potential purchasers of beer filling equipment in China.

- Tsingtao Beer Group
- Zhujiang Beer Group
- Yanjing Beer Group

3.6.5 Major Domestic Suppliers

- Guangdong Light Industry Machinery (Group) Co., Ltd.
- Nanjing Light Industry Machinery Factory
- Ningbo Tiansheng Machinery Co., Ltd.
- Langfang Packaging Equipment Manufacture General Corporation
- Hefei Light Industry Machinery Factory
- Ningbo Shenyu Light Industry Machinery Factory

3.6.6 Major Overseas Suppliers

The major current suppliers of overseas beer filling equipment to the China market include:

- German: KRONES, KHS
- Italian: SASIB, AVE
- French: SIDEL
- American: MeiPack

3.7 Corrugated Cardboard Box Manufacturing Machinery

3.7.1 Status of the Chinese Corrugated Cardboard Box Manufacturing Equipment

In general, the Corrugated Cardboard Box Manufacturing Equipment made in China is still at the stage of the international level of the late 1970's and early 1980's. The first production line for corrugated cardboard boxes in China was not developed until 1981. At present, the functions and status of domestic Corrugated Cardboard Box Manufacturing Equipment are as follows:

Type of Corrugation	<u>A&B, C&E, E&B etc.</u>
Layers	Single Side, 3 Layers, 5 Layers, and 7 Layers
Width	1.2M, 1.6M, 1.8M, 2.0M, 2.2M, 2.5M



Max. Velocity	180M/MIN
Category	Corrugated Paper Board Line, Printing Slotter, Box Sealing Machine, Corner Cutting Machine, etc.
Doctor Roll of Corrugating Machine	Individual, separated
Average Durability of Corrugating Roll	Above 10 million M
Cutter	Digital horizontal and vertical cutters
Dynamics System	Mechanic Drive, Frequency Conversion Motor Drive
Thick Paper Bracket	Mechanical with or without Axis, Hydraulic without Axis, etc.
Technique Application	Single Side Vacuum Absorption, Air Cushion, Paper Guide Grab, etc.

3.7.2 Status quo of Chinese Corrugated Cardboard Box Manufacturing Equipment

The production of Corrugated Cardboard Box Manufacturing Equipment started in the 1980's, and the current level is that of the international level in the 1980's. The quantity of the equipment is shown as follows:

<u>Item (1999)</u>	<u>Quantity</u>
Manufacturers	22 companies
Proportion to all packaging machinery manufacturers	1.38%
Number of equipment currently applied in China	Over 800 sets

According to statistics in 1999, the import and export status of paper, pulp, or paperboard products is as follows:

		<u>1999</u>	<u>1998</u>	<u>1997</u>
<u>Import</u>	Import Volume	2,647 sets	3,536 sets	2,764 sets
	Import Value	US\$ 165,549,000	US\$ 647,266,000	US\$ 366,792,000

	Proportion in total import of machinery	20.35%	45.11%	25.56%
Export	Export Volume	1,119 sets	1,176 sets	1,033 sets
	Export Value	US\$ 13,680,000	US\$ 13,571,000	US\$ 17,586,000
	% total export of packaging machinery	28.9%	30%	35.49%

3.7.3 Comparison of Chinese Corrugated Cardboard Box Manufacturing Equipment to Similar Overseas Equipment

- Insufficient types of domestic machines are available
- Inadequate Application of new and high technology techniques
- Poor Accuracy & Low Reliability
- Backward Accessory Materials to the Production Line

3.7.3 Expectation on the Market Demand & Trends of Chinese Corrugated Cardboard Box Manufacturing Equipment

- (1) Green Packaging (environmental) has been listed among the key development projects in the Planning of China Packaging Industry Development by 2010. By 2010, the annual demand for paper packaging products will exceed 19 million tons, while the current annual output is less than 6 million tons. The current R&D capacity does not assure adequate output growth to meet the huge demand. Therefore, the need for corrugated cardboard box equipment will be enormous.
- (2) Since most medium-small-scale cardboard box manufacturers in China are applying domestic raw materials, the market potential of medium-slow machinery that suits such material will be large.
- (3) In 1997, high-speed and heavy lines started to prevail, and the need for low speed lines dropped dramatically. According to the interviews with the cardboard box manufacturers, medium lines are estimated to be the major products in the near future, and the trend for high-speed lines is also positive.
- (4) Recently some European countries and the US have banned the import of foreign products packaged by wooden boxes or wooden trays. The relevant Chinese authorities have listed corrugated cardboard as one of the five substitutes for wooden packaging. The compliance with the international packaging requirements brings much potential for the corrugated cardboard box equipment.



3.7.4 Major Potential End Users in China

The following are major potential purchasers of corrugated cardboard box manufacturing equipment.

- Haier Group
- Changhong Group
- Hangzhou Wahaha Group Company
- Tianjin Dingyi International Food Co., Ltd.
- Shenzhen Huali Packaging Trade Company

3.7.5 Major Domestic Suppliers

Machinery for corrugated cardboard boxes has been developing rapidly in China in recent years. At present there are more than twenty manufacturers in China. The major manufacturers are:

- Beijing Capital Machinery Factory
- Shanghai Light Industry Machinery Factory
- Yantai Foreign Trade Mold Factory
- Liaoning Dandong Light Industry Machinery Factory
- Hubei Jingshan Light Industry Machinery Factory
- Guangdong Zhaoqing Jialong Packaging Machinery (Group) Co., Ltd.

3.7.6 Major Overseas Suppliers

The major current suppliers of overseas corrugated cardboard box equipment to the China market include:

- Italian: Agnati
- American: Langston, MARQUIP
- German: PETERS, BHS
- Swedish: EMBA
- Japanese: Mitsubishi

3.8 Stacking Machinery

3.8.1 Domestic Manufacturing in China

On the whole, the production of stacking machinery in China is 15-20 years behind



of developed countries. Among the few manufacturers of Stacking machinery in China, the most influential and advanced is Harbin Bosch Automatic Equipment Co., Ltd. Their automatic packaging robot Stacking machinery supplies 50% of China's domestic market.

<u>Manufacturer</u>	<u>Major Products</u>
Harbin Bosch Automation Equipment Co, Ltd.	Automatic packaging robot stack assembly
Guangdong Guangtang Machinery Equipment Company	Paper (Plastic) Carton Stacker
Guangdong Light Industry Machinery (Group) Company	Paper (Plastic) Carton Stacker
Nanjing Light Industry Machinery (Group) Company	Paper (Plastic) Carton Stacker
Henan Luohe Yanluo Cereals Machinery Factory	Stacker for flour bags

3.8.2 The gap between the stacking machinery production and their foreign counterparts

- Primitive appearance
- Poor performance
- Short durability
- More errors

3.8.3 Market demand and trend for the stacking machinery in China

- (1) Currently, the automatic packaging robot stacking machinery manufactured by Harbin Bosch enjoys 50% of the Chinese market. This company is able to produce robot production lines used in the petrol and chemical sectors such as packaging and stacking powder, chunk, and chemical fiber filament. With the same technology and quality, its price is only half or one third of the imported machinery. The China National Petrochemical Group and China Petrol Group have decided to no longer import machinery of the same kind.
- (2) As shown in our market survey and the final analysis, domestic purchasers

tend to turn to machinery made in China after an overall comparison in terms of quality, performance, reliability, and price. As a result, we do not see much good prospect for sales of foreign products of the same kind.

3.8.4 Major potential customers in China

The market survey indicates that the following factories are the major potential purchasers:

- Chengde Lulu Co., Ltd.
- Guangdong Zhujiang Beer Group Corp.
- Dynasty Brewing Co., Ltd.
- Hebei Xuri Group Co., Ltd.
- Shanghai Shenmei Beverage & Food Co., Ltd.

3.8.5 Major overseas suppliers

Such foreign manufacturers of stacking packaging machinery as follows have entered China market:

- Korean: Handong Machinery Co., Ltd.
- French: SIEREM
- U.S.: MeiPack Co., Ltd.
- Dutch: STORK B.V.
- German: HESS

3.9 Coding Machinery

A gap exists between the domestic coding machinery and the foreign products. Generally, the enterprises that use imported bottling machinery will purchase imported coding machinery while others will not because of the much higher price.

3.9.1 Major potential users in China:

- P&G
- Nanfu Battery
- Hongta Group
- Gujinggong
- Ting Xin
- Coca Cola
- Nongfu Spring



- Robust
- Wahaha

3.9.2 Major domestic manufacturers:

Manufacturer	Major Products
Beijing Business Machinery Institute	GS " Golden Star" automatic digital coding machine, HN-6000 coding machine
Guangzhou Fengdeli Industrial Company	DL-III coding machine
Guangzhou Weishi Technology Co., Ltd.	Coding machine
Handong Group	Coding machine
Guangdong Fujie Machinery Equipment Co., Ltd.	Ink coding machine

3.9.3 Major overseas suppliers:

The following foreign manufacturers of coding packaging machinery have entered the Chinese market:

- Videojet Ink Coder (Marconi)
- Hitachi
- Imaje
- Domino
- Genesis

3.10 Labeling Machinery

The domestic labeling machinery employs a frequency changer to adjust the speed more conveniently. Fourfold labeling is already realized. With stable performance, it is compatible with different rates of speed of the packaging production line. Besides, it is cheaper than the imported ones of the same kind.

Presently, there is still a gap between the domestic machinery and the imported ones. In general, the few enterprises that have introduced imported filling machinery are likely to purchase the corresponding imported labeling machinery.



Major domestic potential customers:

- Chengde Lulu Co., Ltd.
- Yanjing Brewing (Group) Co., Ltd.
- Shandong Jinhai Group
- Hainan Fulijie

Major domestic manufacturers

Anqiu Light Industry Machinery Plant

Tel: 0536-4222086 Fax: 0536-4212202

Qinghuangdao Cigarette Machinery Plant

Tel: 0335-4486623 Fax: 0335-4486459

Chongqing Michael Machinery Manufacturing Plant

Tel: 023-68610570 Fax: 023-68614719

Guangdong Light Industry Machinery Group Plant

Tel: 020-84336972 Fax: 020-84356616/84333743

China Light Industry Machinery General Corp., Hefei Plant

Tel: 0551-5562448/5562139 Fax: 0551-5561762

Major overseas suppliers

- Italian: OCEA
- German: Krones
- American: MeiPack Co., Ltd.
- Taiwanese: Lifeng

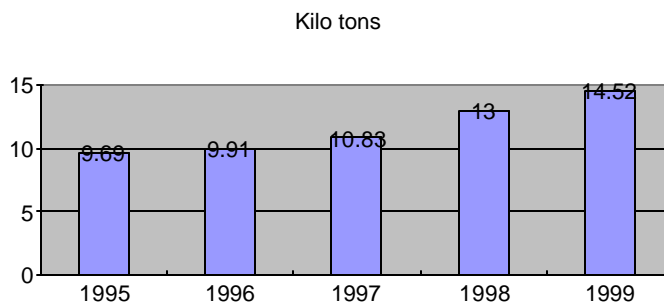
4. BRIEFING ON THE CHINESE FOOD INDUSTRY

4.1 The Beverage Industry

4.1.1 The Output of China's Beverage Industry

There are more than 3200 beverage enterprises in China. The following table illustrates China's output in the beverage industry during 1995~1999:

<u>Year</u>	<u>Output million tons</u>
1999	14.52
1998	13.00
1997	10.83
1996	9.91
1995	9.69



According to the State Statistics Bureau, the 6 major beverage - producing provinces account for 57% and 68% of the national output in 1997 and 1998 respectively. The following are the 6 major beverage-producing provinces in 1998 and their share of the market:

<u>Province</u>	<u>Market Proportion</u>
Guangdong	26.74%
Zhejiang	15.28%
Shanghai	7.47%
Jiangsu	6.81%
Hubei	6.57%
Liaoning	4.59%

4.1.2 Major Products of China's Beverage Industry:

At present, there are the following types of products in China's beverage industry:

- Carbonated beverages; including fruit flavored, and cola. The major brands are Coco Cola, Pepsi Cola, and Jianlibao
- Natural mineral water;
- Fruit & vegetable juice beverages;
- Solid beverages; mainly including bean and milk powder, milky tea.
- Other soft beverages, mainly including Botanic vitamin beverages: such as bean milk, coconut, and apricot beverages, Special beverages: "Red Bull," multivitamin, vitamin AD Ca-milk and other dairy beverages.

China's major products for the beverage industry in 1998:

<u>Products</u>	<u>Output Proportion</u>
Carbonated beverage	46%
Natural mineral water	18%
Fruit & vegetable juice beverage	11%
Milky beverage	4%
Botany vitamin beverage	2%
Dairy	3.5%
Other beverages	15.5%

In recent years, carbonated beverages have been on the decline, yet still remain the leading products. The total output of "Two Colas" has reached 2.7 million tons, covering 22.6% of the total national beverage output.

4.1.3 New Product Trend of China's Beverage Industry:

Carbonated beverages will remain stable, with a proportion of 40%-50%. Tea beverages will grow quickly and be among the 2nd group of products with bottled water, fruit juice, fruit juice beverage, milky beverage, and botany vitamin beverage.

With the fast development of new beverage types, China's average per capita beverage consumption will increase from 10 Kg now to 20 Kg in 2005. And China's total beverage output will reach to 27 million tons then. So the need for beverage filling processing machines will also grow.

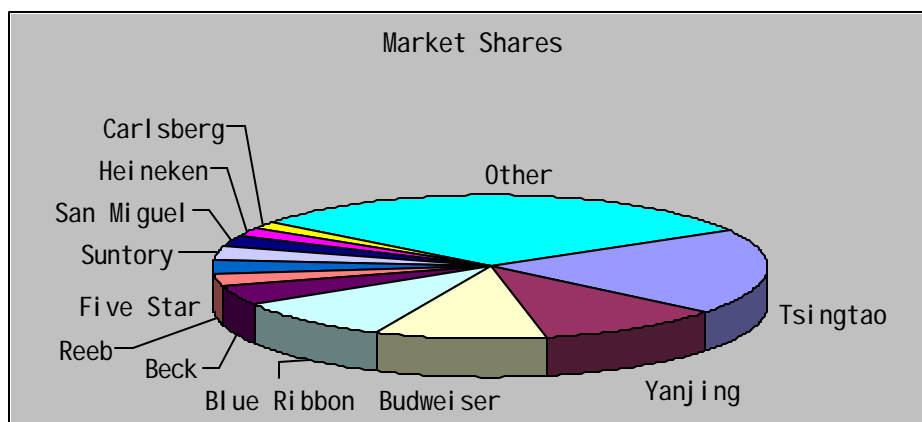
4.1.4 Leading top 50 Beverage producers in China:

	<u>Brand</u>	<u>Company</u>	<u>Turnover</u>	<u>Output (Kilo ton)</u>	<u>Products</u>
1	WeiWei	Jiangsu WeiWei Corp.	US\$ 371.17	157.87	Bean & milk powder, Dairy
2	Jianlibao	Guangdong Jianlibao Corp.	US\$ 333.29	760.70	Carbonated beverage, Bottled water, Fruit juice, Cold tea
3	Wahaha	Hangzhou Wahaha Corp	US\$ 234.88	496.29	Bottled water, Milky beverage
4	Yeshu	Yeshu Corp	US\$ 165.67	248.25	Bottled water, Fruit juice, Botany vitamin beverage, Milky beverage
5	Spring	Shanghai Spring Beverage & Food Ltd.	US\$ 143.55	335.89	Carbonated beverage, Bottled water, Fruit juice
6	Today	Guangdong Today Corp	US\$ 135.12	259.03	Bottled water,
7	Yeshu	Yeshu Corp	US\$ 126.76	139.11	Fruit juice
8	Lulu	Lulu Corp	US\$ 102.06	107.62	Bottled water, Botany vitamin beverage
9	Pepsi Cola	Shanghai Pepsi Cola Beverage Ltd.	US\$ 92.94	241.02	Carbonated beverage, Fruit juice
10	Zhongcui	Hangzhou Zhongcui Food Ltd.	US\$ 79.67	185.30	Carbonated beverage, Bottled water,
11	Xin-zhujiang	Guangzhou Xinzhujiang Food & Beverage Ltd.	US\$ 76.97	191.91	Fruit juice, Dairy beverage
12	Xurisheng	Hebei Xuri Corp	US\$ 73.07	88.49	Bottled water, Fruit juice
13	Zhongcui	Nanjing Zhongcui Food Ltd.	US\$ 72.37	168.45	Carbonated beverage,
14	Coco Cola	Guangdong Coco Cola Ltd.	US\$ 69.96	120.36	Carbonated beverage,

15	Coco Cola	Beijing Coco Cola Ltd.	US\$ 68.30	154.92	Carbonated beverage, Fruit juice
16	Coco Cola	Tianjin Coco Cola Ltd.	US\$ 68.05	159.95	Carbonated beverage, Fruit juice
17	Coco Cola	Wuhan Coco Cola Ltd.	US\$ 58.12	149.91	Carbonated beverage,
18	Coco Cola	Dalian Coco Cola Ltd.	US\$ 53.57	104.67	Carbonated beverage,
19	Huilekang	Xiamen Huilekang Food Ltd.	US\$ 44.03	91.15	Fruit juice, Cold tea, Botany vitamin beverage, Dairy beverage
20	Coco Cola	Tsingtao Coco Cola Ltd.	US\$ 43.74	109.54	Carbonated beverage,
21	Huiyuan	Beijing Huiyuan Fruit juice Corp	US\$ 43.37	80.00	Fruit juice, Cold tea
22	Lufang	Xiamen Luquan Industrial Corp	US\$ 40.61	88.40	Carbonated beverage, Fruit juice.
23	Coco Cola	Hainan Coco Cola Beverage Ltd.	US\$ 37.16	81.98	Carbonated beverage.
24	Shenbao	Shenzhen Shenbao Industrial Ltd.	US\$ 36.31	93.24	Carbonated beverage, Fruit juice, Dairy beverage
25	Zheng-guanghe	Zhengguanghe Corp	US\$ 32.53	176.19	Carbonated beverage, Fruit juice, Dairy
26	Coco Cola	Xiamen Taigu Coco Cola Ltd.	US\$ 31.73	67.65	Carbonated beverage.
27	Chen' guang	Shenzhen Chen'guang Beverage Ltd.	US\$ 27.95	50.00	Fruit juice.
28	Yuan-zhimeng	Hainan Hengtai Mango Industrial Ltd.	US\$ 27.82	14.75	Fruit juice
29	Coco Cola	Haerbin Coco Cola Ltd.	US\$ 22.96	16.75	Carbonated beverage.
30	Zhonglu	Shandong Zhonglu Fruit juice Corp	US\$ 22.67	27.18	Other beverages
31	Pepsi Cola	Sichuan Pepsi Cola Beverage Ltd.	US\$ 22.52	64.02	Fruit juice
32	Yibao	Shenzhen Yibao Beverage Ltd.	US\$ 20.89	100.35	Carbonated beverage.
33	Qiangli	Guangdong Qiangli Corp	US\$ 20.74	33.40	
34	Coco Cola	Zhuhai Coco Cola Ltd.	US\$ 20.25	43.49	Carbonated beverage, Fruit juice

35	Baishi Tianfu	Chongqing Baishi Tianfu Beverage Ltd.	US\$ 17.21	47.32	Carbonated beverage.
36	Yili	Shenzhen Yili Mineral Water Ltd.	US\$ 16.00	79.47	Carbonated beverage.
37	Pepsi Cola	Beijing Pepsi Cola Beverage Ltd.	US\$ 12.59	37.24	
38	Baishi Asia	Baishi-Asia Beverage Ltd.	US\$ 12.21	55.53	Carbonated beverage, Fruit juice
39	Pepsi Cola	Changchun Pepsi Cola Beverage Ltd.	US\$ 11.22	22.29	Carbonated beverage, Bottled water.
40	Pepsi Cola	Fuzhou Pepsi Cola Beverage Ltd.	US\$ 10.03	28.22	Carbonated beverage.
41	Pepsi Cola	Guilin Pepsi Cola Beverage Ltd.	US\$ 7.58	23.48	Carbonated beverage.
42	Yishite	He'nan Yishite Natural Food & Beverage Factory	US\$ 7.53	9.68	Carbonated beverage.
43	Shenbao	Shenzhen Shenbao Beverage Factory	US\$ 7.39	21.73	Carbonated beverage, Bottled water, Fruit juice
44	Foshan	Foshan Foodstuff Factory	US\$ 5.56	19.95	Fruit juice
45	Yeshu	Haikou Yeshu Mineral Water Ltd.	US\$ 5.55	28.20	Fruit juice.
46	Tsingtao	Tsingtao Carbonated Water Factory	US\$ 5.42	18.00	
47	Daffodil	Guangdong Daffodil Industrial Ltd.	US\$ 5.10	35.21	Carbonated beverage.
48	Jialinshan	Zxuhai Yonglong Jialinshan Mineral Water Factory	US\$ 4.70	18.00	Fruit juice, Botany vitamin beverage
49	Kangle	Luoyang Kangle Factory	US\$ 3.38	10.39	Bottled water.
50	Baishi Arctic	Baishi-Arctic Beverage Ltd.	US\$ 3.66	12.90	Carbonated beverage, Fruit juice

4.2 The Beer Industry



4.2.1 Total market value and the shares

- (1) The Beer industry has achieved rapid development in China since the reforms and market opening in 1978, and has been growing at the annual rate of 20-27% since the mid '80s. In 1993, the beer output, accounting for more than 60% of the total output of all alcoholic beverages, made its first breakthrough.

(2)

<u>Year</u>	<u>Output Unit 10 thousand tons</u>
1995	1568.82
1996	1681.91
1997	1888.94
1998	1988
1999	2088

- (2) The market share of major beer producers in 1999:

<u>Name</u>	<u>Brands</u>	<u>Percentage (%)</u>
Tsingtao Beer Group	Tsingtao	19.13
Yanjing Beer Group	Yanjing	10.71
Budweiser Wuhan International Brewing Co., Ltd.	Budweiser	10.02
Blue Ribbon Guangdong Beer Co., Ltd.	Blue Ribbon	9.55
Fujian Putian Jinshi Beer Co., Ltd.	Beck	4.35
Shanghai Mingle Beer Co., Ltd.	Reeb	3.04
Five Star Beer Co., Ltd.	Five star	3.01
Suntory Brewing (Shanghai) Co., Ltd.	Suntory	2.97
San Miguel Guangzhou Beer Co., Ltd.	San Miguel	2.59
Heineken Beer Company	Heineken	1.82
Carlsberg Beer (Huizhou)	Carlsberg	1.68

4.2.2 Foreign-funded enterprises

The top ten brewing companies in the world have found partners in China. At present, 72% of the domestic beer producers with an annual output above 50 thousand tons have a joint venture background. By the end of 1998, there were 46 foreign brands in the beer industry and 95 joint ventures, claiming 17.2% of brands. Their output runs as high as 32.9% of the total, of which foreign brand beer is 4.3%, or 803 thousand tons.

Some really powerful state-owned beer enterprises are taking advantage of their name brands to merge or take over regional beer companies. As shown by the China National Statistic Bureau, Tsingtao Beer Group now has 24 subsidiaries in 9 cities or provinces in China as a result of the expansion over recent years.

The output of four leading Chinese beer enterprises as of 1999:

<u>Name</u>	<u>Output (Unit: 10 thousand tons)</u>
Tsingtao Beer Group	105
Yanjing Beer Group	103
Guangzhou Zhujiang Beer Group	41
Sichuan Lanjian Beer Group	40

On the whole, many expanded or growing large beer companies will need a large quantity of new bottling or canning machinery to cater to the intensified competition. This is despite the fact that the average growth rate for China's beer industry will be 6.4% or so, and remain a low, yet stable, rate in the years to come, experts with China National Food Industry Association estimate.

4.3 The Dairy Industry

The Chinese dairy industry has a relatively longer history. The industry boomed after 1978, with the annual output reaching 525.7 kilo tons in 1995. By 1996, there were more than 500 dairy processing factories in China; approximately 50 were foreign invested or joint ventured companies.

The top five dairy product-producing provinces are Heilongjiang, Hebei, Zhejiang, Inner Mongolia, and Shandong. Heilongjiang is the largest producer.

The output of the five largest dairy product supplying provinces in 1999 are listed



below:

<u>Province</u>	<u>Output</u> <u>(Kilo tons)</u>	<u>Proportion in Total Domestic Output%</u>
Heilongjiang	154.9	25.8
Hebei	96.5	16.1
Zhejiang	61.1	10.2
Inner Mongolia	54.2	9.0
Shandong	52.9	8.0

At present, milk powder comprises the majority of all dairy products. The production of milk powder in 1999 was approximately 500 kilo tons, accounting for approximately 70% of the total output. The other 30% is composed of condensed milk, cheese, cream, and casein. The major milk powder products include: full fat milk powder, fat-free milk powder, milk powder with sugar, baby milk powder, milk powder for the aged and for the pregnant, and lactobacillus milk powder. All together there are more than 100 categories of milk powder products.

The outputs of major dairy products in 1999 are listed in the following table:

<u>Category</u>	<u>Output</u> <u>(K tons)</u>	<u>Proportion in total dairy output</u> <u>(%)</u>
Milk powders	500	70
Condensed milk, cheese, cream, casein, etc.	214	30

Recent years have seen efforts to improve food structure and eating habits in China. People with improved life quality naturally pay more attention to their health. Dairy products, especially the nutritious sour milk beverage and baby milk powder will have great market potential in the future.

4.4 The Convenience Food Industry

The production of instant noodles started in 1970 in China. At present, more than 800 instant noodle manufacturers are scattered all over the country, with more than 1,700 production lines producing up to 350 tons per year. Among the numerous manufacturers, Huafeng Group, a Sino-US joint venture, possesses over 60



production lines, accounting for nearly 20% of the total domestic output. The Taiwanese manufacturer of Master Kang Instant Noodles holds 12% of the market share. China is among the largest instant noodle producing countries in the world.

At the end of 1995, there were approximately 200 companies engaged in the business of processing machinery for convenience food, with the annual sales volume reaching more than 40 thousand sets. In 1996, the sales of instant noodles in China accounted for 6.77% of that in the world. The global proportion of convenience food in the entire food industry is estimated to rise from 5% in the 1990's to 13% in 2010. The proportion in China is currently 3% of the food industry.

There are more than 2,000 categories of convenience foods in the world. In China there are 2,000, and approximately 500 of them have proved popular. According to the figures of the State Bureau of Statistics, 1/3 of foods on the market are convenience foods. The major categories of convenience foods in the Chinese market include: instant noodles, instant rice, instant congee, puffed food, and convenience flavors for instant noodles.

Convenience food has been listed by the China Food Industrial Association as the key trend for future development. It is estimated that by 2010, convenience food will account for 50% of the food market, with the annual production value reaching RMB 50 billion.

4.5 The Quick Frozen Food (QFF) Industry

QFF was introduced to China in the late 1960's. The industry began to grow in the early 1990's with an annual growth rate of 30%, becoming the fastest developing food processing industry since 1990.

At present, the annual demand for QFF reaches 8.5 million tons. The major products include four categories of quick frozen (QF) dumplings in more than 150 different types. According to the State Bureau of Statistics, QF dumplings are extremely welcomed by the public. According to the market survey report of National Domestic Trade Bureau Information Center, QFF is listed as the best-selling products in retailing stores.

There are various problems in the rapid development of QFF, such as the poor food quality, lack of variety, and high prices. Especially in the aspect of packaging, plastic is still the major application while paper boxes are already applied to international products.

China has great stock of food resources with many types of QFF to be developed. It



has been estimated that there will be approximately 1,500 ~ 2,000 categories of QFF by 2010. The consumption consciousness of the public is also changing towards more healthy, nutritious, convenient, and fast foodstuff. These assure the substantial market potential to fuel the development of the industry.

5. ANALYSIS ON MAJOR DOMESTIC SUPPLIERS

China's packaging machinery industry developed rapidly in the 1990s. At present, there are 1,600 packaging machinery manufacturers, 25% of them are large, with over 1,000 staff, 35% medium ones with 300~1,000 staff, and 40% small ones with fewer than 300 employees. In other words, most (75%) of such enterprises are of small or medium scale with staff under 1,000. A reference table is provided below:

<u>Scale</u>	<u>Staff</u>	<u>SalesRMB in million</u>	<u>Proportion%</u>
Large	More than 1,000	More than 50	25
Medium	300~1,000	30-50	35
Small	Less than 300	Less than 30	40

Viewed from the development history, China's packaging machinery industry has gradually diverged from an intensive production economy to a scope production economy. The small-scope enterprises have found it more and more difficult to adjust to the intense competition in the market economy. With the development of China's overall economy, the need for packaging machines increases greatly, which leads to the enlargement of the scope of producing enterprises. Such a tendency is becoming all the more obvious with the intensifying competition. Therefore, more large enterprises were selected for interviews in preparation of this report as compared with small and medium ones.

(Analysis on the samples chosen)

<u>Scale</u>	<u>Staff</u>	<u>Sales (RMB in million)</u>	<u>Samples</u>	<u>Proportion%</u>
Large	More than 1,000	More than 50	4	40
Medium	300~1,000	30~50	3	30
Small	Less than 300	Less than 30	3	30

6. ANALYSIS ON SEGMENTED END USERS

Since the adoption of new policies opening the Chinese market to the outside world and internal reform policies, China has made notable achievements in the world. However, in 1997, China was affected by the Asian financial crisis, resulting in slackness in the national economy. Since 2000, a new rise has taken place in every sector of industry. Especially in the lines of foodstuff, electronics, beverages, pharmaceuticals and personal care products that are closely related to the people's daily life. These industries have become major components of China's national economy today.

6.1 The Food Industry

Over the past 20 years, China's foodstuff industry has been increasing at a sustaining, rapid, growth rate of 10%~12% each year and grown into a pillar industry among consumer goods industries. According to the State Statistics Bureau, the foodstuff industry as a whole realized a total profit of RMB 800 billion in 1999, holding a share of 10.3% of the national industrial output.

6.2 The Electronics Industry

Forecasted by State Statistics Bureau, the overall scale of China's electronics industry will be 1.3 trillion RMB in the year of 2001 with the possibility of faster development rates. The growth rate of the market of infrastructure products will be approximately 20~25%, while that of the integrated complete computer systems will also increase. The growth rate of consumer electronics will remain at 10-15%

6.3 The Beverage Industry

In 1990, China's beverage industry reached an output of 3.3 million tons according to the statistics of State Statistics Bureau. In 1999, it reached 14 million tons. Along with increased production, there appears to be more variety and better quality, and the packaging involved is becoming more diversified.

6.4 The Pharmaceutical Industry

Between 1978~1999, the average annual increase rate of pharmaceutical production was 17.6%, far above the growth rate of China's national industries as a whole during the corresponding periods. At present, there are 6,391 pharmaceutical manufacturers in China that can produce 1300 compounds for medicine making with a total output of 360,000 tons, 2nd in the world in terms of production.

6.5 The Personal Care Industry

By 2010, the total national gross sales in the line of personal care industry will reach RMB 80 billion with a sustaining annual increase rate of 12.9%, as forecasted by China State Statistics Bureau.

6.6 An Analysis on the Sample Enterprises of the Five Industries

- (1) Each interviewee comes from a large or medium enterprise in its own industry sector, who has a good business standing, advanced technology and promising prospects for development
- (2) Each interviewee feels the necessity to import advanced packaging machinery and equipment to stay more competitive in the market. Each company has strong financial resources to devote to this purpose if need be.
- (3) Some of the interviewed enterprises are Chinese state-owned and operated. In order to realize the industrial reform and restructuring, the Chinese government will consider offering favorable fiscal policies towards to them in terms of upgrading the existing equipment.
- (4) From the standpoint of the customers, with the rise of people's living standards, they become more demanding for a better commodity package.
- (5) Enterprises who wish to enter the international market with their products feel strongly that they need to improve the packaging of their products.

7. MARKET SIZE OF CHINA PACKAGING MACHINERY INDUSTRY (CPMI)

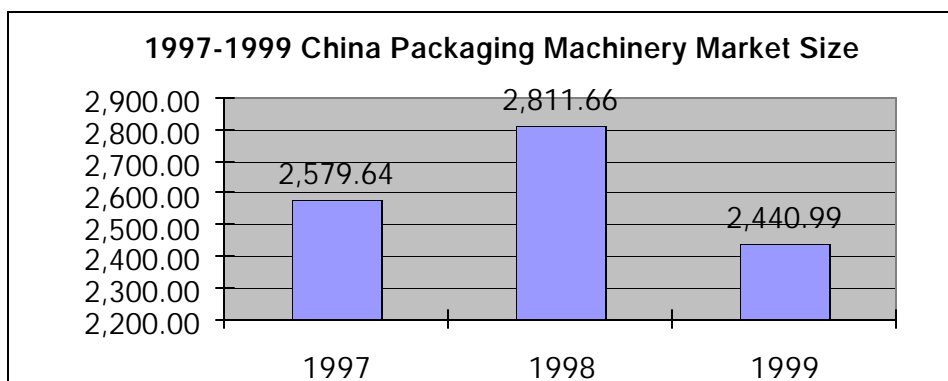
7.1 Market Size of CPMI during 1997~1999

Market Size of CPMI:

Total Domestic Sales of CPMI - Total Exports of CPMI + Total imported Packaging Machinery

From 1997 to 1999, China's packaging machinery industry saw a fast increase. With a sudden sharp import decrease in 1999, the overall market size shrunk in comparison with 1998 and 1997.

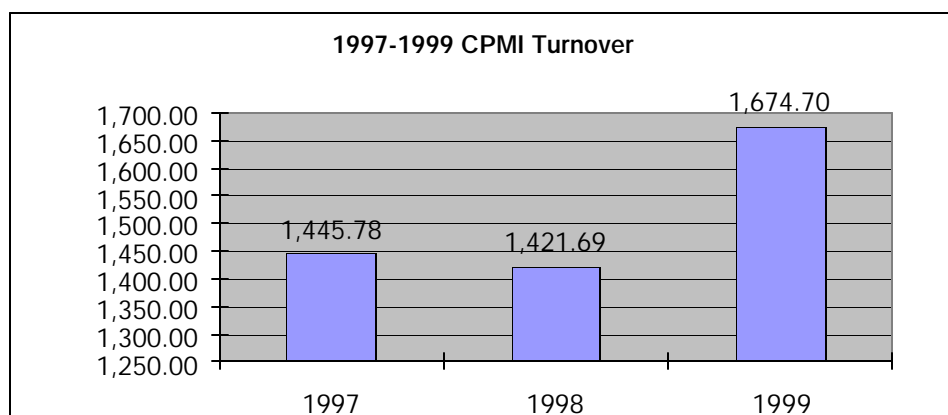
US\$ in million



7.2 Turnover of CPMI during 1997~1999

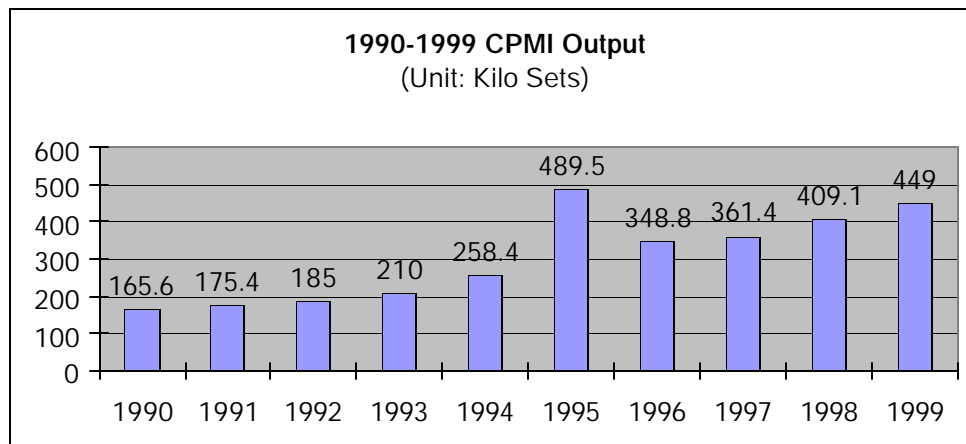
Turnover of CPMI during 1997~1999:

US\$ in million



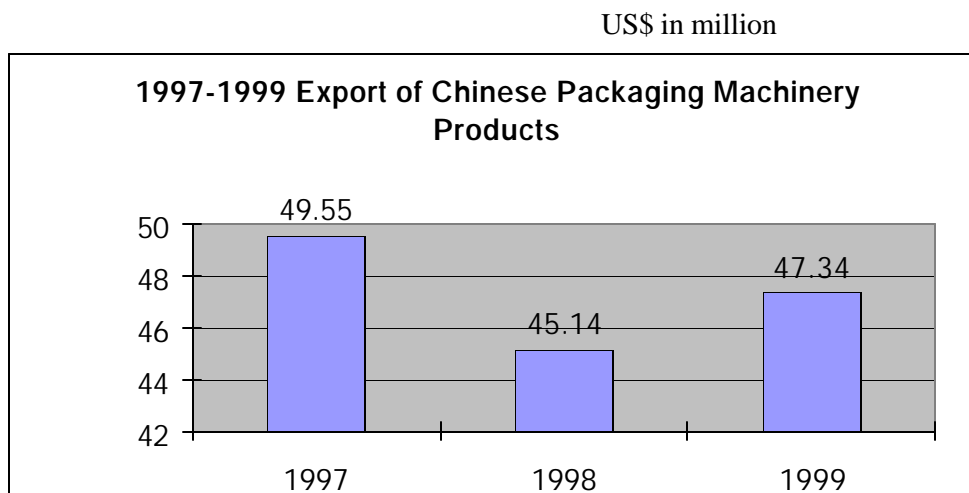
Affected by the Asian Financial Storm of 1997, the economic growth of Mainland China slowed down, and the turnover of CPMI of 1998 also decreased. Not until 1999 did CPMI see an increase of turnover, once the negative influence of Asian Financial Storm tapered.

7.3 Output of CPMI during 1990~1999:



7.4 Export Volume of CPMI during 1997~1999

This is the chart of exported volume of CPMI during 1997~1999:

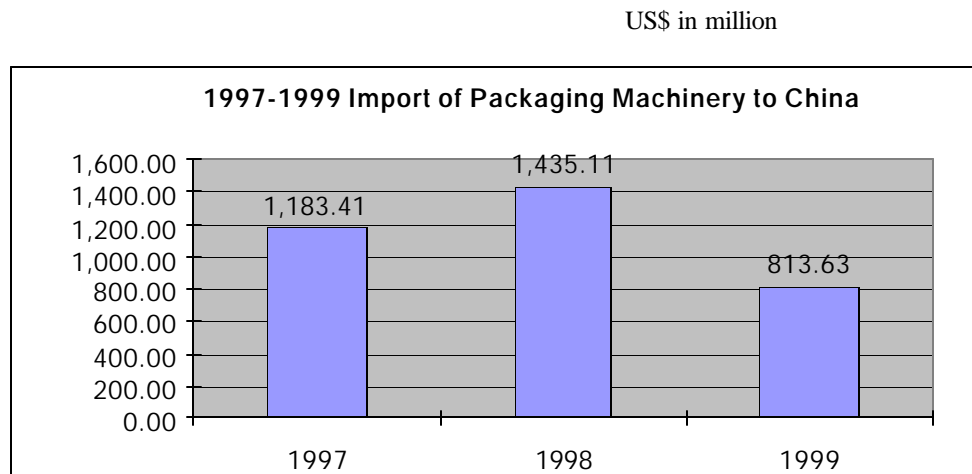




Because of the effects of the Asian Financial Storm, the exported volume of CPMI in 1998 decreased dramatically. In 1999, with the recovery of Asian countries, CPMI found a stable increase.

7.5 Import Volume of CPMI during 1997~1999

This is the chart of imported volume of CPMI during 1997~1999:



Between 1993 and 1999, the Chinese economy underwent a 7-year period of slow growth. 1999 saw an especially bad slump, which made demand for packaging machines decrease substantially.

7.6 Top Countries Imports of packaging machinery 1997~1999

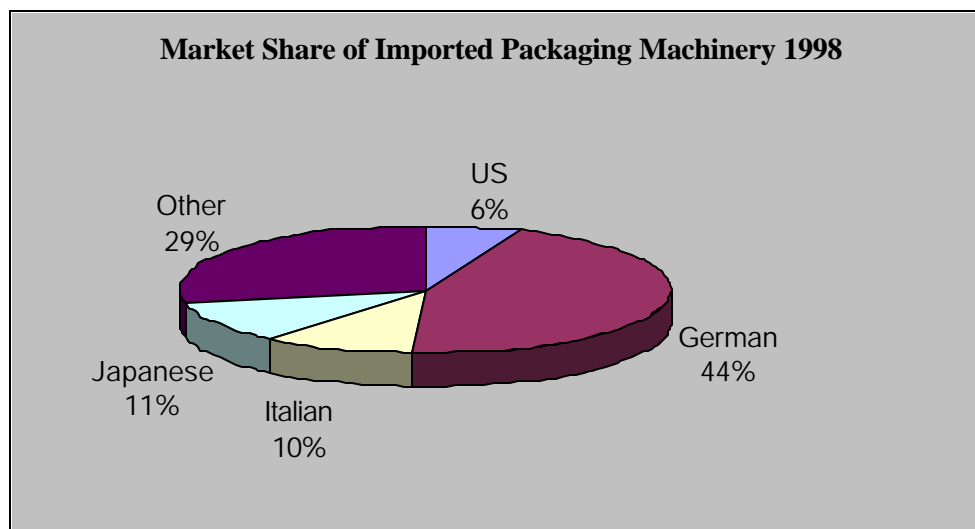
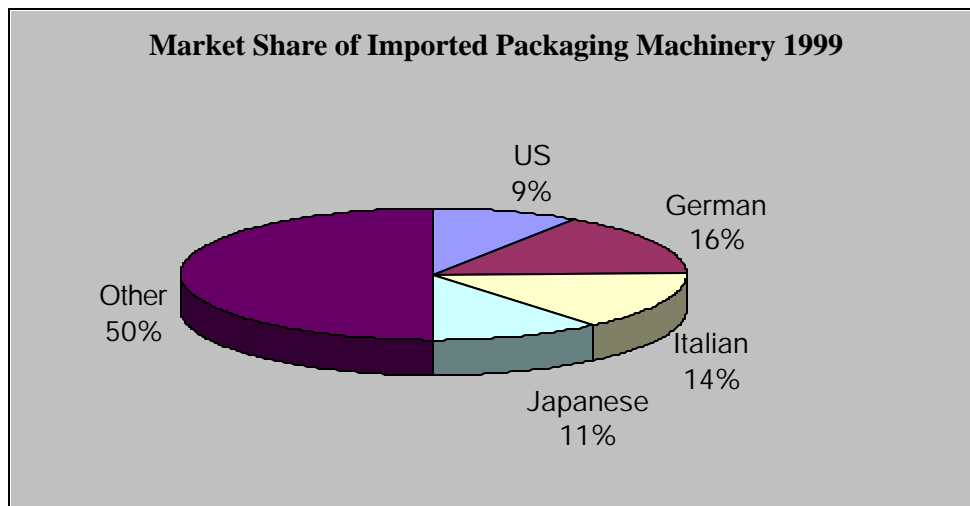
U.S.A, Germany, Italy, and Japan are the 4 most powerful packaging machinery manufacturers in the world. China's imported packaging machinery chiefly comes from these countries.

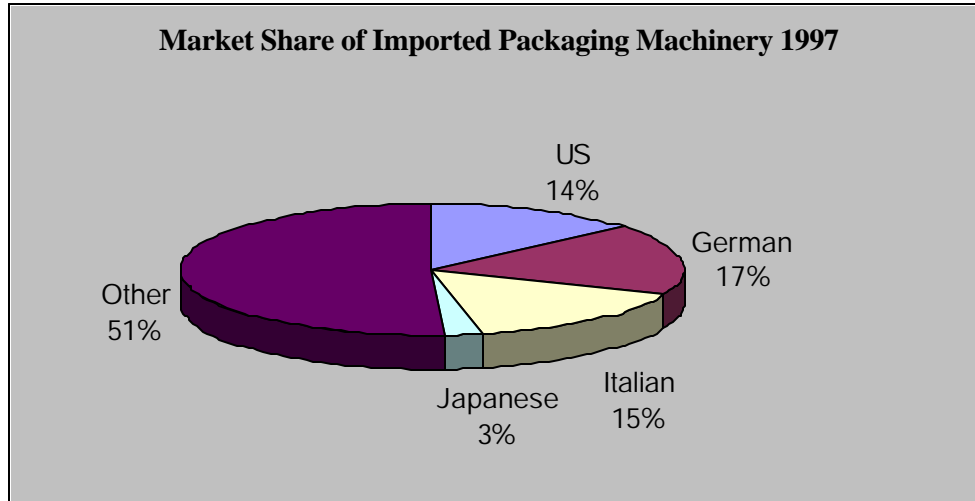
China's import volume of packaging machines:

Unit: USD 1,000

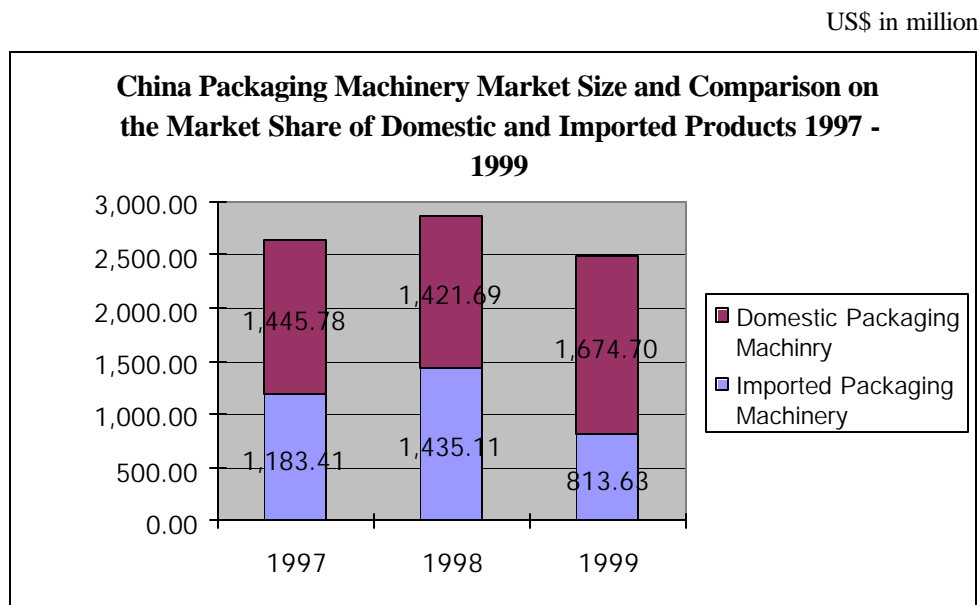
Country	1997		1998		1999	
	Export	Import	Export	Import	Export	Import
US	3,453	164,554	6,580	90,542	7,031	75,729
Germany	663	205,772	762	640,135	1,417	126,468
Italy	416	181,927	515	141,775	589	115,735
Japan	6,418	30,136	4,902	151,054	6,671	88,754

China's imported volume of its packaging machines





7.7 Comparison of the Proportion Between domestic and imported packaging machinery during 1997~1999



8. SEGMENTED IMPORT & EXPORT ANALYSIS

Import and Export of CPMI in 1999

Amount Unit: USD 1,000

<u>Category</u>	<u>Unit</u>	<u>Export</u>			<u>Import</u>		
		<u>Quantity</u>	<u>Value</u>	<u>Market share (%)</u>	<u>Quantity</u>	<u>Value</u>	<u>Market share (%)</u>
1. Beverage & Liquid Food Filling Equipment	Sets	171	2,119	4.47	544	91,313	11.22
2. Cement Packaging Machines	Sets	1,766	3,783	7.99	1,584	51,582	6.34
3. Sealing, Labeling, and Aerating Equipment	Sets	486,406	5,611	11.85	3,575	50,713	6.23
4. Packers & Balers (including contraction packers)	Sets	139,722	9,690	20.47	9,266	108,687	13.34
5. Paper-Plastic -Aluminum Can Equipment	Sets	13	54	0.11	6	247	0.03
6. Paper-Plastic -Aluminum Flexible packaging Equipment	Sets	53	192	0.40	44	11,565	1.42
7. Paper Bag, Pouch, or Envelope Making Machinery	Sets	99	923	1.95	91	4,544	0.56
8. Paper Carton, Box, Pipe, Barrel, or Similar Container Making Machinery	Sets	150	2,279	4.81	532	20,310	2.50
9. Pulp, Paper, or Cardboard Making Machinery	Sets	644	9,275	19.59	1,044	87,577	10.76
10. Pulp, Paper or Cardboard Tidying Machinery	Sets	226	1,203	2.54	830	53,118	6.53
11. Automatic or Semi-automatic Resistance Welders	Sets	364	681	1.44	1,367	44,574	5.48
12. Various Packaging Weighing Equipment	Sets	6,766	188	0.39	1,212	7,779	0.95
13. Washing & Drying Machines	Sets	30,896	3,882	8.2	30,646	113,908	14
14. Spare Parts for Packaging Machinery	Kg	2,280,610	7,564	15.97	9,661,546	168,617	20.72
Total			47,344			813,634	



Import and Export of CPMI in 1998

Amount Unit: USD 1,000

<u>Category</u>	<u>Unit</u>	<u>Export</u>			<u>Import</u>		
		<u>Quantity</u>	<u>Value</u>	<u>Market share (%)</u>	<u>Quantity</u>	<u>Value</u>	<u>Market share (%)</u>
1. Beverage & Liquid Food Filling Equipment	Sets	173	1,678	3.72	992	55,829	3.89
2. Canning & Packing Machines (Cement Packaging Machines)	Sets	2,223	1,305	2.89	496	32,573	2.27
3. Sealing, Labeling, and Aerating Equipment	Sets	427,574	6,930	15.35	3,341	73,936	5.15
4. Packers & Balers (including contraction packers)	Sets	118,591	6,994	15.49	10,714	146,668	10.22
5. Forage Baler (including collecting baler)	Sets	1,118	15	0.03	131	382	0.02
6. Washing or Drying Machines for Bottles or other Containers	Sets	8,828	1,319	2.92	4,360	12,235	0.85
7. Other Dryers	Sets	5,033	6,819	15.10	12,872	67,277	4.69
8. Continuous Weighing Equipment on Conveyers	Sets	4,133	878	1.94	1,006	4,415	0.31
9. Pulp, Paper, or Cardboard Making & Tidying Machinery	Sets	172	2,107	4.47	1,560	478,399	33.34
10. Paper Bag, Pouch, or Envelope Making Machinery	Sets	82	1,468	3.25	311	7,100	0.49
11. Paper Carton, Box, Pipe, Barrel, or Similar Container Making Machinery	Sets	207	2,044	4.53	551	14,192	0.99
12. Paper-Plastic-Aluminum Can Equipment	Sets	9	46	0.10	5	81	0.01
13. Paper-Plastic-Aluminum Flexible packaging Equipment	Sets	5	57	0.12	35	16,803	1.17
14. Pulp, Paper, or Cardboard Product making Machinery (including molding form machinery)	Sets	715	7,952	17.62	1,114	147,575	10.28
15. Automatic or Semi-automatic Resistance Welders	Sets	15,070	709	1.57	4,034	33,695	2.35
16. Spare Parts for Packaging Machinery	K g	1,169,000	4,815	10.67	22,680,899	343,858	23.96
Total			45,136			1,435,018	



Import and Export of CPMI in 1997

Amount Unit: USD 1,000

<u>Category</u>	<u>Unit</u>	<u>Export</u>			<u>Import</u>		
		<u>Quantity</u>	<u>Value</u>	<u>Market share (%)</u>	<u>Quantity</u>	<u>Value</u>	<u>Market share (%)</u>
1. Beverage & Liquid Food Filling Equipment	Sets	227	2110	4.26	1,099	111,418	9.41
2. Cement Packaging Machines	Sets	12	69	0.14	2	165	0.01
3. Sealing, Labeling, and Aerating Equipment	Sets	594532	7,189	14.51	6,009	132,641	11.21
4. Packers & Balers (including contraction packers)	Sets	70,519	6,813	13.75	13,647	251,030	21.21
5. Forage Baler (including collecting baler)	Sets	1,098	35	0.07	152	1,471	0.12
6. Washing or Drying Machines for Bottles or other Containers	Sets	945	679	1.37	3,082	19,909	1.68
7. Other Dryers	Sets	17,047	4,657	9.40	14,655	116,707	9.86
8. Continuous Weighing Equipment on Conveyers	Sets	4,714	935	1.89	5,818	5,590	0.47
9. Pulp, Paper, or Cardboard Making & Tidying Machinery	Sets	179	6,539	13.19	1,612	222,568	18.81
10. Paper Bag, Pouch, or Envelope Making Machinery	Sets	62	464	0.94	239	9,418	0.79
11. Paper Carton, Box, Pipe, Barrel, or Similar Container Making Machinery	Sets	167	1582	3.19	705	33,560	2.83
12. Paper-Plastic-Aluminum Can Equipment	Sets	34	633	1.28	16	299	0.02
13. Paper-Plastic-Aluminum Flexible packaging Equipment	Sets	0	119	0.24	51	4,430	0.37
14. Pulp, Paper, or Cardboard Product Making Machinery (including molding form machinery)	Sets	625	9,001	18.16	1708	101,246	8.55
15. Automatic or Semi-automatic Resistance Welders	Sets	3,040	1,086	2.19	5,929	33,785	2.85
16. Spare Parts for Packaging Machinery	Kg	1,907,993	7,560	15.26	10,592,270	109,161	9.22
Total			49,553			1,183,414	

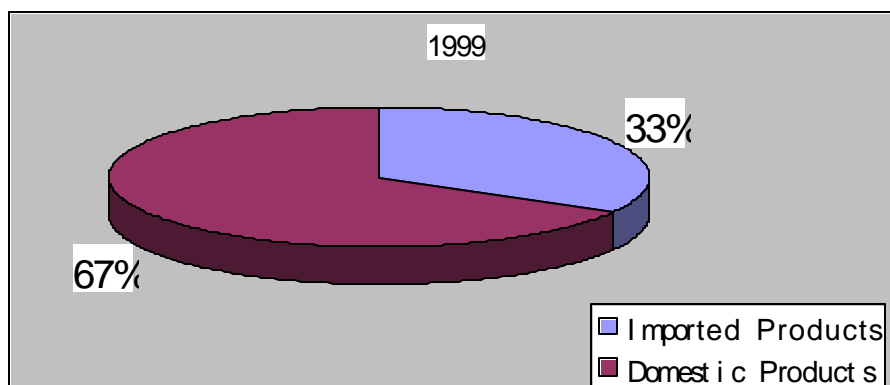
9. DOMESTIC PACKAGING MACHINERY VS. IMPORTED MACHINERY

As packaging is the final stage of the whole manufacturing process, the reliability of packaging machinery directly affects the efficiency of the whole production line. There still exists a great gap between CPPI machines and advanced foreign machines in terms of quality, operation reliability, maintenance, and after-sale service. As a result, some Chinese domestic enterprises are inclined to import equipment, especially large industrial groups and multi-national corporations operating in China

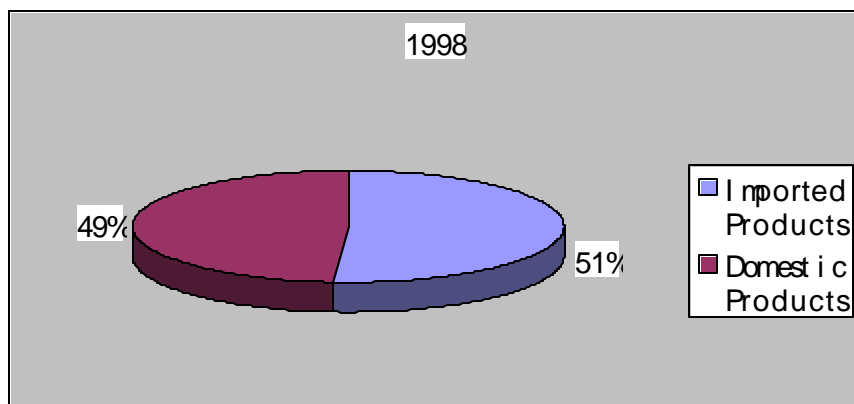
The following table illustrates the market share proportion of China's domestic packaging machines and imported ones during 1997~1999:

	97	98	99
Domestic Machinery %	54.12	48.96	66.67
Imported Machinery %	45.88	51.04	33.33

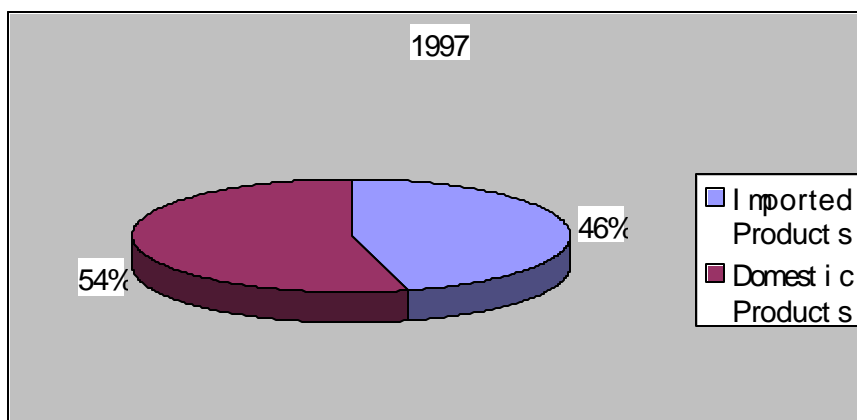
The chart illustrates the market proportion of China's self-made and imported packaging machines in 1999:



The chart illustrates the market proportion of China's domestic and imported packaging machines in 1998:



The chart illustrates the market proportion of China's domestic and imported packaging machines in 1997:



In the coming years of 2001~2005, imported packaging machines will hold a share of 40%~50%, and the domestic 50%~60%, according to the forecast of the Association of CPPI and the market research.

10.FACTORS AFFECTING CHINESE END USERS' PURCHASES

By and large, China's end users take into account the following factors when choosing packaging machinery:

(1) Price

The price is the primary factor that concerns the Chinese end-users when they consider buying imported packaging machinery. In fact, there is a great difference in the price of imported machinery and locally made machinery.

(2) Quality

The difference between imported machinery and domestic machinery has a direct effect on the choice of the end users. Imported machines provide better quality than domestic ones.

(3) After-sale service

China's users are concerned about getting after-sale service of imported machinery, including technical assistance, parts, and accessories.

(4) Compatibility

End-users in China take in to account whether the imported machinery is compatible with their original machinery.

(5) Brand

The enterprises also choose imported machinery according to their confidence in and the previous experience of using a certain brand of machinery.

(6) Durability

Durability is taken into consideration in judging the value of imported machinery.

(7) Easy operation

It is imperative that the machines are user friendly for workers.



(8) Non-business factors

Most Chinese are hospitable and show respect to foreigners, especially to Americans. In big cities many people speak very good English and have a relatively deep understanding of the western philosophy. However, due to differences in cultural backgrounds, PMMI Members are encouraged to take notice of some unique characteristics when doing business with Chinese companies. For instance, it is an unwritten law that Chinese purchasers want to send a delegation to visit the country where the product is manufactured. Only a very limited proportion of the agenda is spent discussing business with the seller. Another example is that Chinese businessmen like to talk about serious business over dining tables. When PMMI members are asked to a Chinese banquet, please be prepared for a business negotiation.

11.SALES, DISTRIBUTION, AND TERMS OF PAYMENT

11.1 Sales and Distribution

11.1.1 Domestic Suppliers

(1) Direct Sales

Usually domestic manufacturers adopt direct sales, i.e. the sales people promote the sale face-to-face to the users; offices of the manufacturers are also set up in major cities such as Beijing, Shanghai, and Guangzhou to explore local markets and managing after-sale service. Alternatively, manufacturers advertise their products in specialized newspapers and magazines.

(2) Cooperation with other enterprises in the same trade

The manufacturers of some minor parts of packaging equipment tend to integrate their product with parts manufactured by other manufacturers to provide the customers with a complete assembly line.

(3) Agency

The same manufacturers as mentioned in point ii adopt sales agency to expand sales opportunities.

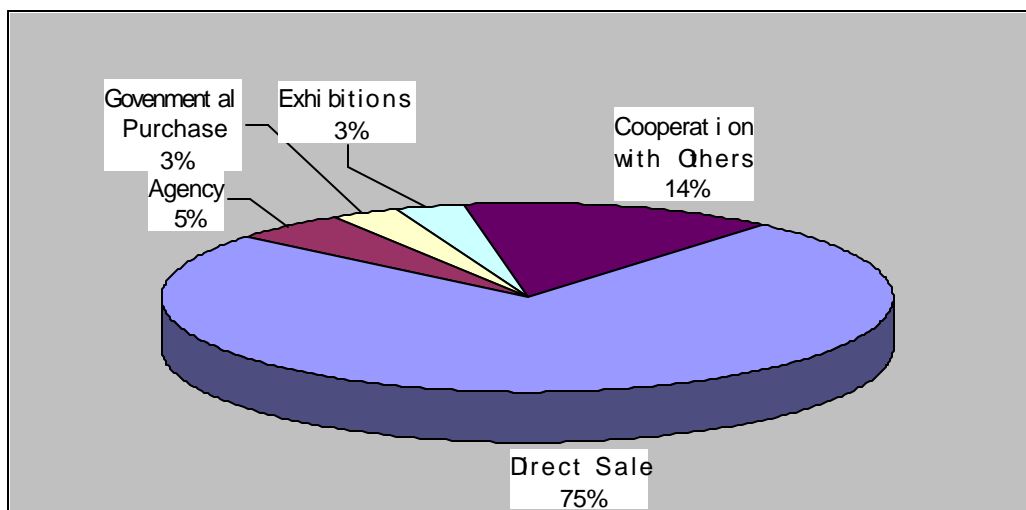
(4) Exhibition

Domestic enterprises of substantial economic strength will attend various expos both for advertising to promote sales and for obtaining information about their counterparts at home and abroad.

(5) Government Purchases

The government purchases packaging machinery for its own use in government run companies. Government purchases account for a certain percentage in government funded projects in an attempt to help the domestic enterprises purchase their machinery.

Through the market survey on domestic manufacturers, the current proportion of the said five forms of sales is as follows:



11.1.2 Overseas Suppliers

(1) Agency

Sales volume through agencies account for the largest percentage of overseas sales. Most of the foreign manufacturers tend to sell their products through agencies because of their uncertainty about the future of China's market. They have developed a market for themselves by relying on the distribution channels and after-sales service system of the agencies. In addition, agencies can provide installation and maintenance services.

(2) Purchase by transnational corporation

Another major source of packaging machinery in China. Some subsidiaries of transnational corporations import such machinery as arranged by their parent corporations.

(3) Office

Once satisfactory sales volumes are attained, the foreign manufacturers will set up



offices in China for direct distribution to better serve the customers with a more professional technical background

(4) Import and Export Company (I&E)

An import and export company functions as a special distribution channel to serve the foreign manufacturers who do not have the right to export to China directly. Nonetheless, such method is rarely adopted because the I&E company is not able to provide professional technical support and after-sale service.

(5) Setting up factories in China

Some manufacturers set up factories in China, most of them Taiwanese. The major products are usually easily worn parts instead of core parts of high technological content.

(6) Exhibition

The first step for foreign manufacturers to enter a market is to participate in an exhibition. An exhibition is an ideal place to get information about domestic demand. In addition, expos prove effective methods to advertise your company even in comparison with the professional newspapers and magazines.

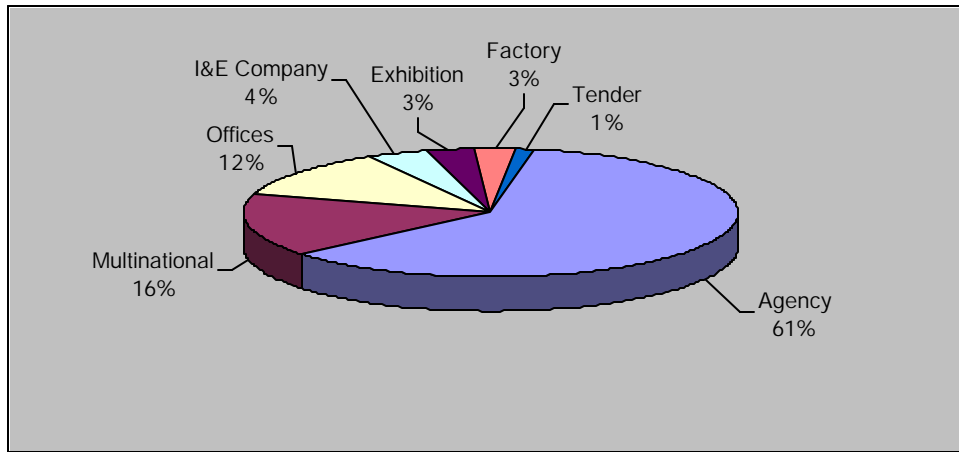
(7) Tendering

Another choice for foreign manufacturers to enter China's market. As stipulated by Chinese government, any purchase above RMB 500,000 shall be made through tendering. It is advisable that foreign manufacturers keep an eye on the notice of tendering companies in China.

(8) Utilizing the World Wide Web

Establishing links to some well-known websites specializing in the packaging trade to advertise your company.

The current proportion of the said forms of sales reached by the market survey on foreign manufacturers is as follows:



Note: Exhibition accounted for a higher percentage of 10%-15% in the 1980's. This was due to fewer contacts between the end users and manufacturers resulting from the difficulty in communication. The number of the transactions over the exhibitions decreases in the 1990's when the users were able to contact the manufacturers both at home and abroad through much more diversified channels. Despite the decline exhibition is still useful in collecting information and advertising.

11.2 Terms of Payment and Delivery

11.2.1 Domestic Suppliers

(1) Terms of Payment

The usually acceptable ratio for domestic manufacturers is 30%: 60%: 10%, 30% as deposit from the customer, 60% after delivery, and 10% paid after the satisfactory testing.

Customers request postponement of the larger part of the payment until after the installment and testing for fear of quality problems. Manufacturers hold an opposite desire for the sake of profit.

(2) Delivery

On the whole, delivery by domestic manufacturers is within 1-2 months in the case of a complete assembly line. With regard to part of the assembly line with comparatively smaller value, delivery is expected to be quicker, and most probably, the manufacturers have ready stock.

11.2.2 Overseas Suppliers

(1) Terms of Payment

Two acceptable terms of payment for foreign manufacturers: 100% payment in advance; 20-30% as advance money, with the remaining by L/C. The uncertainty about the payment capacity explains the strict terms of payment. Chinese customers do not like such payment terms but have to compromise because they must rely on the advanced foreign technology to be more competitive.

(2) Delivery

Delivery by foreign manufacturers takes much longer (4 to 6 months), which contributes to the dissatisfaction of Chinese users.

11.3 Guide for PMMI members to enter China and procedures for exportation

11.3.1 Guide for PMMI's entry into China

- (1) Attend exhibitions in the packaging industry to collect info on customers; to select a sales agency; and to set up offices or factories when the substantial sales volume and great potential are in sight.
- (2) Adopt flexible terms of payment, which are competitive in comparison with the current ones.
- (3) Provide better after-sale service to create a better image to Chinese end users.

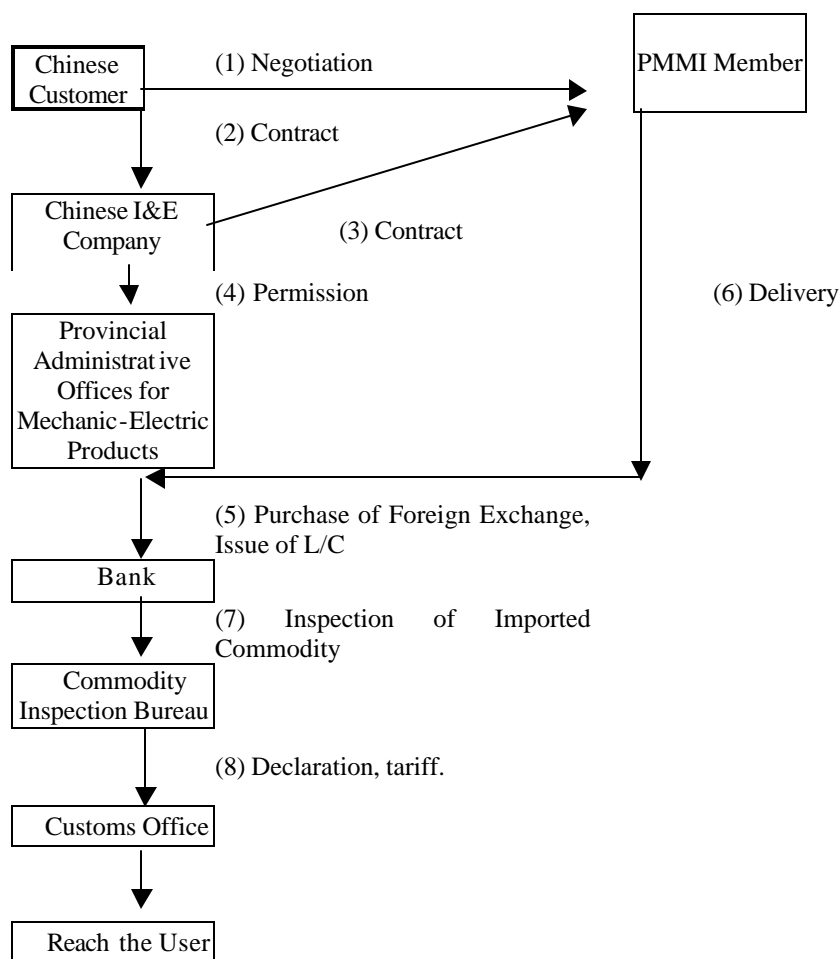
11.3.2 Procedures for Exportation

PMMI Members have to go through the following procedures to enter China's market:

- (1) An agreement on the value and specifications of the packaging machinery must be reached between the Chinese user and the foreign manufacturers.
- (2) An import and export (I&E) company needs to be entrusted by domestic customers to attend to all the procedures of importation. For this task, the I&E company applies with the mechanical and electric office at the relevant provincial or municipal level for the approval of the imported packaging machinery.

- (3) Purchase foreign currency with relevant banks or opening a L/C after the importation has been approved.
- (4) When the imported machinery has arrived at the port of destination, the same I&E company declares with Customs and the Commodity Inspection Bureau examines the imports. The goods are granted permission with the Bureau's approval and the tariff and duty paid.
- (5) The last step—the I&E company notifies the domestic customers of the delivery.

The procedures are shown in the graphic below:





11.3.3 Top ten packaging machinery importers in China

China Machinery Import & Export (Group) Corp.

Add: 1 Fuwai Rd., Xicheng District, Beijing

Tel: 010-68991165

Fax: 010-68991000

China Electromechanical Equipment I&E Company

Add: 16 Fuxingmenwai Rd., Beijing

Tel: 010-63266600

Fax: 010-63268905

China Package I&E General Corp.

Add: B#, Xingfu Mansion, 3Dongsanhuan Rd. N., Chaoyang District, Beijing

Tel: 010-64616361

Fax: 010-64616437

Shandong Machinery I&E Company

Add: 1 Qutangxia, Tsingtao city, Shandong province

Tel: 0532-2661630

Fax: 0532-2661655

Guangdong Machinery I&E (Group) Corp.

Add: 726 Donggang Rd. E., Guangzhou, Guangdong province

Tel: 020-87782168

Fax: 020-87771844

Shanghai Machinery I&E (Group) Co., Ltd.

Add: 445 Jiangning Rd., Shanghai

Tel: 021-62711558

Fax: 021-52715128

Zhongshe Jiangsu Machine Equipment I&E Group Corp.

Add: 198 Changjiang Rd., Nanjing, Jiangsu province

Tel: 025-4511888

Fax: 025-4411772

Zhejiang Zhongda Group Control-Stock Co., Ltd.

Add: A#, Zhongda Plaza, Hangzhou, Zhejiang province

Tel: 0571-5155000

Fax: 0571-5777008



China Packaging & Food Machinery General Corp.

Add: 26 Yuetan Rd. S., Beijing

Tel: 010-68596455

Fax: 010-68596449

China Packaging Materials (Group) General Corp.

Add: 15 Huayuan Rd., Haidian District, Beijing

Tel: 010-62031572

Fax: 010-62031576

11.3.4 Major tendering companies in China

Beijing Electromechanical Equipment Bidding & Tendering Company

Add: 71 Chaoyangmen Rd. N., Dongcheng District, Beijing

Post code: 100010

Tel: 010-84046627 84045677

Fax: 010-84045700

E-mail: cbtc@public.fhnet.cn

Person to contact: Mr. Liang Xingjian and Mr. Zhou Xingqi

Zhejiang Mechanical and Electric Equipment Tendering Co., Ltd.

Add: 13/F, Tuxu Building, 308 Zhongshan Rd. N., Hangzhou, Zhejiang

Post code: 310003

Tel: 0571-5774154-53/56

Fax: 0571-4774102

E-mail: zmeetb@mail.hz.zj.cn

Person to contact: Chen Wei and Qiu Xujun

Shanghai Electromechanical Equipment Tendering Company

Add: 20/F, Hengda Square, 285 Changshou Rd., Shanghai

Post code: 200060

Tel: 021-62996940

Fax: 021-62273738

E-mail: duckweed@public2.sta.net.cn

Person to contact: Lu Likun and Liu Hua

Shandong Electro-mechanic Equipment

Add: 408, 9#, Quarter1 of Fuoshan Park, Jinan, Shandong

Post code: 250011

Tel: 0531-6022043

Fax: 0531-6916381



E-mail: SDTCNO.1@sanlian.com.cn

Person to contact: Cai Weiyang and Yang Guoqiang

China Technology I&E General Corp.

Add: Jiuling Mansion, 21 Xisanhuan Rd.N., Beijing

Post code: 100089

Tel: 010-68404706 68404446

Fax: 010-68414605 68404022

Person to contact: Wu Youqun and Wang Huilai

Jiangsu International Tendering Company

Add: 7Xikang Rd., Nanjing Jiangsu province

Post code: 210024

Tel: 025-3323111-5024

Fax: 025-3320400

E-mail: jitc@public1.ppt.js.cn

Person to contact: Lu Meixia

Guangdong Electromechanical Equipment Bidding Company

Add: 11/F, Jinying Mansion, 316 Huanshi Rd. Central, Guangzhou, Guangdong province

Post code: 510060

Tel: 020-83568596 83544461

Fax: 020-83540304

E-mail: gmetb1@chinaguangdongbidding.com

Person to contact: Pang Zhanghuan

11.3.5 Top ten Chinese websites specialized in packaging

China Packing Network (in simplified Chinese) www.packing.com.cn

Food Business Network (in simplified Chinese) www.foodbusiness.com.cn

China Food Industry Information Network (in both simplified and traditional Chinese and English) www.cfiin.com.cn

PackChina (in both simplified and traditional Chinese and English)
www.packchina.com.cn

China Pharmaceutical Packaging Network (in simplified Chinese)
www.chinappn.com



China Package (in simplified Chinese) www.cpackage.com

DrinkChina (in simplified Chinese) www.drinkchina.com

Etnet (in simplified Chinese) www.etnet.com.cn

Yapuda Daily Products Network (in simplified Chinese) www.rihua.allproducts.cn

China Purchase & Bidding Network (in both simplified and traditional Chinese and English) www.chinabidding.gov.cn

11.3.6 Major newspapers and magazines specialized in packaging:

China Packing and Packaging (newspaper)

Tel: 010-62977169

Fax: 010-62977177

China Packing and Packaging (magazine)

Tel: 010-64036046

Fax: 010-64036046

International Food Industry

Tel: 010-64273017

Fax: 010-64273017

Package and Food

Tel: 0551-5312800

Fax: 0551-5312800

Packaging World

Tel: 0571-5111363

Fax: 0571-5113292

11.3.7 Major Packing Expos in China

China International Alliance Packing & Packaging Expo

Venue: Beijing

Sponsor: China Packing & Packaging Technology Association

Tel: 010-65816688

Fax: 010-65813489



China International Food Processing & Packaging Machinery Expo

Venue: Beijing

Sponsor: China Packaging & Food Machinery General Corp.

Tel: 010-68596450

Fax: 010-68596449

China International Processing & Packaging Technology Expo

Venue: Shanghai

Sponsor: Hong Kong Exhibition Service Co., Ltd.

Tel: 021-62095209

Fax: 021-62095210

China International Packaging Industry Expo

Venue: Guangzhou

Sponsor: Hong Kong Yashi Exhibition Service Co., Ltd.

Tel: 00852-28118897

Fax: 00852-25165024

China International Packaging Technology Expo

Venue: Beijing

Sponsor: China Packing & Packaging Technology Association

Tel: 010-65816688

Fax: 010-65813489

China International Packaging & Processing Science & Technology Expo

Venue: Guangzhou

Sponsor: Hong Kong Yashi Exhibition Service Co., Ltd.

Tel: 00852-28118897

Fax: 00852-25165024

12. TARIFFS ON PACKAGING MACHINERY

12.1 Types of taxes and tax rate

In China there are three types of duties for imported goods. Specifically, a Customs duty, value-added tax, and consumer tax. An itemized list of tax rate is as below (note: the value-added tax is 17%; packaging machinery does not need to pay the consumer tax).

Judging from the current situation in China, the rate may remain as low as 17% and will be reduced in the years to come because of China's entry of WTO. In addition, there will be little possibility for the Chinese government to impose higher rate of tax to protect the less developed domestic manufacturers

12.2 Assessment

- (1) Import tax = CIF * Import duty rate
- (2) Value-added tax = (CIF + Import tax) * value-added tax rate
- (3) Expenses for declaration at Customs and storage after the goods has reached the port of destination, amounting 1% - 2% of the cost of the goods.
- (4) An I&E company is necessary to attend to the importation, because none of the overseas manufacturers and very few of the domestic users have the right to import or export directly, according to Chinese laws. The I&E company purchases the packaging machinery by contracting with a foreign manufacturer and then sells it to the domestic users. The charge for doing so is 1% - 2% of cost of the goods. But I&E companies are not responsible for the installation, testing, or the maintenance. For those overseas manufacturers with sales offices in China, it must be pointed out that an I&E company is still required to get involved unless the machinery is made in China.

12.3 Importing Tariff Rate for Packaging Machinery

<u>S/N</u>	<u>TNHN</u>	<u>Name of Commodity</u>	<u>Tariff Rate</u>
4803	84193200	Log, pulp, paper or cardboard dryer	14%
4894	84193800	Other dryers	14%
4823	84221100	Household dish washer	25%
4924	84221900	Non-household dish washer	22%
4025	84222000	Washer or dryer for bottle or other containers	15%
4928	84223010	Beverage & liquid food filling equipment	15%
4927	84223020	Cement packaging machine	18%
4928	84223090	Sealing and labeling machinery for other containers, beverage aerating machine	18%
4929	84224000	Other packers or balers	15%
4930	84229010	Spare parts of dish washers	18%
4931	84229020	Spare parts of beverage & liquid food fillers	10%
4934	84232000	Continuous weighing device on conveyers	20%
4935	84233000	Invariable weighing device, weighing device applied to bag or container filling of measured materials, and hopper scale	20%
5040	84334000	Forage baler, including collecting baler	12%
5071	84392000	Paper or cardboard making machinery	12%
5072	84393000	Paper or cardboard tidying machinery	12%
5074	84399900	Parts of paper or cardboard making or tidying machinery	7%
5078	84412000	Bag, pouch, or envelope making machine	14%
5079	84413010	Paper-plastic-aluminum can making machine	15%
5080	84413090	Machinery for the making of carton, box, pipe, barrel or similar container	15%
5081	84414000	Pulp, paper, or cardboard products molding form machinery	15%
5082	84418010	Soft package making equipment	15%

(TNHN = Tax Nomenclature Heading Number)

13.LEGAL ISSUES

Laws and regulations concerning packaging are yet to be formulated by the state, while the ministerial provisions and the administrative regulations protecting the environment from plastic products pollution is being drafted by the China Economy and Trade Commission and China Environment Protection Bureau respectively.

In China there are three regulatory levels that produce rules, which everyone in the packaging industry must follow. They are: state level, ministry level, and company level. The State Technology Supervision Bureau (TSB) regulates state and ministry criteria. These are further defined as compulsory criteria and reference guidelines in accordance with the Law of Standardization of P. R. China. The regulatory criteria include those responsible for guaranteeing human health, human security and property security, and those required by laws and administrative regulations, as well as some suggested guidelines. According to the statistics up to late June 1997, there were 678 state criteria in China, 68 of which were compulsory ones, constituting a relatively complete system for packaging criteria.

In addition, China has been actively introducing advanced international criteria since the 1980's. Among the promulgated 58 basic packaging criteria, 67%, i.e. 44 have adopted developed international criteria, and the other 14 measure up to the international criteria for the late 1990's.

State TSB is in charge of the supervision and administration of product quality across the country as regulated in Product Quality Law of P.R.C. while the various Ministries under State Council are responsible for the supervision and administration of product quality in their special field.

There are six institutions at the state level in charge of supervision and examination of packaging quality that have been approved by State TSB, they are: China Packaging Scientific Research & Testing Center (Tianjin), Dalian Product Quality Supervision & Testing Institute, Shandong Product Quality Supervision & Testing Institute, Chengdu Product Quality Supervision & Testing Institute, Guangzhou Product Quality Supervision & Testing Institute, and Gansu Product Quality Supervision & Testing Institute. In addition, some Ministries, provinces and municipalities have established relevant institutions, specifically: China Export Commodity Packaging Institute of Foreign Economy and Trade Commission, the No. 54 Institute of North Industrial General Corp., Standardization Institution of China Machinery Industrial Bureau, Standardization Institute of the Ministry of Information Industry, Packaging Institute of Hunan Province, and Packaging Institute of Chongqing Municipality.



ISO9000 and ISO12000 systems have been introduced into China in accordance with Administrative Provisions Concerning Product Quality Certification of P.R.C. to improve the packaging quality and good will of the products to expand international trade. The general administration of the Certification across the country is under the charge of State TSB that in turn authorizes Certification committees of various sectors to handle the implementation of the concrete Certification work.

Approved by State TSB and State Economy and Trade, founded in 1998, China Packaging Production Quality Certification Center (CPQCC) undertakes the certification of paper, plastic, glass, metal, wood package and the related packaging machinery. Products awarded certification are entitled to use the certification sign and are internationally recognized.

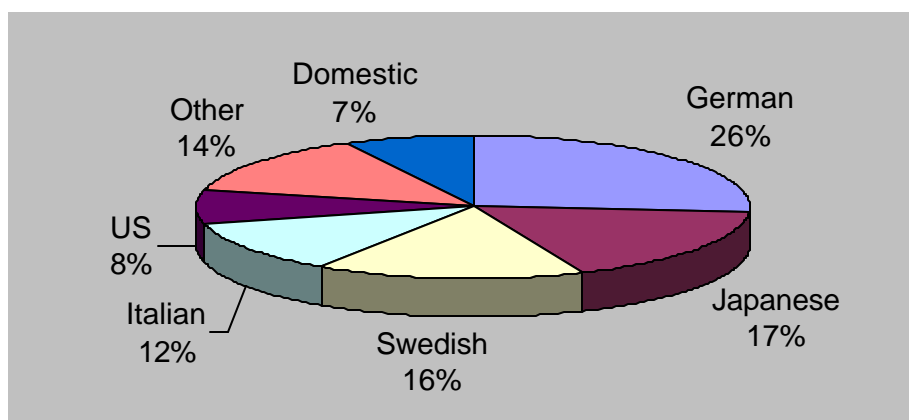
14. QUESTIONNAIRE ANALYSIS

14.1 Summary

Statistics of Imported Packaging Machinery Applied in the Five Surveyed Industries

Amount unit: US\$ in thousand

Import	Country	Amount	Proportion (%)
	German	5,668	26.2
	Italian	2,592	12.0
	US	1,627	7.5
	Japanese	3,736	17.3
	Swiss	558	2.6
	Korean	228	1.1
	Swedish	3,411	15.8
	Dutch	184	0.8
	British	983	4.5
	Danish	360	1.7
	Taiwanese	133	0.6
	Singapore	150	0.7
	Malaysian	25	0.1
	French	94	0.4
	Belgium	200	0.9
	Canadian	88	0.4
Domestic		1,603	7.4
Total		21,640	100



Analysis of the questionnaire survey:

(1) Leading importers of packaging machinery in China

Germany, Italy, U.S., Japan, and Sweden are the major importers of packaging machinery in China. Tetra Pack, from Sweden, does enough business in China to put the country among the top importers.

Over recent years, demand for flexible packaging has developed rapidly, and therefore flexible packaging machinery is urgently needed. Most of domestic enterprises in this trade have turned to Tetra Pack because of its monopoly role in this trade.

Sweden is also listed as one of the top 5 major importers of packaging machinery in China because 25 companies in the food industry were selected for the survey. Sweden's packaging machinery imports are largely food related.

(2) The sample survey suggests that domestic machinery in use accounts for 7.4% of the market, which is different from the actual percentage 60%. The difference can be explained by the following reasons:

- a. The interviewed sectors enjoy a more rapid development than the other sectors that are not included in the question survey. The fast growth makes it possible for the enterprises in these sectors to import advanced packaging machinery.
- b. The interviewed enterprises in this question survey, without exception, are the largest of their kinds-- another advantage that enables their importation of packaging machinery.
- c. Being pillar enterprises in local regions, the interviewed enterprises enjoy such governmental support as loans when importing expensive machinery.
- d. These companies introduce imported machinery where it is necessary in order to maintain their lead over competition.
- e. These enterprises need to utilize nice packaging to enable expansion of their exports to overseas markets.

(3) The questionnaire survey indicates that domestic enterprises import packaging machinery for the following reasons:

-
- a. To develop new products of different types, for example, a bakery that is considering producing soft drinks.
 - b. To expand scale of operation for greater production capacity.
 - c. To introduce automation in order to reduce manual labor.
 - d. To enhance the image of the companies and upgrade their products.
 - e. To replace the machinery in use.
- (4) Major means of importation as collected in survey:
- a. To entrust foreign trade company to import packaging machinery.
 - b. Centralized purchasing by home office of transnational corporations.
 - c. Stable relations with familiar manufacturers
 - d. Enterprises also get information from professional periodicals, and then contact the desired manufacturers or agency.
 - e. Recommendation by other enterprises in the same trade.
 - f. Some corporations make use of its control-stock agency to import packaging machinery for its subsidiaries.
 - g. A small percentage of transactions are done at expositions, which function as important sources for information about the development of packaging machinery.
 - h. The Internet may provide a direct source to learn about manufacturers.
 - i. Tendering.
- (5) As suggested in the question survey imported machinery is in better performance in terms of:
- a. Speed
 - b. Stability
 - c. Automation
 - d. Precision
 - e. Easy operation
- (6) The survey also reflects the major problems with imported machinery:
- a. Expensive. The price of the machinery imported from Europe or the United States is usually ten times that of domestic ones.
 - b. Longer period of purchase. As a rule, it takes one year or so to receive the machinery after an order is placed.
 - c. Inadequate maintenance
 - d. Passive manufacturers. Some manufacturers do not inform their Chinese end-users of the cease of production of some parts.
 - e. Higher demand for the quality raw materials required by imported machines. Many imported machines are not compatible with domestic raw materials.
 - f. Expensive parts and fittings. To solve the problem caused by expensive parts and the lack of parts and fittings with the sale agency, most of domestic



end-users choose to produce similar parts by themselves.

14.2 The Food Industry

An overview of China's food industry

In the two decades since reforms and opening their markets to the outside world, China's food industry has been continuously growing at an annual rate as high as 10%-20%, thus the pillar sector in consumer industry. As shown by the State Statistical Bureau, a total value of output of RMB 800 million has been achieved by all the food enterprises in 1999, accounting for 10.3% of national total in the field of industry. With the focus of consumers shifting from quantity to quality, people have begun to pay attention to the balance of nutrition. A wider variety of foods have become more available as urban and rural citizens both earn higher wages.

Promises of China's food industry

- (1) The food structure is undergoing further improvement, with increased quality and variety. The concepts of nutrition and convenience are becoming more and more prominent as citizens are better paid and the pace of life speeds up. As a result, the socialization of household food consumption is accelerated, the market for frozen food expands, and dairy product is one of the most promising industries in the few years to come. Currently, the annual consumption of dairy food per capita is just 6.6 kg, the near future, however, may witness an increase to 20-30 kg.
- (2) A general trend is to equip the food processing industry with new, high technology equipment. To cater to people's demand, modern food processing is advancing toward the trend of providing safer, more nutritious, faster, more convenient, and varied foods. In this case, the traditional processing methods and technology can no longer satisfy the needs of the modern food industry.
- (3) The development of health food.
The recent decades have seen a profound change in the eating habits of China. China has solved the problem of feeding their large population, and most of the people afford a fairly comfortable life now. They are beginning to pay more attention to health instead of just getting food to eat, hence the line of health food.

Analysis of questionnaire investigation on food industries

Figure 1_A Comparison among the Countries Producing Food Packaging Machinery

Amount unit: US\$

1,000

Import	Country	Amount	Proportion %
	German	912	8.2
	Italian	143	1.3
	US	1,301	11.7
	Japanese	2,715	24.5
	Swiss	258	2.3
	Korean	129	1.2
	Swedish	3,005	27.1
	Dutch	120	1.1
	British	613	5.5
	Danish	360	3.2
	Taiwanese	103	0.9
	Singapore	150	1.3
	Malaysian	25	0.2
Domestic		1,283	11.5
Total		11,117	100

Figure 2 Time Comparison of Imported Food Packaging Machinery

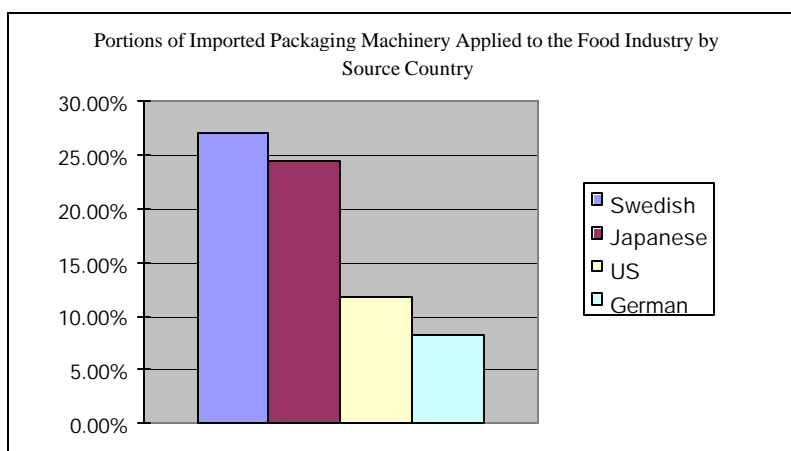
Unit: US\$ 1,000

Year of Import \ Amount	Import	Domestic
Before 1990	544	37
1991	132	53
1992	645	5
1993	923	80
1994	482	42
1995	3,161	886
1996	1,335	77

1997	600	8
1998	871	90
1999	717	-
2000	424	3
Total	9,834	1283

- (1) As shown in Figure 1, the leading countries are Sweden, Japan, U.S., and Germany, which is further demonstrated in the following bar chart:

Figure 1



- a. Imported food-packaging machinery from Sweden accounts for 27.1%.

Main reasons: Despite the great changes in the soft drink industry over the past decade, germ-free packaging technology lags behind. Making use of the Chinese dependence on imported equipment, Sweden entered the Chinese market very early and enjoys the largest share of the market.

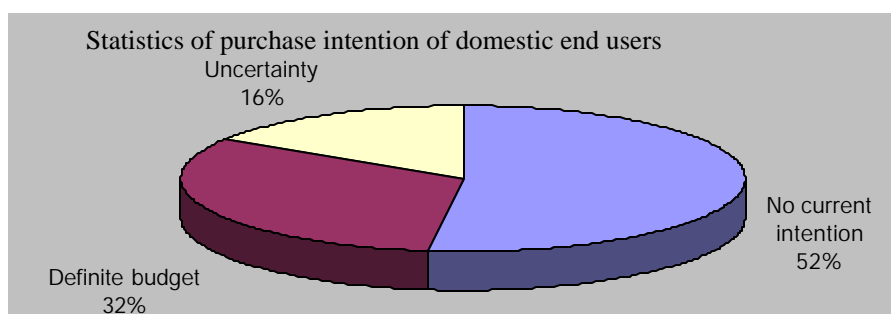
- b. Domestic machinery claims a considerable share in terms of numbers, although the percentage is just 11.5%. The reason lies in the price discrepancy between the domestic machinery and the imported ones that cost 10 times as much

- (2) Figure 2 reflects that the height of importation was concentrated between 1995 and 1996. The next prime season of sales is expected to come at 2010, since the durability of the imported machinery lasts for 15 years as a rule.

- (3) The figure below demonstrates the feedback of 25 investigated enterprises regarding the purchasing intention of buyers.

Statistics on the domestic enterprises' intention of packaging machinery

Intention	Definite purchase budget	No intention	Uncertainty
Proportion	32%	52%	16%



- (4) The Expo that these 25 enterprises attend:

- International Food and Packaging Machinery Expo
- Chongqing Food Machinery Expo
- Shanghai International Packaging and Food Machinery Expo
- China International Food, Food Processing and Packaging Machinery Expo
- Beijing International Package Expo
- Dalian International Food Processing and Packaging Machinery Expo
- Guangzhou Packaging Machinery Expo



Interviewee Beijing Hongluo Food Corp.
 Address 631 Rd, Zhengzhong Village, Huairou County, Beijing
 Phone 010-60692286
 Fax 010-60692286
 Ownership Collective
 G. Manager Zhou Fushu
 Number of Staff 270

1. MAJOR PRODUCTS OF THE COMPANY: 1. Preserved fruit 2. Biscuits

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 100

0)

Assets	Turnover	Profit
31,200	7,682	600

3. CURRENT PACKAGING STATUS:

Cases, boxes and packs.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Filling machine	2	71	Japan	1999
2	Liquid-filling machine	2	38	Moway	1999
3	Horizontal filling machine	1	28	Kunshan Dahe Machinery	2000
4	Dried fruit packaging machine	1	5	Guishan Food Machinery Plant	1998

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Better packaging materials, more variety, styles and materials as good as the foreign ones, better service, and lower price. Technological renovation is expected to improve the stability of the operation of the company.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

Preserved fruit packaging machinery is needed and the budget is USD 100-200 thousand.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THAT OCCASION?

2000 Chongqing Food Machinery Expo, and the 2nd International Food and Packaging Machinery Expo. We have once purchased some equipment at the above-mentioned Expos.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

One of the current thorny problem is that preserved fruit easily sticks to the packaging machinery, which hope to be solved by foreign manufacturers; the other problem is that inward plastic film which contains the fruit is still manually handled instead of by machine.



Interviewee Luoyang Chundu Group Co., Ltd.
Address 29 Kaixuan Rd. W., Luoyang, Henan Province
Phone 0379-2386074
Fax 0379-2386005
Ownership State Control-stock
G. Manager Zhao Haijun
Number of Staff 4,738

1. MAJOR PRODUCTS OF THE COMPANY: Sausage.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
338,114	13,055	3,094

3. CURRENT PACKAGING STATUS:

Automatic germ-free packaging line.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic aseptic packaging line	4	300	Japan	1992
2	Automatic aseptic packaging line	2	500	Germany	1993
3	Automatic aseptic packaging line	1	400	U.S.	1996
4	Automatic aseptic packaging line	1	350	Sweden	1997

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will introduce world advanced technology to nationalize packaging machinery for lower cost.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

Our production scale and equipment status is up to the market.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION?

Often. The Expos are useful to learn the present situation in this trade. Of course, careful inspection and comparison are indispensable.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

We are really annoyed when there is something wrong with the imported machinery. We get nowhere to buy the original parts at a reasonable price. Usually we employ similar parts produced by a domestic factory, and have to withstand the bad durability and the resultant spoiled overall stability. I think this is the direction to which the foreign manufacturers progress.



Interviewee Shanghai Dajiang (Group) Co., Ltd.
Address 26 Guyang Rd. S., Songjiang, Shanghai
Phone 021-57822480
Fax 021-57820072
Ownership Joint venture
G. Manager Li Shaozhu
Number of Staff 1,566

1. MAJOR PRODUCTS OF THE COMPANY: Processing meat food.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
(Unit: USD 1000)

Assets	Turnover	Profit
232,367	231,455	812

3. CURRENT PACKAGING STATUS: Bag for both raw and prepared products, and vacuum bag.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE
(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Vacuum packaging machine	20	353	Japan	1990-1999

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY
Keep up with the market development all the time

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST
No plan for the time being. We will contact manufacturers when we need new machinery.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.
Occasionally.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY
The visits of the foreign manufacturers are welcome in maintaining the stable performance. The only thing is the much higher price.



Interviewee Tianjin Ting-Yi International Food Co., Ltd.
Address 5th Rd., Economic and Technological Zone, Tianjin
Phone 022-25325954
Fax 022-25325964
Ownership Joint venture
G. Manager Wei Yingjiao
Number of Staff 3,258

1. MAJOR PRODUCTS OF THE COMPANY: Instant noodles.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
310,882	118,086	5,809

3. CURRENT PACKAGING STATUS: Small bags, bowls, and cups.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Auto Production line	36	350	Japan	1992-1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We are subject to the overall arrangement by our parent company.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No intention for the machinery in use is in good condition.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

We send our professionals to Expos to collect information we need.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Neither the sealing level nor the hygienic condition of the domestic machinery is as satisfactory as that of the foreign ones, which is crucial to a food enterprise.



Interviewee Shanghai Guanshengyuan Food Co., Ltd.
Address 220 Caobao Rd., Xuhui District, Shanghai
Phone 021-64360501
Fax 021-64700604
Ownership State-owned
G. Manager Weng Mao
Number of Staff 1,135

1. MAJOR PRODUCTS OF THE COMPANY: Confectionery.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
61,128	22,358	846

3. CURRENT PACKAGING STATUS: Bags and boxes.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Confectionery production line	2	118	Germany	1992
2	Confectionery production line	4	30	Italy	1994
3	Confectionery production line	1	128	Britain	1995
4	Confectionery production line	132	2	China	1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We hope the imported machinery is in better conformity with domestic workmanship with lower requirement of the packaging materials while remaining the quality unchanged.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No intention.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Often. The purpose is to keep an eye on the development of the trade.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The imported machinery is of better quality, yet it is expensive and the after-sale service is not prompt as that of the domestic manufacturers.



Interviewee Shanghai Guangming Dairy Co., Ltd.
Address 251 Fenglin Rd., Shanghai
Phone 021-64041393
Fax 021-64049006
Ownership State-owned
G. Manager Wang Jiafen
Number of Staff 2,605

1. MAJOR PRODUCTS OF THE COMPANY: 1.Diary products 2.Milk 3.Milk powder.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
121,894	169,084	10,077

3. CURRENT PACKAGING STATUS: Milk: glass, plastic bag, asepsis paper bag;
Yogurt: cup; Milk powder: bag.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Manufacturer	Year of Purchase
1	Automatic asepsis packaging line	12	Sweden	1998-2000
2	Automatic Aseptic Packaging Assembly	2	Germany Hassia	1998

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will improve packaging level for better product quality.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

The plan is subject to the production.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Often. We are interested in large-scale international expo.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The imported machinery is a must for high-grade product.



Interviewee Hangzhou Fenghui Fermenting Co., Ltd.
Address 306 Qiutao Rd., Hangzhou
Phone 0571-6064795
Fax 0571-6064336
Ownership State-owned
G. Manager He Quanzhi
Number of Staff 776

1. MAJOR PRODUCTS OF THE COMPANY: Gourmet.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 100

0)

Assets	Turnover	Profit
27,059	24,596	4,294

3. CURRENT PACKAGING STATUS:

Automatic and semi-automatic and manual filling and packaging.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Sealing machine	58	0.3	Zhejiang	1991-1998
2	Automatic wrapping machine	4	1.9	Zhejiang	1991-1998
3	Automatic production line	1	141	Germany	2000 to be mounted

5. EXPECTATIONS AND PLAN S ON IMPROVEMENT OF PACKAGING QUALITY

We will take gradual measures to automate the packaging work.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No intention for time being. We are testing the newly purchased German machinery to buy the rest if it is effective.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

We attended many expos in Beijing, Shanghai and Hangzhou yet failed to find the satisfactory packaging machinery for powder gourmet. Our purchase is done through Hangzhou Foreign Trade Company.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The domestic machinery is much cheaper with not desirable quality.



Interviewee Orion Foods Co., Ltd.
Address 47 Langfang Economic and Technological Zone, Hebei
Phone 0316-6077888
Fax 0318-6088964
Ownership Korea solely owned
G. Manager Zhang Shijie
Number of Staff 110

1. MAJOR PRODUCTS OF THE COMPANY: 1.Chocolate pie 2. Egg pie.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
9,176	9,861	1000

3. CURRENT PACKAGING STATUS:

Automatic machinery; bags and boxes.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Box-packaging machine	5	118	Korea	1996-97
2	Bag-packaging machine	6	118	Korea	1996-97
3	Wrapping machine	2	94	U.S.	1996-97

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Preserving food fresh is crucial.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No intention, for the machinery in use satisfies the need.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Often. Specifically, 2nd International Food and Packaging Machinery Expo, Shanghai Packaging and Food Machinery Expo. We hope to learn the current situation of the trade and purchase parts. Anyway, the production line is purchases by the Headquarter in Korea.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The point of concern for foreign manufacturers is the after-sale service. The current problems are: 1. long period of maintenance; 2. expensive parts; 3. lack of contact resulting in the difficulty in getting replacement parts when the manufacturers have stopped the production of certain parts. Korean machinery is good in compatibility with the domestic machines.



Interviewee Wall's China Co., Ltd.
Address 16 Wanyuan Rd., Development Zone, Beijing
Phone 010-67881068
Fax 010-67881064
Ownership Joint venture
G. Manager Duan Cunhua
Number of Staff 1,200

1. MAJOR PRODUCTS OF THE COMPANY: Ice-cream and frozen foods.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
128,530	15,632	258

3. CURRENT PACKAGING STATUS: Bags.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Stirring machine	5	800	Britain	1995-98
2	Freezing machine	4	900	Denmark	1995-98

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

The machinery in use is satisfactory and the purchase plan is made by Headquarter.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No intention.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

We send professionals to attend. Specifically, Shanghai International Food and Packaging Machinery Expo, China International Food, Food Processing, and Packaging Machinery Expo.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The imported machinery is more stable in terms of performance and makes less errors.



Interviewee Henan Lianhua Gourmet Group Co., Ltd.
 Address 18 Lianhua Rd., Xiangcheng, Henan
 Phone 0394-4298955
 Fax 0394-4298955
 Ownership State-owned
 G. Manager Li Huaiqing
 Number of Staff 15,000

1. MAJOR PRODUCTS OF THE COMPANY: "Lianhua" gourmet.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
36,770	347,404	25,329

3. CURRENT PACKAGING STATUS:

Manual, semi-automatic and automatic bag packaging.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Manual weighing; sealing machine	150	12	Wenzhou, China	1995
2	Semi-automatic packaging machine(material-filling machine and sealing machine)	250	18	Tianjin, China	1995
3	Automatic packaging machine	1	120	Japan	1999
4	Automatic packaging machine	1	71	Taiwan	2000

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

New packages, together with a small quantity of bottled products, are to be developed.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No intention. The imported machinery will not help us achieve acceleration, instead, it occupies more space and more workers will be unnecessary.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Yes. Specifically, China International Food, Food Processing, and Packaging Machinery Expo, Beijing International Packaging Machinery Expo.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY



At present, the manual work is acceptable for the imported machinery, esp. those from Europe is quite expensive.

Interviewee Henz Co., Ltd.
Address Yantang, Shahe, Guangzhou
Phone 020-87706218
Fax 020-87705808
Ownership Joint venture
G. Manager David Yeung
Number of Staff 335

1. MAJOR PRODUCTS OF THE COMPANY:

(1).Henz Cereal Powder (2).Biscuits for infants

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
112,941	21,015	9,703

3. CURRENT PACKAGING STATUS: Bags and boxes.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Aseptic packaging machine	7	800	U.S.	1984-95

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We would like the packages of more attractive packages and the most advanced packaging machinery.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No intention.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

We send professionals to the Expos. Specifically, Jinan International Food and Packaging Machinery Expo, Dalian International Food Processing and Packaging Machinery Expo.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

We do not choose the imported machinery for fear of the inadequate after-sale service, the inadequacy that can lead to serious loss on our part.



Interviewee Hebei Hualong Food Group Co., Ltd.
Address Longyao County, Xingtai, Hebei Province
Phone 0319-6591908
Fax 0319-6591559
Ownership Stock company
G. Manager Fan Xianguo
Number of Staff 6,600

1. MAJOR PRODUCTS OF THE COMPANY: Instant noodles.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
150,903	83,724	5,511

3. CURRENT PACKAGING STATUS:

Automatic packaging machinery; bags and boxes.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit value	Manufacturer	Year of Purchase
1	Automatic packaging line	40	18	Sino-Japan joint venture	1994-1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Discussions and research are conducted constantly to have our machinery updated.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We plan to purchase 15 sets of Fuji machinery, which are being produced in Shanghai, with a total value of USD 240thousand.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Seldom. Manufacturers usually show us their samples and the transaction is completed after testing. The minimum period of maintenance is one year. And they provide follow-up service, so our relations are stable.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The advantages of foreign machinery lie in the high degree of automation and precision, flexible adjustment, and easy operation.



Interviewee Shanghai Jiali Grain and Edible Oil Industrial Co., Ltd.
Address 168 Dongtang Rd., Pudong, Shanghai
Phone 021-58712277
Fax 021-58468408
Ownership Joint venture
G. Manager Guo Jianhai
Number of Staff 244

1. MAJOR PRODUCTS OF THE COMPANY: Edible vegetable oil

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 100

0)

Assets	Turnover	Profit
55,964	137,970	6,901

3. CURRENT PACKAGING STATUS: Automatic bottling and filling machinery.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic bottling machine	7	100	Italy	1993
2	Automatic barreling machine	1	18	Shantou, Guangdong	1998

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Our machinery is advanced in China. The only problem is the labeling machine. The machine in use is strict with the types of the bottles, and we have to label manually. We hope the manufacturers will take this into account.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

Sure there will be a purchase budget for imported machinery. The estimated input is USD 180 million.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Often. To learn about the current situation in the trade.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The imported machinery produces nicer bottles, but the after-sale service is not so prompt, the parts are expensive, and the period for mounting takes longer.



Interviewee Shandong Jinluo Group Corp.
Address Linyi, Shandong Province
Phone 0539-8692001
Fax 0539-8641578
Ownership Stock company
G. Manager Zhou Liankui
Number of Staff 8,600

1. MAJOR PRODUCTS OF THE COMPANY:

1. Meat products; 2. Ready meat; 3. separated bean protein .

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1

000)

Assets	Turnover	Profit
217,647	382,237	5,897

3. CURRENT PACKAGING STATUS: Bags.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Packaging machine	5	59	Japan	1994
2	Packaging machine	25	94	Germany	1996
3	Packaging machine	31	106	U.S.	1995

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We need new packaging products for our new products.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We will purchase new machinery to improve the packaging condition.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Interested in the Expos typical of the advanced level both at home and abroad, we often send professionals to attend .

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The imported machinery is expensive.



Interviewee Alliance Pastry (China) Co., Ltd.
Address 7th Rd., Shekou, Shenzhen, Guangdong province
Phone 0755-6696573
Fax 0755-6866577
Ownership Joint venture
G. Manager Wei Licheng
Number of Staff 1,321

1. MAJOR PRODUCTS OF THE COMPANY: Biscuits.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
36,066	41,976	3647

3. CURRENT PACKAGING STATUS:

Automatic production and packaging line; bags and boxes.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Horizontal wrapping machine	20	94	Britain	1995
2	Bar-wrapping machine	30	24	Taiwan	1996
3	Carton-sealing machine	15	35	Japan	1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Our packaging machinery is advanced in China, and we will conduct technological renovation and maintenance to keep our lead.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We have a budget of RMB 2 million for the near future.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Occasionally. We give priority to a few manufacturers for the sake of our stable relationship.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

It pays to employ imported machinery regardless of the higher price. We know well that the quality is the most important principle.



Interviewee Shandong Longfeng Group Corp.
Address 10 Huangcheng Rd. N., Longkou, Shandong province
Phone 0535-8528191
Fax 0535-8526908
Ownership Joint venture
G. Manager Song Xuejun
Number of Staff 2,000

1. MAJOR PRODUCTS OF THE COMPANY:
1. Instant noodles; 2. Separated bean protein.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
(Unit: USD 1000)

Assets	Turnover	Profit
94,518	66,749	7,061

3. CURRENT PACKAGING STATUS: Bags.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE
(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Auto Production line	15	66	China	1993-1995

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY
We will purchase the necessary machinery according to the market. The improved machinery helps the progress in product quality. We sincerely wish for better machinery made in China with lower price.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST
No intention for the time being.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.
Seldom. The main channels to collect information are specialized magazines and the recommendation of other enterprises.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY
The imported machinery is more expensive but with higher degree of precision and durability. In contrast, the domestic ones are more compatible with the bottle types.



Interviewee Nabisco Food (Suzhou) Co., Ltd.
Address 51 Baiyu Rd., Suzhou Industrial Park, Jiangsu province
Phone 0512-7617540
Fax 0512-7616362
Ownership Joint venture
G. Manager Xue Jinaguang
Number of Staff 420

1. MAJOR PRODUCTS OF THE COMPANY: Biscuits.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
21,176	18,322	1,765

3. CURRENT PACKAGING STATUS: Bags and boxes.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic production line	2	600	Holland	1996
2	Automatic production line	3	500	Singapore	1997

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will consistently explore the new move of this trade both at home and abroad to keep our machinery first class.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No intention.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

We are interested in such Expo as China International Food Processing and Packaging Machinery Expo, which reflect the latest machinery.



Interviewee Nanhai Oil Industrial (Chiwan) Co., Ltd.
Address Chiwan, Shekou, Shenzhen, Guangdong province
Phone 0755-6694322
Fax 0755-6851589
Ownership Joint venture
G. Manager Guo Lianhai
Number of Staff 475

1. MAJOR PRODUCTS OF THE COMPANY: Salad oil.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
118,088	279,605	8,556

3. CURRENT PACKAGING STATUS: Bag.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Manufacturer	Year of Purchase
1	Automatic filling machinery	6	Japan	1989-1993
2	Automatic filling machinery	3	Taiwan	1995
3	Automatic filling machinery	3	Malaysia	1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We'd like to import packaging machinery to reduce the manual work.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No intention at present. The plan is subject to our development.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

We have professionals responsible for market research and purchase. We attend Expos held in Guangzhou, and the bi-yearly Beijing International Packaging Machinery Expo.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The imported machinery is quicker and more stable.



Interviewee Henan Nanjie Co., Ltd.
Address Xingzhuang Village, Chengguan Town, Linying, Henan province
Phone 0395-8011274
Fax 0395-8011888
Ownership Collective
G. Manager Geng Fujie
Number of Staff 10731

1. MAJOR PRODUCTS OF THE COMPANY: 1. Instant noodles 2. Rice crust.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 100
0)

Assets	Turnover	Profit
153708	148048	1001

3. CURRENT PACKAGING STATUS: Bag and bowl.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic packaging machine	3	35	U.S.	1998

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We need to improve packaging level for the domestic machinery produces more bad quality packages and with slower speed of 100bags/minute.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We wish to reduce manual involvement in packaging.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

We send our professionals to attend large-scale Expos both at home and abroad, esp. those held in Beijing and Guangzhou.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Japan manufacturers have agency in Beijing responsible for daily maintenance. The service of Michi is satisfactory.



Interviewee Shandong Qingyuan Food Group Co., Ltd.
 Address 29 Yibo Rd., Yishui County, Linyi, Shandong Province
 Phone 0539-2252937
 Fax 0539-2252837
 Ownership Stock company
 G. Manager Xu Chuanliang
 Number of Staff 4,914

1. MAJOR PRODUCTS OF THE COMPANY:

1. Biscuits; 2. Instant noodles; 3. Meat products; and 4. Dairy products.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1 000)

Assets	Turnover	Profit
35,420	51,074	1,565

3. CURRENT PACKAGING STATUS:

Bag for biscuits; bag and bowl for instant noodles.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Biscuit packaging machine	8	47	Tsingtao Packaging Plant	1985
2	Instant noodle production line	15	35	Shanghai Songjiang Packaging Plant	1991
3	Dairy packaging machine	40	59	Tianjin Light Industry Packaging Plant	1995

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will improve the packaging style with higher grade.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

The plan is subject to our development.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Seldom. We have established stable relationship with current suppliers and will give them the priority for new purchase.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The domestic machinery in use is acceptable both in speed and stability. And they provide better after-sale service. We do not have intention to import packaging machinery.



Interviewee Shijiazhuang Sanlu Group Co., Ltd.
Address Xinhua District, Shijiazhuang, Hebei province
Phone 0311-7044184
Fax 0311-8615365
Ownership State-owned
G. Manager Tian Wenhua
Number of Staff 1, 636

1. MAJOR PRODUCTS OF THE COMPANY: 1. Milk powder; 2. Milk.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
30,859	93,780	6,580

3. CURRENT PACKAGING STATUS: Bag for milk powder; asepsis bag, paper bag for milk.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic packaging machine (milk powder)	4	141	Germany	1996
2	Automatic filling machinery (milk)	2	260	Italy	1997

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will upgrade the packaging to ensure the product quality. Besides, we wish the domestic manufacturers will develop good filling machinery to reduce our cost.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We will need machinery for filling milk under the premise of ensured milk powder production.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Occasionally. To get better informed to prepare for the renewal of the current machinery.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The imported machinery is of better performance yet too expensive and inconvenient to get after-sale service.



Interviewee Henan Luohe Shuanghui Industrial Group Co., Ltd.
Address 1 Shuanghui Rd., Luohe, Henan province
Phone 0395-2622616
Fax 0395-2623398
Ownership State-owned
G. Manager Wan Long
Number of Staff 5,738

1. MAJOR PRODUCTS OF THE COMPANY: Sausage.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
39,446	50,850	6,256

3. CURRENT PACKAGING STATUS:

World-level automatic aseptic packaging machinery.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Packaging machine	25	47	Japan	1992
2	Packaging machine	20	118	Germany	1999
3	Packaging machine	38	100	U.S.	1993
4	Packaging machine	54	82	Sweden	1995
5	Packaging machine	15	71	Switzerland	1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We are to upgrade the package for longer period of validity in accordance with the strict requirement of food sector.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No intention for the machinery in use is in good condition.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Seldom. We import machinery through our own I&E company to direct contact the foreign manufacturers. They provide samples for trial use out of the self-confidence in their goodwill. The usual terms of payment are L/Cs.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The product of domestic packages is not so desirable though they are cheaper. We introduce imported machinery to keep our lead in the trade.



Interviewee Kunshan President Food Co., Ltd.
Address 210 Qingyang Rd. S., Kunshan Economic and Technological Zone,
Jiangsu province
Phone 0520-7310333
Fax 0520-7313167
Ownership Joint venture
G. Manager Xiao Fengshi
Number of Staff 2,000

1. MAJOR PRODUCTS OF THE COMPANY: 1. Instant noodles; 2. Boxed drink.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW

(Unit: USD 1000)

Assets	Turnover	Profit
57,315	91,688	4,820

3. CURRENT PACKAGING STATUS:

Automatic production and packaging line; bags, bowls, and boxes.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic instant noodle production line	16	59	Japan: TOKIWA	1998-98
2	Automatic instant noodle production line	2	24	Kunshan Dahe Machinery Ltd.	1998
3	Automatic drink production line	12	1,300	Asepsis package	1995

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We are waiting for the production line going with production lines of various specifications.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We intend to set up a subsidiary in Hefei, Anhui province and have got the machinery ready. The purchase is through a Japan agency, which obtains investment from its Headquarter. We have no intention for further purchase at present.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Often. The purpose is to learn the latest information and professionals then make the purchase from Taiwan.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

We think domestic machinery is much cheaper. But you get what you pay for. Imported machinery has far better performance.



Interviewee Jiangsu Wantong Group Co., Ltd.
Address 106 Erhuan Rd. W., Xuzhou, Jiangsu province
Phone 0516-5654182
Fax 0516-5759800
Ownership State-owned
G. Manager Ding Weiguo
Number of Staff 740

1. MAJOR PRODUCTS OF THE COMPANY:
1.Soy sauce 2.Vinega 3.Preserved bean curd.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
(Unit: USD 1000)

Assets	Turnover	Profit
17,918	1,000	1,553

9. CURRENT PACKAGING STATUS: Bottle and bag.

- 10.NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE
(Unit: USD 1000)

	Name	Quantity	Unit value	Manufacturer	Year of Purchase
1	Liquid-packaging line	11	2	Anhui Huayu	1996
2	Bottling machinery	21	47	Shandong Anqiu Light Industry Plant	1992
3	Numbering machine	2	9	Shanghai	1998

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will orient our packaging style to market. It is our sincere wish to see the strengthened technological renovation and accelerated industrialization of genetically engineered fruits.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We plan to purchase machinery for bottling machine and that for special –shaped bottles. The estimated investment is USD 30-40 thousand.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

We hope to take part in more Expos where we purchase the machinery we need.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

We have not experience of using imported machinery while the domestic ones is acceptable at present.



Interviewee Shaanxi Yiwu Group Co., Ltd.
 Address Huoju Rd. E., Baoji, Shaanxi province
 Phone 0917-3313180
 Fax 0917-3319774
 Ownership Stock company
 G. Manager Wang Lurang
 Number of Staff 3,500

1. MAJOR PRODUCTS OF THE COMPANY:
 1. Instant noodles 2. Liquor 3. Purified water

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
 (Unit: USD 100
 0)

Assets	Turnover	Profit
13,277	14,118	242

3. CURRENT PACKAGING STATUS:
 Bag and bowl for instant noodles; bottle and box for liquor; barrel and bottle for purified water.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE
 (Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	M-5000 #	5	58	Japanese	1994
2	DW-8000#	30	24	Guangdong	1998
3	SB-60Y	55	2	Beijing	1994
4	KL-3.5	5	20	Shanghai Kanematsu	1998
5	KP-602	3	12	Shanghai Kanematsu	1998
6	TKL-1000	3	56	Shanghai Kanematsu	1998
7	CT-87013	1	31	Japanese Matsumoto	2000

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY
 We need to upgrade the machinery for packaging seasoning and sauce. The current problems: the barreling machine is not so precise in split charging; water in bottle washer splashes; some parts easily rust.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST
 We intend to import advanced foreign packaging machinery. The budget for the next year is RMB 1million.



7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

We are interested in such expos and attend occasionally. But the majority of the transaction is through I&E company.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The delivery of foreign machinery through agency takes much longer time.

14.3 THE BEVERAGE INDUSTRY

The Current Status of China's Beverage Industry (CBI)

China's beverage industry (CBI) is newly developed. The annual output of beverages was 288 thousand tons in 1980, 1 million tons in 1985, 3.3 million tons in 1990, and 11.2 million tons in 1995. In 1999, it reached 14 million tons. With the rise in output, more varieties appeared, with better quality, and the packaging styles demonstrate a clearer diversity. There are two major reasons:

- (1) Consumers' increasing need for higher-grade and health-care beverages, due to their rising income and desire for better quality products.
- (2) The state adopts the free-competition policy regarding the industry, which better adapts the development of market channels and paves the way for the growth of CBI manufacturers.

However, China Beverage Industry still faces problems:

- Adjustment of the enterprise structure has yet to be made;
- Regional distribution is not quite rational;
- Quality of products need improvement;
- More efforts have yet to be made to open up more rural and international markets.

The Prospects for China's Beverage Industry Development (CBI)

- (1) There is still more room for CBI's development. China is rich in fruits and vegetables, and there is enormous market potential for the consumption of beverages. In spite of being one of the fastest developing industries, the per capita consumption volume is far behind the average amount of the world. China's annual per capita consumption is only 8 Kg, 1/5 of that of the average level of the world, 1/24 of Western Europe developed countries. China's annual per capita of juice and juicy drinks is 1 Kg, 1/40 of W. European countries. The Beverage Industry will find vast room for further development in China with the unceasing increase of the people's living standard.
- (2) CBI's orientation: "Natural, Nutritious, Fine, Varied in Kinds & Grades".

- (3) Product range adjustment should be made according to the fluctuation of need. With the popularization of carbonated drinks, vigorous action is taken to expand fruit and vegetable juices, botany protein beverages, drinkable mineral water, and to develop solid and special- nutrition beverages. Carbonated drinks have been in China for a long time, and they will continue to expand. Bottled drinking water and pure water will gradually be replaced by mineral and spring waters. Fruit juice beverages are the weak link of CBI, lagging seriously behind. Because of its richness in fruits, China shall find a normal stage of development of its fruit juice industry.

Questionnaire of Packaging Machinery End-users of CBI

- (1) As seen in Table 1: the countries which export the most machinery in this industry are: Germany, Italy, and Sweden. Germany and Italy have strength in instilling equipment, beer-instilling in particular. The major manufacturers are Germany's KRONES and KHS, Italy's SASIB. Sweden has Tetra Pack, who enjoys monopoly in sterile packaging, and comes out third in the market proportion.

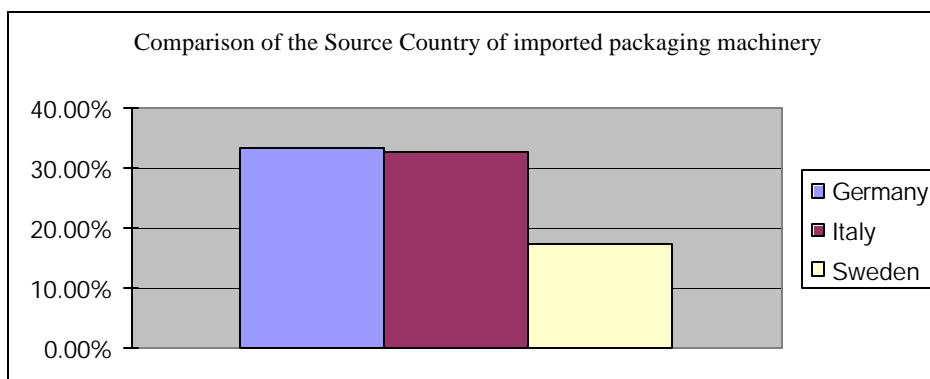
	Country	Volume (USD 1000)	Ratio %
Imported	Germany	754	33.0%
	Italy	743	32.5
	USA	95	4.2
	France	93	4.1
	S. Korea	90	3.9
	Sweden	392	17.1
Domestic		121	5.2
Total		2,288	100

Table 1

- (2) As shown in Table 2 and the relevant chart: there has been dramatic increase in imported packaging machines since 1996. It is mainly due to the fierce competition in the lines of beer and beverage. In the line of beer, the main competition is between Tsingtao Beer and Yanjing Beer. In soft drinks, competition is between Robust and Wahaha. Such competition propels other large enterprises in the line to invest more and more funds in importing equipment to improve each one's own strength in competition.

Year \ Source	Imported (USD 1000)	Domestic
Before 1990	53	12
1990	53	12
1991	53	12
1992	53	4
1993	32	5
1994	32	5
1995	60	4
1996	323	3
1997	211	34
1998	850	9
1999	249	20
2000	198	1
Total	2,167	121

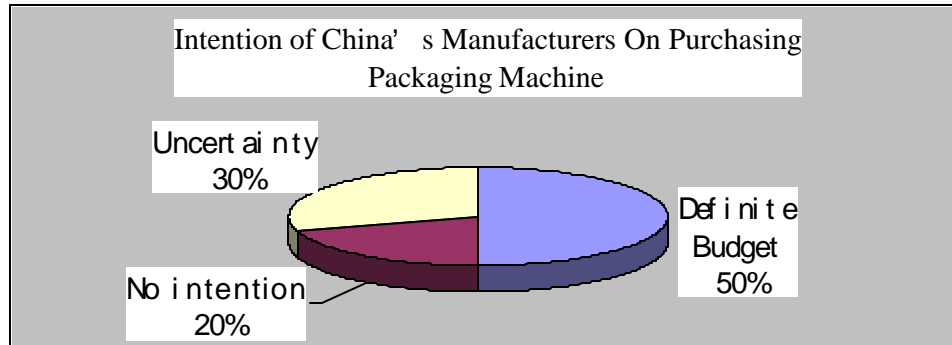
Table 2



- (3) Seen from Table III and relevant chart: Feedback of the questionnaires of 10 CBI manufacturers' intention on purchasing machinery.

Intention to Purchase	Definite Budget	No Intention	Uncertainty
Proportion	50%	20%	30%

Table 3



(4) The following are common fairs this industry visits:

China International Packaging Machinery Fair

China International Tech-Fair on the Production & Filling of Beverages & Brewing

North-West Food & Beverage Fair

China Packaging, Beverage -Tech, and Food Expo



Interviewee Beijing Yanjing Beer Corp.
Address 9 Shuanghe Rd, Shunyi, Beijing
Phone 010-89492316
Fax 010-89495273
Ownership State-owned
G. Manager Li Fucheng
Number of Staff 7,600

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Beer.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
457,052	179,237	4,471

3. CURRENT PACKAGING STATUS:

Automatic instilling processing lines of canned, bottled, and barreled.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Auto-instilling processing line (bottled)	1	1,100	German KHS	1999
2	Auto-instilling processing line (canned)	1	1,100	German KHS	1999
3	Fresh beer auto-instilling processing line	1	800	German KHS	2000
4	Auto-instilling processing line (small bottled)	1	88	Nanjing Light Machinery Factory	1998
5	Auto-instilling processing line	10	141	Guangzhou Light Machinery Corp.	1989~1997

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

It is of vital importance to promote the quality and to enforce scale economy.

Advanced international equipment shall be adopted and to develop the enterprise into a first class one.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

It has not been clearly decided what to purchase, depending on the future of the enterprise.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

We often attend to learn the true status of the equipment home and abroad. The fairs we usually attend are those held in Beijing, Shanghai, and Guangzhou. Sometimes, we visit fairs abroad in the wine packaging machinery industry.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Foreign advanced packaging machinery must be adopted to promote the grade of our product. The packaging machinery made in China lags 10 years behind.



Interviewee Jian Li Bao Beverage Ltd.
Address Xi'nan Town, Sanshui City, Guangdong Province
Phone 0757-7734236
Fax 0757-7734236
Ownership Joint-stock Interviewee
G. Manager Li Jingwei
Number of Staff 2,260

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Cola.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
156,471	201,367	20,190

3. CURRENT PACKAGING STATUS:

Automatic instilling processing lines of canned, plastics-bottled, paper-wrapped, and cartoned.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Cap-sealing machine	5	550	America	1985~1995
2	Packaging machine	17	400	America	1985~1995
3	Packaging machine	5	820	Sweden	1985~1992

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We do not feel the need to improve our packaging machinery.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We have no plans to buy any new packaging machinery

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

Personnel may be sent to attend the fair but no plans have been made to purchase any packaging machinery.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Packaging machinery made in China is incomparable with machinery made abroad with regard to quality, but that made abroad is too expensive.



Interviewee Tsingtao Beer (Group) Ltd.
Address Tsing-Beer Building, May-4th Square, Hongkong Rd (M), Tsingtao, Shandong Province
Phone 0532-5711991
Fax 0532-57147169
Ownership State-owned
G. Manager Peng Zuoyi
Number of Staff 3,952

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Beer.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
433,934	189,084	22,118

3. CURRENT PACKAGING STATUS: barreled, bottled and canned.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Auto-instilling processing line (bottled)	6	900	Germany	1998
2	Auto-instilling processing line (canned)	6	1,100	German KHS	1997
3	Fresh beer auto-instilling processing line	2	1,000	Germany	2000
4	All-automatic instilling processing line	2	188	Guangzhou Light Machinery Corp.	1999

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will keep enhancing the packaging grade to meet the needs of the consumers.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

It is under the charge of the Development Department to purchase machines; the specific plan should be made according to the real running condition.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIMENTS PURCHASED ON THAT OCCASION?

We send some regular people to attend the fair, and some professionals may be sent abroad to conduct on-site inspections.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Machines made abroad are high in price, and troublesome in terms of after-sales maintenance, but we still use imported ones to pack our high-grade products.



Interviewee Sichuan Yibin Wu Liang Ye (Group) Ltd.
Address 150 Minjiang Rd (W), Yibin City, Sichuan Province
Phone 0831-3553988
Fax 0831-3552624
Ownership State-owned with share-controlling rights
G. Manager Wang Guochun
Number of Staff 14,851

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Distilled spirit.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
971,765	619,351	118,584

3. CURRENT PACKAGING STATUS: Automatic instilling processing lines.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Auto-instilling processing line	2	800	France	1995~1996
2	Auto-instilling processing line	4	600	Italy	1996
3	Auto-instilling processing line	23	188	Shandong Anqiu Machinery Factory	1997
4	Label-sticking machine	3	150	German KHS	1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Adopt equipment of first grade, to assure the quality of our product.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We have purchased 5 Sidel processing lines from France, although the machines have not yet arrived, nor have they been installed.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

We often attend fairs to get familiar with the development of the equipment manufactured domestically and abroad.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Foreign machinery presents faster speed and higher output together with satisfactory after-sales service. It is impressing that foreign manufactures would offer free-training and regular maintenance.



Interviewee Guangdong Robust (Group) Ltd.
Address 37 Jucheng Boulevard (E), Xiaolan Town, Zhongshan, Guangdong Province
Phone 0760-2101803
Fax 0760-2101802
Ownership Collective
G. Manager He Boquan
Number of Staff 5,389

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Milk beverage and mineral water.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
235,294	167,810	7,167

3. CURRENT PACKAGING STATUS: Bottled.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Auto-instilling processing machine (bottled)	2~3 sets	350	Italy SASIB	1998~1999
2	Man-operated packaging processing line (bottled)	A dozen of lines	24	Guangdong Light Machinery Corp.	1996~1997

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will keep on improving our packaging level.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

Next year, we are to transform the manually operated processing lines to automatic lines, requiring a budget of 10 million.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

Sometimes, but not blindly.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Imported machines seldom go wrong and are economic in the use of raw material. We are satisfied with the after-sales service of foreign manufacturers who offer timely service, a year's free guarantee, and also free services in installment, trial running, and technician training. By the way, they charges higher.



Interviewee Sichuan Chengdu Quanxing Wine Factory
Address Quanxing Rd, Jinnu District, Chengdu, Sichuan Province
Phone 028-7513999
Fax 028-7519999
Ownership State-owned
G. Manager Yang Zhaoji
Number of Staff 4,913

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Distilled spirit.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
184,364	179,594	3,800

3. CURRENT PACKAGING STATUS: Bottled and boxed.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Auto-instilling processing line	8	118	Shanghai Weihai Packaging Machinery Factory	1997
2	Auto-instilling processing line	10	88	Shandong Anqiu Light Machinery Factory	1997

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will keep on improving our packaging machinery, and eliminate the proportion of manual operation.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

To eliminate manual operation, we are to purchase new equipment from Shanghai or South Korea. Machinery of S. Korea is not as good as that of USA or Italy, but it is better than domestically made ones and the price is appropriate. We planned to put in USD 590,000 to introduce 3 automatic processing lines. The Unit value of the S. Korean line is USD 120,000 and Shanghai USD 60,000.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

Often, and we are especially interested in big international fairs.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Imported packaging machines price too high, and domestic manufacturers offer timely overhauling.



Interviewee VV Group Ltd.
Address 128 Fuxing Rd (S), Xuzhou, Jiangsu Province
Phone 0516-2704068
Fax 0516-2704888
Ownership State-owned
G. Manager Cui Guiliang
Number of Staff 6,896

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Bean & milk powder and bean powder.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
(Unit: USD 1000)

Assets	Turnover	Profit
239,472	445,406	40,125

3. CURRENT PACKAGING STATUS: Bagged, bottled and boxed.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE
(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	All-automatic packaging processing line	2	1,900	Switzerland	1996
2	Auto-packaging processing line	130	80	Tianjin	1992~1995

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY
We will introduce brand-new, fashionable packaging styles in accordance with our newly developed products.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST
We are to purchase imported packaging processing equipment at a price of USD 3 million.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?
We often attend fairs in order to get informed about the newly fashionable packaging styles in the world. We actively contact the domestic agents of foreign manufacturers when purchasing equipment. Payment: cash against delivery.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY
Imported packaging machinery is superior in terms of high automation, advanced self-control, and good security. But it charges more in after-sales service than domestic manufacturers.



Interviewee Yeshu Group Ltd.
Address 41 Longhua Rd, Haikou, Hainan Province
Phone 0898-6777124
Fax 0898-6773891
Ownership State-owned
G. Manager Zhang Xuebin
Number of Staff 5,000

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Coconut juice, mineral water and mango juice.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
60,281	228,235	8,259

3. CURRENT PACKAGING STATUS: Bottled, boxed, and pull-top canned.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	(Canned) auto-instilling processing line	15	482	Italy	From 1985
2	(Canned) auto-instilling processing line	10	506	German	From 1985
3	(Boxed) auto-instilling processing line	10	1,200	Swiss	From 1987

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will speed up the research on the production lines of soft drink packaging machinery so that new processing line might be introduced to take the place of Tetra Pack packaging machinery, which is very high in price.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We have allocated an annual budget of USD 950,000 to purchase packaging equipment.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

Occasionally, and we go to exhibitions to stay informed on new trends in the packaging industry. We seldom purchase equipment through a trade show.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Imported packaging machinery is superior in terms of high automation, advanced controlling, good security and hygienic condition. But their after-sales service is more expensive than domestic manufacturers



Interviewee Hangzhou Wahaha Group Ltd.
Address 128-1 Qiutao Rd (N), Hangzhou, Zhejiang Province
Phone 0517-6039921
Fax 0571-6951532
Ownership Collective
G. Manager Zong Qinghou
Number of Staff 3,720

1. MAJOR PRODUCTS OF THE INTERVIEWEE : Fruit & milk drink, pure water, pure milk and cola.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
336,471	530,156	79,294

3. CURRENT PACKAGING STATUS: PET-bottled and canned.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Bottle-instilling processing line	14	3,0	Italy SASIB	1998
2	Can-instilling processing line	1	3,000	Italy SASIB	1998
3	Can-instilling processing line	2	1,200	Germany	1998
4	Can-instilling processing line	1	900	South Korea	1997

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We want to adopt first-grade packaging machinery in the world.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We are actively in contact with packaging machinery manufacturers. Specific plans should be made according to the real running condition.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION ?

We often attend fairs held in Beijing, Shanghai, and Guangzhou. We are also interested in PMMI fairs held abroad. We had sent people to Germany for a fair and will send someone to France for a large fair.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Imported packaging machines are good in stability and are fast in speed but the problem is after-sales service In addition, the price is too high. At the same time, domestic manufacturers offer timely maintenance, and actively contact us, inquiring the current running condition of our machines.



Interviewee Sichuan Jian Nan Chun Group Ltd.
Address Chunyi Street (W), Mianzhu, Sichuan Province
Phone 0838-6202206
Fax 0838-6202221
Ownership State-owned
G. Manager Qiao Tianming
Number of Staff 5,454

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Distilled spirits.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
222,687	134,280	32,000

3. CURRENT PACKAGING STATUS: Bottled and boxed.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Bottle-washing machine	1	170	France	1999
2	Instilling machine	42	8	France	1988~1998
3	Half-auto cap -pressing machine	6	88	France	1997~1998
4	All-auto cap-pressing machine	17	12	France	1996~2000
5	Rinsing machine	1	186	Yibin Minjiang Machinery Factory	1999
6	Instilling machine	12	31	Shanghai Weihai Packaging Machinery Factory	1997~2000
7	Binding machine	46	2	Wenzhou Lucheng Xinhua Machinery Factory	1993~2000

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We will introduce hi-tech packaging machinery, and gradually eliminate the proportion of manual operation. With regular budget, we maintain and improve our packaging equipment and keep ourselves in the leading position. But the filling machinery, cappers and labeling machinery fail to work properly owing to the bad quality of auxiliary materials. So manual-operation has to be applied, which restricts the application of packaging machines. Especially, the trademark material has to be imported to meet the technical requirements of the label-sticking machine, but this increases the cost of packaging.



6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We are to invest RMB 3 million in purchasing machines of instilling, binding, and of unpacking.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

We do, and we are interested in national PMMI fairs that helps us understand more about the latest developments in packaging machines. And usually we would place an order.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Domestic packaging machines are not as good in quality, but the after-sales service and parts and maintaining is better. Imported machines demand raw materials that are not produced domestically and therefore do not perform as well.

14.4 The Pharmaceutical Industry

The Summary of China's Pharmaceutical Industry

Since the enforcement of the open and reform policy, China's pharmaceutical industry has made great achievement in chemical medicine, Chinese herbal medicine, biological products, medical equipment, sanitary materials, medicine-producing machinery, and medical packaging industry. The annual increasing rate of China's pharmaceutical industry is 17.6% during 1978~1999, far above the overall national industry increasing rate of the same period.

At present, there are 6,391 companies in the pharmaceutical industry, which are producing 1,300 types of chemical medications, totaling 360 thousand tons, ranking second in the world. The Pharmaceutical business has also taken shape: there are 16,518 medicine wholesalers and 63,850 retailers. According to the State Economics & Trade Committee, China's pharmaceutical commodity realized a total turnover of RMB 122 billion and profit RMB 11 billion in 1999. And there are 24 enterprises realizing profits of over 100 million. The top three pharmaceutical companies are: Tianjin Pharmaceutical Corp, 999 Corp, and Sino-US Pharmaceutical Ltd. And 22 realized their turnover of RMB one billion, which are: Shanghai Pharmaceutical Corp, 999 Corp, and China Pharmaceutical Corp.

The most recent development in China's pharmaceutical industry as of September, the industry has had a turnover totaling RMB 170 billion with an increase of 23% and a gross increase of 25%, higher than 13% the national average rate. And the commercial pharmaceutical turnover is RMB 113 billion with a comparative increase of 15.4%. The regional gap of the pharmaceutical distribution has become wider: The overall market is more concentrated in the Eastern coastal areas, especially the provinces of Zhejiang, Jiangsu, Shanghai, Guangdong, Shandong, and Beijing which cover 60% of the national pharmaceutical market. It is estimated that the industry will reach a total turnover of RMB 230 billion, a commercial turnover of RMB 150 billion, total value of import & export of RMB 630 million (import RMB 400 million), and the total profit of RMB 12~13 billion.

The Impact on the Pharmaceutical Industry After China's Entering WTO

Restricted by a series of non-tariff factors such as the European and US technology, security criteria, and export quota, China's pharmaceutical products faced such a grave situation in 1999 that imports increased sharply while the export of medication



equipment, medical dressing, western medicine, biological medicine decreased month by month.

The Future of China's Pharmaceutical Industry

1. The whole industry keeps increasing at a high speed—a rate of 10~12%. With the reform of China's Medical Care system and improvement of the people's living standards, the pharmaceutical costs will increase at a rate of 10-12%, 3% - 5% higher than that of the GNP. The rate may decrease somewhat, but the general rate will still keep on increasing
2. Domestic medicine finds help. Affected by the reform in Public Medicare esp. "Pharmaceutical Reimbursement Instruction," imported and high priced medicines are greatly affected, and national large chemical enterprises on the contrary find good opportunity of a new leap.
3. Over the counter (OTC) medication will develop at a high rate. Under the double influence of the state's policy guide and citizens' habits of taking medicine, and with the quick pace of separating medicine from dosage, OTC consumption will see further development.

The Demand for Packaging Machinery of China's Pharmaceutical Industry

China's big pharmaceutical companies and all of the foreign-invested manufactures have imported processing lines of their own including advanced packaging machinery. But China's domestic packaging machines find more and more obstruction when recommended to these said enterprises. With the development of China's pharmaceutical industry, there will be great need for imported processing lines including advanced all-auto packaging machines.

Major foreign-invested Pharmaceutical Enterprises in Mainland China

Sino-American Shanghai Squibb Pharmaceuticals Ltd.
Sino-American Tianjin SmithKline Pharmaceuticals Ltd.
Xian-Janssen Pharmaceuticals Ltd.
Shanghai Johnson & Johnson Pharmaceuticals Ltd.
Shanghai Roche Pharmaceutical Ltd.
Pfizer Pharmaceuticals Ltd.
Jinan-Hemofarm Pharmaceutical Co., Ltd.

The analysis of the questionnaire survey

Figure 1 The comparison among major manufacturers

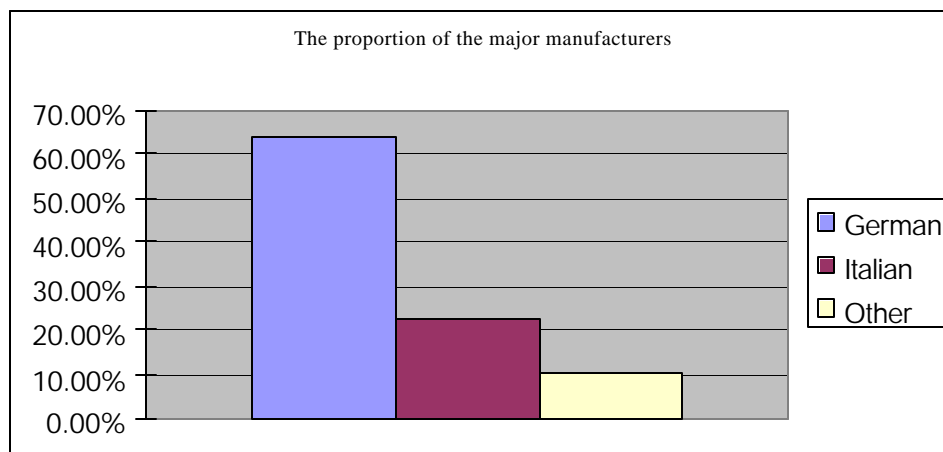
	Country/Region	Value USD 1000	Percentage %
Imported from	Germany	2,269	64
	Italy	805	22.5
	Britain	200	5.6
	Canada	59	1.6
	Japan	7	0.2
	Holland	64	1.8
	Korea	9	0.3
	Taiwan	30	0.9
Domestic		115	3.1
Total		3,558	100

Figure 2: The comparison among the year of importation

	Importation(USD 1000)	Machinery made in China
Prior to 1990	871	-
1990	225	12
1991	294	-
1992	394	6
1993	293	3
1994	272	14
1995	158	30
1996	342	28
1997	217	7
1998	189	10
1999	188	5
Total	3,443	115

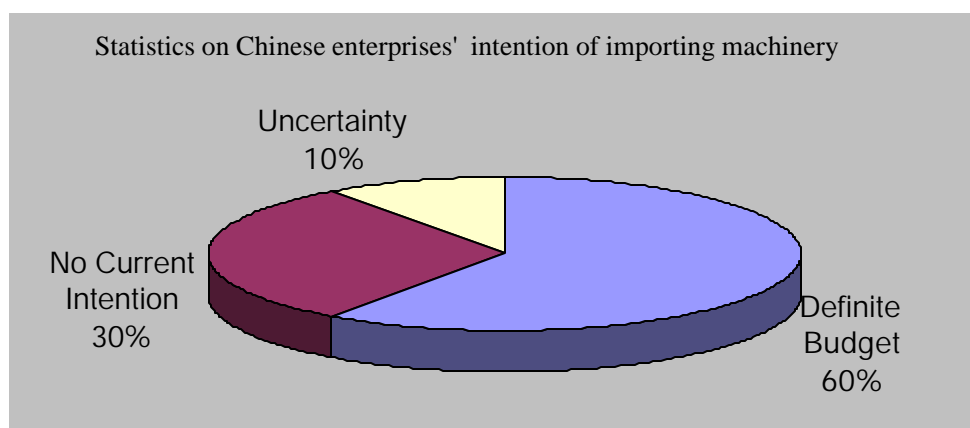
(1) Figure 1 reflects that the largest importers are Germany and Italy, accounting

for 64% and 22.55% respectively with 3.15 for China. Pharmaceutical production imposes a strict requirement over both sanitation and dosage, which leads to the high percentage of the imported machinery.



- (2) Figure 2 shows little difference in the annual purchase value after 1990. It is believed that the years to come will see a stable demand for imported machinery.
- (3) Among the interviewed enterprises, six have the intention to purchase, three have not and one is uncertain. Despite the favorable proportion for that are intending to buy, the total purchase value will not be great because only a small percentage of machinery needs replacement excluding the possibility of expanding their production.

	Definite budget	No intention	Uncertain
Percentage	60%	30%	10%





-
- (4) Domestic pharmaceutical enterprises often attend the following packaging machinery Expos:

Shanghai International Medicine Producing &Packaging Machinery Expo
International Medicine and Cosmetics Packaging Technology Expo
China International Packaging Technology Expo
South China Industry Expo
China International Packaging Industry Expo
South China Medicine Producing & Packaging Machinery Expo
China International Medicine Packaging Expo



Interviewee Sino-American Shanghai Squibb Pharmaceuticals Ltd.
Address 1315, Minhang, Shanghai
Phone 21-6430-2740
Fax 21-6430-1498
Ownership Joint Venture
G. Manager Zhou Defu
Number of Staff 1,100

1. MAJOR PRODUCTS OF THE COMPANY

- Shi'erkang Tonics
- Bufferin

2. Assets, turnover, and profit as of 1999 is listed below:

(
US\$ 1,000)

Assets	Turn Over	Gross Profit
64,706	96,471	8,522

3. CURRENT PACKAGING STATUS

Bottles and boxes.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(US\$ 1,000)

No.	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Bottle Packaging Assembly	3	900	Italian IMA	One after another since 1985
		2	800	Italian CAM	

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Hoping for an assembly that can package products in multi-specifications and with better quality.

6. KIND OF PACKAGING MACHINERY TO BE PURCHAS ED AND ESTIMATED COST

No current purchasing planning. Imported packaging machinery will be purchased if the company decides to expand their business.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCATION.

Occasionally, and only Expos for imported packaging machinery are attended. The assembly lines will not be purchased through expos. Only parts or fittings will be purchased through expos.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY
Satisfied with imported packaging machinery there are several problems in the aspects of after-sale service: (1) Long Repair Period of commonly half a year. (2) High Prices for parts and fittings. (3) Not Enough Training for operators.



Interviewee Sino-America Tianjin SmithKline Pharmaceuticals Co., Ltd.
Address Chengzhou Rd. Chenglinzhuangdao, Dongli District, Tianjin
Phone 22-2470-0888
Fax 22-2470-0666
Ownership Joint Venture
G. Manager Yang Weiqiang
Number of Staff 1,200

1. MAJOR PRODUCTS OF THE COMPANY

1. Stomach Medicine 2. Contact (for cold) 3. Anti-verminosis

2. ASSETS, TURNOVER, AND PROFIT AS OF 1999 (US\$ 1,000)

Assets	Turn Over	Gross Profit
110,897	148,722	48,393

3. CURRENT PACKAGING STATUS

At present mainly packaged in bottles, boxes, and pouches.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(US\$ 1,000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Bottle Packaging Assembly	1		German	
2	Pouch Packaging Assembly	10		Italian	
3	Box Packaging Assembly	1		German	

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

The currently applied packaging is taking the lead in the market.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

A regular annual fund of approximately RMB 2 million is applied to equipment replacement.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCATION.

Originally, all machinery import was conducted through a Hong Kong agency, which represents for quite a few international packaging machinery manufacturers. Now some direct contact with overseas suppliers is getting started. Some expos are attended in Shanghai, Nanning, and Zhengzhou, especially the Shanghai International Expo of Pharmaceutical Machinery & Packaging Equipment. The



normally accepted payment mode is L/C, in three phases.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Only imported machinery is employed and there is no direct understanding of domestic machines. Imported machinery is highly reliable and satisfying. The after-sale service is also satisfactory due to the good relationship between the company and packaging machinery suppliers.



Interviewee Jiangsu Yangtze River Pharmaceutical Group.
Address 1 Koutai Rd., Taizhou, Jiangsu Province
Phone 523-696-1999
Fax 523-691-4769
Ownership State-owned Enterprise
G. Manager Xu Jingren
Number of Staff 2,100

1. MAJOR PRODUCTS OF THE COMPANY

(1) Yangtze River Brand stomach medicine, (2) Maidenhair leaves

2. ASSETS, TURNOVER, AND PROFIT AS OF 1999

US\$ 1,000)

Assets	Turn Over	Gross Profit
162,353	210,588	43,529

3. CURRENT PACKAGING STATUS

Mainly packaged in bottles, pouches, boxes and in Aluminum-plastic packages.

3. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(US\$ 1,000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Packaging Assembly for Pills	2	141	Main machine made in Netherlands, some parts made in US.	1990-1993
2	Bottle filling machine	2	71	German and Italian	1992
3	Labeling machine	8	9	Taiwan Huangjiang Packaging Machinery	1995

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

More research will be conducted as to the airproof feature and technique of packaging to reduce the percentage of wasted packaged products.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

Domestic machinery is to be replaced gradually in the near future and imported ones are to be purchased. The replacement will be conducted year by year, and the total budget is US\$ 350,000. After-sale service is very important so the suppliers with offices in China will be chosen.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCATION.

Frequently. Mainly the expos of packaging machinery for pharmaceutical manufacturers held in Shanghai, such as Shanghai International Pharmaceutical Machinery & Medicine Packaging Equipment Expo, International Pharmaceutical & Cosmetics Packaging Technology Expo.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The major superiorities of imported machinery are their high speed, high reliability, automation, and safety.



Interviewee Shandong Xinhua Pharmaceutical Group Company
Address 14 Dongyi Rd., Zhangdian District, Zibo, Shandong Province
Phone 533-218-4223
Fax 533-228-7508
Ownership State-owned
G. Manager He Duant
Number of Staff 1,200

1. MAJOR PRODUCTS OF THE COMPANY: “Anka” capsules

2. ASSETS, TURNOVER, AND PROFIT AS OF 1999

(US\$ 1,000)

Assets	Turn Over	Gross Profit
254,588	272,941	13,177

3. CURRENT PACKAGING STATUS: Mainly in bottles, boxes, and pouches

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(US\$ 1,000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic Assembly	3	647	German and Canadian	1992-1994
2	Semi-automatic Assembly	4	882	Hunan Zhongnan Pharmaceutical Machinery Factory	1995-1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

To further reduce manual packaging.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

Have intention but don't have specific budget. Mainly imported machinery is favored to reduce manual packaging.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Frequently. Purchases are made only after a site visit to the supplier and full understanding of the machine's performance. Agencies are employed when purchasing imported machinery, and the agency is responsible for all the importing affairs. Since the government supports the company, it enjoys favorable tariff rates. Major expos attended include South China Industrial Expo, China International Packaging Industry Expo.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Major superiorities of imported machinery include high stability and ease to operate, while those of domestic ones include better after-sale service, in-time repair, and availability of parts and fittings.



Interviewee 999 Enterprises Group
Address 1028 Beihuan Ave. Shenzhen, Guangdong Province
Phone 755-336-0999
Fax 755-335-0888
Ownership State-owned Enterprise
G. Manager Zhao Xinxian
Number of Staff 3,400

1. MAJOR PRODUCTS OF THE COMPANY

(1) 999 Stomach Medicine (2) 999 Cold Medicine (3) Tonics

2. ASSETS, TURNOVER, AND PROFIT AS OF 1999 (US\$ 1,000)

Assets	Turn Over	Gross Profit
1,411,765	541,177	104,706

3. CURRENT PACKAGING STATUS:

Mainly packaged in bottles, boxes, pouches, and capsules.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(US\$ 1,000)				
	Name	Quantity	Unit Value	Manufacturer
1	Bottle assembly	1	2,000	British
2	Pouch assembly	15	18	Tianjin (domestic)
3	Box assembly	1	1,200	German
4	Capsule assembly	2	900	German and Italian

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Concerned about the improvements in airproof and sterile packaging.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No detailed purchasing plans. Machinery purchase is up to the replacement of old equipment and the expansion of business.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCATION.

Frequently. We pay close attention to the development trends of pharmaceutical packaging machinery. It is also common to contact the suppliers through expos. Some suppliers also actively send them product profiles due to the good business reputation of 999. The common payment term is 1:8:1. Import is conducted through the trading company of 999 group. Major expos attended include: South China Pharmaceutical and Medicine Packaging Machinery Expo, International Pharmaceutical and Cosmetics Packaging Technology Expo.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Imported machinery is superior to domestic ones in respects of performance and stability. However the prices are relatively too high. The after-sales (repair) period is relatively too long and the prices for parts and fittings are also too high.



Interviewee Harbei Pharmaceutical Group Co., Ltd.
Address 388 Heping East Rd., Shijiazhuang, Hebei Province
Phone 311-606-7972
Fax 311-505-1133
Ownership State-owned
G. Manager Lu Weichuan
Number of Staff 17,000

1. MAJOR PRODUCTS OF THE COMPANY

(1) Medicines (2) Tonics (3) Agricultural Chemicals

2. ASSETS, TURNOVER, AND PROFIT AS OF 1999 (US\$ 1,000)

Assets	Turn Over	Gross Profit
1,411,765	423,529	28,235

3. CURRENT PACKAGING STATUS

In bottles, boxes, and pouches.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(US\$ 1,000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Capsule packaging machine	3	1,500	One Italian and two domestic	1990
2	Aluminum-plastic packaging machine	3	3,700	One German and two made in Beijing	1990
3	Liquid Filling Assembly	2	94	Taiwanese	1993
4	Powder filling machine	20	588	German Bosch	1986-1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Major concerns are to improve the applied materials, which are currently being used and to improve the reliability of the medicine.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

Annual purchase policy implemented by the sourcing department. No fixed budget.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Mainly attend China International Pharmaceutical Packaging Expo. Purchase are possible to be made through expos if necessary.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Imported machinery is superior in respects of automation and high performance.



Interviewee Harbin Pharmaceutical Group
 Address 431 Friendship Rd. Harbin, Heilongjiang Province
 Phone 451-460-8188
 Fax 451-485-6783
 Ownership State-owned
 G. Manager Liu Cunzhou
 Number of Staff 8,000

1. MAJOR PRODUCTS OF THE COMPANY

(1) Zinc Gluconate oral liquid (2) Calcium tonic

2. ASSETS, TURNOVER, AND PROFIT AS OF 1999 (US\$ 1,000)

Assets	Turn Over	Gross Profit
741,177	717,647	30,588

3. CURRENT PACKAGING STATUS

In bottles, boxes, and Aluminum-plastic packages.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(US\$

1,000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Bottle filling machines	3	22	Japanese	1993-1994
		6	11	Harbin Machinery Institute	One by one since 1993
		8	6	Shanghai	1999
2	Capsule packaging machine	2	353	German Bosch	1992-1993
3	Labeling machine	4	9	Shanghai	1999
4	Aluminum-plastic Packaging machine	3	18	Beijing	One by one since 1994

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Advanced packaging technique is needed to reduce waste.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

Generally to contact the suppliers directly while domestic agencies are employed for imported machinery. Sometimes tendering is applied to large-scale purchases. There is need but there is no current budget.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCATION.

Attend a variety of expos, mainly for domestic machinery. But no purchase will be made through expos.



8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Imported machinery is superior in respects to speed and stability. However, in north China labor is very cheap, and the company is a state-owned enterprise, which means it has to employ a certain quantity of labor on behalf of the government. So domestic machinery is preferred at present. In the future this situation will change.



Interviewee Dongbei Pharmaceutical Plant
Address 37 Zhonggong N. Street, Tiexi District, Shenyang, Liaoning Province
Phone 24-2580-6517
Fax 24-2580-6888
Ownership State-owned
G. Manager Chen Gang
Number of Staff 1,200

1. MAJOR PRODUCTS OF THE COMPANY: Antibiotics

2. ASSETS, TURNOVER, AND PROFIT AS OF 1999 (US\$ 1,000)

Assets	Turn Over	Gross Profit
78,824	84,706	7,059

3. CURRENT PACKAGING STATUS

In bottles and pouches.

4. NAME, QUALITY, AND MANUFACTURER OF PACKGING MACHINERY IN USE

(US\$ 1,000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Pouch packaging machine	3	24	Tianjin	
2	Bottle filling machine	2	177	Dutch	1996
		2	141	Italian	1997

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Attention is paid to airproof and sterile packaging.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

Very possible to purchase imported machinery since the company is about to expand. Large funds will be applied to the purchase of packaging machinery in the coming years.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCATION.

Attend a variety of expos for packaging machinery, mainly for domestic products. Purchases will be made through expos, such as the China International Packaging Industrial Expo held in Guangzhou.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Domestic machinery is not preferred because of poor hygiene features.



Interviewee Beijing Double-Crane Pharmaceutical Co., Ltd.
 Address 9 Guanghai Rd., Chaoyang District, Beijing
 Phone 10-6506-0077
 Fax 10-6502-4698
 Ownership State-owned public enterprise
 G. Manager Zhang Yu
 Number of Staff 500

1. MAJOR PRODUCTS OF THE COMPANY

(1) Antibiotics (2) Various medicines

2. ASSETS, TURNOVER, AND PROFIT AS OF 1999 (US\$ 1,000)

Assets	Turn Over	Gross Profit
190,554	121,376	53,422

3. CURRENT PACKAGING STATUS

Mainly in bottles, pouches, boxes, and capsules.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE
 (US\$ 1,000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Box Assembly	3	353	German	1993-1994
2	Pouch Assembly	12	35 for imported, 9 for domestic	Italian and domestic	1992
3	Bottle assembly	2	94	Taiwanese and domestic	1994-1995
4	Capsule	2	47	Korean	1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Imported machinery is preferred to reduce manpower packaging.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

An annual fund of several hundreds of thousands of US dollars is applied to the purchase of packaging machinery.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCATION.

Sometimes purchase through expos but sometimes suppliers contacts them directly. For imported machinery the trade affair is conducted by its own import and export company. Major expos attended include China International Packaging Technology Expo.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The warranty period of imported machinery is relatively shorter due to the high stability, normally one year. For domestic machinery, if the quality is good, the warranty period is about one year, and if the stability is poor, the warranty period is over one year. However, there are various problems with imported machinery in respects to repair and fittings. The fittings are too expensive, and the repair cycle is too long which seriously affects the manufacturer. American and European machinery are with high stability while Taiwanese and Korean packaging machinery are relatively cheaper with poorer performance.



Interviewee Xi'an Janssen Pharmaceutical Co., Ltd.
Address 34 Wanshou N. Rd., Xi'an Shaanxi Province.
Phone 29-323-4455
Fax 29-323-5161
Ownership Joint Venture
G. Manager Zhuang Xiangxing
Number of Staff 1,500

1. MAJOR PRODUCTS OF THE COMPANY

(1) Stomach Medicine (2) Anti-erethism medicine

2. ASSETS, TURNOVER, AND PROFIT AS OF 1999 (US\$ 1,000)

Assets	Turn Over	Gross Profit
197,647	264,706	44,706

3. CURRENT PACKAGING STATUS

Mainly in bottles, boxes, pouches, and aluminum-plastic packages.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(
US\$ 1,000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic assembly	8	706	German Bosch, IWKA, UHLMANN	1987-1988 / 1991-1992
2	Automatic assembly	3	706	Italian IMA	1987-1988

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Mainly concerned about vacuum and dosage techniques.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

Normally contact directly with China offices of overseas suppliers. No current need for new machinery.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCATION.

Hardly any. The very seldom visit expos, and when they do it's just to understand the latest trends in packaging. No purchases will be made through expos.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

A quantity of fittings and parts are stored in the company so there are few after-sale problems. Domestic machinery factories process some smaller parts and fittings. The warranty periods for imported machinery are one year. And after one year if there are any problems with the machinery, the maintenance expense is US\$ 2,000.

14.5 The Personal Care Industry

An overview of the trade of personal care in China

Personal care industry went through a developing stage in the 1980's in China. The 1990's witnessed the rapid expansion of the consumer market of personal care products, with annual growth rate of 35%. Personal care goods have become the sector that enjoys the most rapid, and the greatest impact. The expansion was mainly due to the increase of per capita income.

The trend for personal care market in China

By 2010, personal care goods in China will achieve the turnover of RMB 80 billion with an annual growth rate of 12.9%. With the development, a new pattern is growing.

1. Natural personal care goods gains popularity.
2. The market for personal care products for the middle and old aged people is enormous.
3. Professional personal care goods are in urgent need. At present there are about 100 thousand beauty salons across the country, yet the consumers are worried about their quality. According to the statistics, 63% of the female interviewees were willing to go to beauty salon if the product quality there is both reliable and effective. Any enterprise in this trade will not neglect the enormous market.
4. The market of children's personal care goods is still on rise and is looking for any practical, excellent, and novel goods.
5. Personal sports equipment designed against sweating, odor, dampness, inflation, germ, and convenience, will find ready market.

The analysis of the question survey in this trade

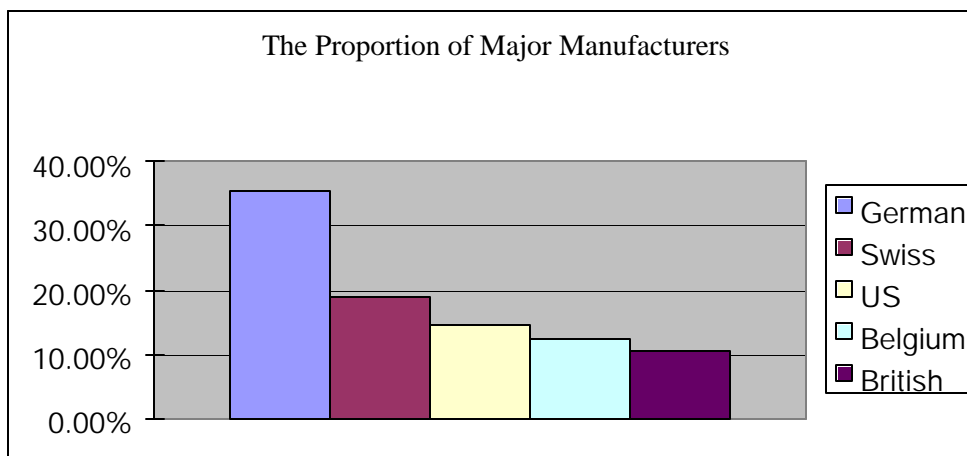
Figure 1 Comparison among countries

	Country	Value USD 1000	Percentage %
Imported from	Germany	564	35.3
	Italy	29	1.8
	U.S.	231	14.5
	Japan	45	2.8
	Switzerland	300	18.8
	France	1	0.1
	Sweden	14	0.9
	Belgium	200	12.5
	Britain	170	10.6
	Canada	29	1.8
China		14	0.9
Total		1,597	100

Figure 2 Comparison in terms of the year of importation

	Importation USD 1000	Machinery made in China
Prior to 1990	38	2
1990	88	-
1991	120	-
1992	120	-
1993	354	3
1994	120	-
1995	104	3
1996	213	6
1997	7	-
1998	9	-
1999	198	-
2000	212	-
Total	1,583	14

- (1) Figure 1 shows the even distribution of the importation in this trade. The five top countries that import are Germany, Switzerland, U.S., Belgium, and Britain with the small percentage of 0.9% for China. The comparison is explained by the larger proportion of the joint ventures in this trade, which tend to use imported machinery.



- (2) A stable trend of importation is found in chart 2 except for the years 1997 and 1998.
- (3) The majority of the interviewed enterprises have no purchase budget for packaging machinery in the near future. The main reason is that most of the enterprises in this trade are not gaining profit but P&G.
- (4) With their stable channel of supply, large -scale joint ventures in this trade are not inclined to attend packaging Expos.

Interviewee C-bons Group Ltd.
 Address C-bons Building, Huangpu Rd, Wuhan, Hubei Province
 Phone 027-82920888
 Fax 027-82920889
 Ownership Joint-ventured
 G. Manager Liang Liangsheng
 Number of Staff 3,000

1. MAJOR PRODUCTS OF THE INTERVIEWEE: C-bons, Lihua Sibao and Shulei.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
76,471	115,294	4,706

3. CURRENT PACKAGING STATUS: Bottled, bagged.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Tube-processing line	15	141	Sweden	1993~1996
2	Bag-processing line	35	94	Japan	1994~1995

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

The applied imported equipment has reached the standard packaging requirements in both technology and quality.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We have put no investment in purchasing packaging machine for years, nor will we purchase in the years to come. But we may purchase some if we expand our business scope.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

We often attend fairs and make direct negotiations with manufacturers during the fairs. In addition, there are packaging machinery manufacturers which promote their products through mail and E-mail. Sometimes, we surf on the network for the machine needed. The transactions are mainly completed with the agencies of foreign enterprises in China as well as direct contact with foreign manufacturers through our import company. The fairs we attend often are: International Pharmaceutical Fairs, and Cosmetics Packaging Tech Fair.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Imported machines are reliable in quality and seldom go wrong; but domestic ones are much worse. And a big gap exists in the way of processing speed. Highly automated, the imported machinery leads to quite a reduction of labors.



Interviewee Shanghai Jahwa Ltd.
Address 133 Tiantong Rd, Shanghai
Phone 021-63240752
Fax 021-63065335
Ownership State-owned
G. Manager Ge Wenyao
Number of Staff 2,500

1. MAJOR PRODUCTS OF THE INTERVIEWEE: MAXAM sun-proof series, Liushen skin-protector product and MAXAM hand oil.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
76,470	14,118	(1,412)

3. CURRENT PACKAGING STATUS: Bottled and bagged.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Instilling machine	3	141	Japan	1994
2	Carton-filling machine	3	35	Shanghai Songjiang	1993
3	Box-filling machine	5	29	Ningbo Lianfeng	1995
4	Carton-unwrapping machine	2	15	Home-made	1989

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Raw material is of vital importance to the packaging capability. And packaging machinery affects packaging technology.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We have made plans to buy imported packaging machinery to replace domestic equipment and survive the fierce competition in the cosmetics industry. Five million RMB is to be invested in purchasing.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

We often attend big packaging machinery industry fairs held in Beijing, Shanghai, and Guangzhou. Orders were placed during the fairs of Southern China Packaging Machinery Industry Tech Fair and International Pharmaceuticals & Cosmetics Fair.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Generally speaking, imported machinery is superior to domestic equipment especially with respect to speed, stability, quality, and after-sales service.



Interviewee Shanghai Kao Ltd.
Address 333 Huawang Rd, Minhang, Shanghai
Phone 021-64091210
Fax 021-64094930
Ownership Japanese exclusive-invested
G. Manager Japanese
Number of Staff 1,100

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Shampoo and face-cleaning product.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
(Unit: USD 1000)

Assets	Turnover	Profit
104,706	103,529	(436)

3. CURRENT PACKAGING STATUS: Bottled and boxed.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE
(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	All-auto processing line	8	212	Japan	1993

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY
To design more nice-looking and reasonably designed packaging styles.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST
We will allocate a budget of RMB 50~60 thousand to purchase packaging machinery.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST.

We often attend big packaging machinery industry fairs and have made up our mind to purchase imported machines through on-site inspection and information collected in the fairs. We usually attend fairs held in big cities especially China International Multi Packaging Machinery Industry Fair and China International Pharmaceuticals & Cosmetics Tech Fair.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY
Imported machines are impressive in speed and stability, but they cause trouble because of the lack of accessories in the market. The solution is to apply domestic equipment.



Interviewee Shanghai Unilux Ltd.
Address 2310 Yangshupu Rd, Shanghai
Phone 021-65390822
Fax 021-65438234
Ownership Joint-ventured
G. Manager Zhang Jincheng
Number of Staff 900

1. MAJOR PRODUCTS OF THE INTERVIEWEE: LUX toilet soap, LUX shampoo products and LUX bathing.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
(Unit: USD 1000)

Assets	Turnover	Profit
36,471	198,824	

3. CURRENT PACKAGING STATUS: Boxed and bagged.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE
(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Binding machine	3	176	Italy	1994~1995
2	Instilling machine	6	1600	Germany	1993
3	Label-sticking machine	3	24	Germany	1993~1995
4	Wrapping machine	2	18	Germany	1994

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY
Try to adopt more imported equipment, make our production more automatic, and promote the unity of our packaging styles.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST
We have made no plan to buy new packaging machinery in the near future.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?
We seldom attend domestic packaging machinery industry fairs. Our packaging machines are regulated and purchased by our headquarter in China.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY
Imported machines are high in price, but our headquarters insists on purchasing them. The prime factor considered is the quality of aluminum coating of the machines, then security and then other factors: stability, free-maintainability. According to these criteria, imported packaging machines are more suitable.



Interviewee Shanghai Henkel Common Cosmetics Ltd.
Address 2691 Pingliang Rd, Shanghai
Phone 021-65668637
Fax 021-65663790
Ownership Germany-China Joint-ventured
G. Manager Zhu Jincai
Number of Staff 1,200

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Kemeng cosmetics series and shampoos.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
29,412	37,647	(236)

3. CURRENT PACKAGING STATUS: Bottled.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Bottle-processing line	3	353	Sweden	1996
2		1	1500	Britain	1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

To make the appearance of our packaging styles more appealing and delicate.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We have made no plans to buy any packaging machinery at present. We may purchase some in such cases: (1) Scale-enlargement; (2) Equipment renewal.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

We seldom attend packaging machinery industry fairs. Our packaging machinery is purchased through agencies which we have stable relations with.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

We use 100% imported packaging machinery and the after-sales service is done timely by the packaging machinery agencies who also offer us free regular training. Imported machines are superior to domestic in: (1) Low breakdown; (2) High automation; (3) Convenient maintaining.



Interviewee Guangzhou Colgate Ltd.
Address 33 Qingnian Rd, Economy & Tech. Dev. Zone, Guangzhou
Phone 020-82214468
Fax 020-87550977
Ownership Joint-ventured
G. Manager Fang Baohui
Number of Staff 400

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Toothpaste and tooth brush. .

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
50,588	40,000	5,294

3. CURRENT PACKAGING STATUS: Boxed and tubed.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Tooth paste packaging	4	800	USA	1991~1993
2	processing line	3	500	Germany	1991~1993

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

Have adopted imported equipment, we reach the standard packaging requirements in both technology and quality.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

It is our parent company that is responsible for purchasing. The China company only purchases some parts and components, and the total amount will be decided by the parent company.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

Seldom.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

We have been using imported packaging machinery all the time, and few domestic machines have been used. So we have no idea about the differences of home and abroad.



Interviewee Beijing Sanlu Factory
Address 4 Yongsheng Lane, Xingfu Boulevard, Congwen District, Beijing
Phone 010-67115558
Fax 010-67111857
Ownership State-owned
G. Manager Du Bin
Number of Staff 2,400

1. MAJOR PRODUCTS OF THE INTERVIEWEE: SOD milk, daytime cream, night cream and cleaning milk.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
(Unit: USD 1000)

Assets	Turnover	Profit
62,353	76,471	2,941

3. CURRENT PACKAGING STATUS: Bottled and boxed.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE
(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Vacuum emulsifying packaging machine	8	47	Shanghai Huaming	1996
2	Air-powered half-auto instilling machine	24	2	Shanghai Feipu	1996
3	Paste transportation machine	22	2	Shanghai Feipu	1996
4	Wrapping machine	12	1	Beijing Peili	1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY
Pneumatic filling machine is employed in filling. Mechanical propeller pump is employed in material conveying. Mechanical semi-automatic rollers are employed in bottle washing. These machines produce: (1) Higher instilling accuracy, (2) Better working efficiency, (3) Lower working strains.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST
We are to invest RMB 500,000 in purchasing packaging machine in 2001.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?
We often attend big packaging machinery fairs, e.g. China International Multi-Packaging Fair. These fairs enable us to see the developing trend of future packaging machines that might be adopted. And we also learn how to improve our present machines to promote their productive ability and efficiency.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY
Most of our packaging machinery is made in China, so we have little to conclude between domestic and imported. We are satisfied with domestic machinery. The manufactures have done a good job in after-sales service.



Interviewee O'Neal Cosmetics Ltd.
Address 11 Jianxin Rd (W), Jiangbei District, Chongqing
Phone 023-67851789
Fax 023-67862138
Ownership Joint-ventured
G. Manager Huang Jiaqi
Number of Staff 2,100

1. MAJOR PRODUCTS OF THE INTERVIEWEE: O'Neal bottled shampoo and O'Neal bagged shampoo.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
(Unit: USD 1000)

Assets	Turnover	Profit
36,471	58,824	2,428

3. CURRENT PACKAGING STATUS: Bottled and bagged.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE
(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	All-auto processing line (tinned)	3	1765	Germany BOSCH	2000
2	Wrapping machines (bagged) 60 bags/min	6	235	Germany	2000
3	Wrapping machines (bagged) 40 bags/min	6	118	Italy	2000

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY
To improve the appearance of our packaging styles, adopt high-grade raw materials, and establish a better image of our products.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST
We have renewed all of our packaging machines most with imported ones in 2000. At present, we are complete in equipment and don't need any more. We purchase through 3 terms of payment: (1) Deposit, (2) Delivery against payment, (3) Payment after test-run.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?
We do attend packaging machinery fairs most of which are those held in Shanghai, e.g. China International Processing and Packaging Tech Fair. At first, orders were placed through agencies; later direct contact has been made with the office of the foreign manufacturers.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY
We get modeled parts and components from home manufacturers, after the imported ones are worn. The modeled parts are satisfactory.



Interviewee Guangzhou Procter & Gamble Ltd.
Address 1 Binhe Rd, Economy & Tech. Dev. Zone, Guangzhou
Phone 020-86698828
Fax 020-82218526
Ownership Joint-ventured
G Manager Guo Xinyu
Number of Staff 4,000

1. MAJOR PRODUCTS OF THE INTERVIEWEE: Rejoice, and Whisper sanitary towel, Head & Shoulders and Pantene shampoo and Safeguard soap. .

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
(Unit: USD 1000)

Assets	Turnover	Profit
652,941	616,471	232,941

3. CURRENT PACKAGING STATUS: Boxed, bottled and bagged.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE
(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Packaging processing line	12	3000	SIG	1989~1996
2	(bottled)	4	2000	Cloosterman	1990~1993
3	Packaging machine (boxed)	6	1500	OTIMA	1993~1995
4	Code-sticking machine	12	18	Markem	1990~1993

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

It is of vital importance to promote our packaging style better the image of our brand. We have been making efforts to adopt the best packaging machines and raw materials possible.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

As a transnational enterprise, our purchases of packaging machinery are decided by each departments

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENTS PURCHASED ON THAT OCCASION?

Seldom. We have our regular business partners: SIG, Cloostermans, ORION, Markem, Videojet.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

It is not true that all imported machines are advanced in technology. But domestic manufacturers are too simpleminded, e.g. indulgent in price competition, unmindful on the wrappings and the whole image of their products. By the way, home producers have the problem of management. With respect to after-sales service and technology, domestic manufacturers are almost at the same level with foreign producers.



Interviewee Johnson & Johnson (China) Ltd.
 Address 3285 Dongchuan Rd, Minhang, Shanghai
 Phone 021-64302010
 Fax 021-64635875
 Ownership USA exclusive-invested
 G. Manager Wu Renwei
 Number of Staff 250

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

Tooth brush, Baby-care products, Prickly-free powder and Woman-care products.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
69,412	76,471	(20,000)

3. CURRENT PACKAGING STATUS: Boxed, bottled and bagged.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Tooth packaging machine	8	141	Order from USA	1997~1998
2	Powder packaging processing line	2	35	USA	1992~1998
3	Liquid instilling processing line	3	412	Canada KALISH	1999
4	Prickly-free powder processing line	1	1700	Britain	1999

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

The newly imported machines improved our packaging.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We purchased packaging machines 3 years ago, and ours are complete now. So few will be bought in the years to come.

7. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIMENTS PURCHASED ON THAT OCCASION?

We often attend packaging machine fairs. We may make direct contact with the manufacturers, and their promotional materials may be sent to us through mail and E-mail. Sometimes, we may surf on the net for some information. The transactions are completed with agencies of foreign enterprises, or direct dealing between our Import & Export Company and foreign producers.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Generally speaking, we will adopt imported machines to ensure the packaging quality of our product. The imported machinery is known for their security, reliability, and free or little maintainability.

14.6 The Electronics Industry

An overview of China's electronics industry

2000 witnessed an improvement in the international economy after the influence of the Asian Crisis faded. A favorable external environment has helped China expand its exportation and attract foreign investment.

As for the internal environment, China is actively speeding up the development of the IT industry to bring the national economy into the information era. Further, the policies to help upgrade industries and to open the western territories of China have also contributed to the healthy growth of electronics industry.

The following features characterize the current development of this industry:

(I) The prominent expansion of scale

1999 saw a prominent expansion of electronics industry, embodied by the soaring total assets to RMB 469.6 billion, an increase of 18.9% over the last year; the turnover to RMB 430 billion, an increase of 27.7%; the industrial added value to RMB 106.2 billion, an increase of 26%; tax to RMB 33 billion, and increase of 39%; and the average growth rate of 26%.

(II) Further improvement of industrial structure

1. The decreasing percentage of state-owned enterprises and the abrupt increase of non-state-owned ones.

The former was decreased from 70% in 1998 to 67% in 1999 with a corresponding change in the output value from 65% to 58%. At the same time, the rapid growth of the latter is reflected by the following changes: the assets and output value of joint stock enterprises grew from 16% to 17% and 14% to 17% respectively while those of joint ventures from 33% to 36% and 42% to 45% respectively, according to the statistics in 1999.

2. Improved industrial structure.

The ration among the three types of structure changed from 36.7:37.3:25.9 to 38.2:35.8:25.9. Of the three types, investment sector with its strong momentum has become an important force to provide incentive to the electronics industry, its products being 3 percentage points higher than consumer sector.

3. The trend toward centralization.

2389 electronics enterprise in 1999 were 525 less than the year before. Among them were 384 large-scale ones whose industrial added value was RMB 67.1 billion, accounting for 63% of the total, 3.1 percentage points higher than the average rate. The annual profit per capita of the electronics industry was RMB 133.34 million, 5% higher than the year before.

(III) The obvious trend of globalization of technology, production, formation of complete set, and market; strengthened role of joint ventures in the industry

The global electronics industry is undergoing the reorganization of structure and pattern. With the advantage in capital, technology, and brand, transnational corporations are vying for China, an enormous market. This results in an international competition in China and the globalization of domestic market. Nowadays, China has become an important part of the international electronics product market.

Tendency of China's electronic market for the year 2001

- (I) The estimated value will be USD152.9 billion and remain the brisk momentum.
- (II) Technological progress will exert important effect on electronic market. The progress reduces cost, upgrade the product, but also shortens the life circle of the commodities, thus provides the premise for expanding enterprise scale and market share.
- (III) Technological renovation makes investment easier; enterprises of electronic industry enter into the market at lower cost. On the other hand, with the profound change, many new types of business and service crop up, and the annex and reorganization regardless of trade, nation is taking place as the traditional trades disappear, interpenetrate, and overlap.

The demand of China's electronics enterprises for imported packaging machinery

The development of electronics industry in China demands more advanced automatic packaging machinery. All the large-scale and solely foreign funded electronics enterprises import complete set of production lines, including superior packaging equipment. It becomes harder for domestic packaging machinery to find its way to the mentioned two types of enterprises.

Major foreign funded electronics enterprises in China

Name	Telephone
Konka Group Co., Ltd.	0755-3333222
Philips Electronics (China) Group	0591-7090040
Motorola Electronics (China) Co., Ltd.	022-25329191
Shanghai Huahong NEC Electronics Co., Ltd.	021-50310909
Dalian Toshiba Television Co., Ltd.	0411-7624888
Sony (China) Ltd.	010-65880969

The analysis of the question survey in this trade

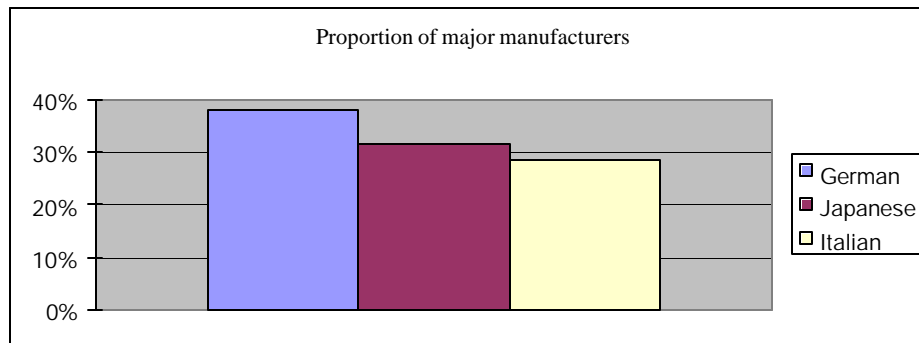
Figure 1 Comparison in terms of major import source countries

	Country	Value USD 1000	Percentage %
Imported from	Germany	564	35.3
	Italy	29	1.8
	U.S.	231	14.5
	Japan	45	2.8
	Switzerland	300	18.8
	France	1	0.1
	Sweden	14	0.9
	Belgium	200	12.5
	Britain	170	10.6
	Canada	29	1.8
China		14	0.9
Total		1,597	100

Figure 2 Comparison in terms of the year of importation

	Importation USD 1000	Machinery made in China
Prior to 1990	38	2
1990	88	-
1991	120	-
1992	120	-
1993	354	3
1994	120	-
1995	104	3
1996	213	6
1997	7	-
1998	9	-
1999	198	-
2000	212	-
Total	1,583	14

- (1) As shown in Figure 1, the major importers of packaging machinery in electronic sector are Germany, Italy, and Japan. Nonetheless, this figure does not necessarily reflect the overall situation in the trade, since the five interviewees are the top five Chinese enterprises. In fact, small and medium-sized electronic enterprises tend to use domestic packaging machinery or equipment modeling on foreign one because the package for electronic products do not rely very much on technology.



- (2) Figure 2 reflects the concentration of importation of packaging machinery between 1993 and 1998 during this period the leading household electronic appliance producers underwent fast development. Besides, the pattern in this trade has taken shape. It follows that there will not be a breakthrough in purchase of such machinery.
- (3) With their own stable channels of supply, these leading enterprises seldom attend packaging Expos.
- (4) What is noteworthy is Jingshan Light Industry Factory, a supplier of corrugated cartons that controls 70% of the domestic market and whose customers are many of the small and medium-sized electronic enterprises.



Interviewee Konka Electronics (Group) Co., Ltd.
Address Shantou Rd., Huaqiao City, Shenzhen, Guangdong Province
Phone 0755-3333222
Fax 0755-6000082
Ownership Stock company
G. Manager Zhong Yuntian
Number of Staff 2,400

1. MAJOR PRODUCTS OF THE COMPANY: TV sets, mobile phone, refrigerator, air-conditioner and washing machine

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:
(Unit: USD 10 00)

Assets 1000,000	Turnover 1,188,235	Profit 72,941
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3. CURRENT PACKAGING STATUS:
Corrugated carton

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic carton packing machine	12	400	Italy	1994-96
2	Automatic casing machine	10	200	Germany	1996
3	Labeling machine	10	1	China	1994
4	Sealing machine	12	1	Guangdong, China	1994-96

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We are satisfied with the present package. The room for improvement lies in the degree of automation. We will upgrade the packaging workmanship without slowing down the packaging speed.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We are going to purchase sets of packaging machinery totaling RMB 5 million.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Seldom. Generally, we entrust the purchase to an agency in Hong Kong who is also responsible for the after-sale service.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The advantages of imported machinery stand out in comparison with the domestic ones, yet the maintenance is both expensive and takes longer time.



Interviewee Sichuan Changhong Electronics Co., Ltd.
Address 35 Mianxing Rd. E., Gaoxin District, Mianyang, Sichuan Province
Phone 0816-2411114
Fax 0816-2418518
Ownership Stock company
G. Manager Zhao Yong
Number of Staff 30,000

1. MAJOR PRODUCTS OF THE COMPANY: TV sets, video and aural equipment and air conditioner.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit:

USD 1000)

Assets	Turnover	Profit
1,941,177	2,117,647	108,235

3. CURRENT PACKAGING STATUS:

Corrugated carton.

4. NAME, QUALITY, AND MANUFACTURER OF PACKAGING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic carton packing machine	30 sets	300	Japan: Matsushita	1993-96
2	Semi-automatic sealing machine	30 sets	2	China: Guangtai Packaging Machinery Factory	1993
3	Wrapping machine	5	3	China	1996

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We hope manufacturers will improve the outward appearance of package, particularly, of the durability of the key parts, which are easily worn, and reduce the price of imported parts.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

It is certain that we will need more packaging machinery as the enterprise grows, though the annual investment won't be large.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Hardly attend them. We purchase the machinery at Expos when urgent need arises.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

Imported machinery has a much higher degree of automation, which means less use of labor, and thus the reduction of cost.



Interviewee Shanghai Broadcasting and Television (Group) Co., Ltd.
Address 140 Tianlin Rd., Shanghai
Phone 021-64701316
Fax 021-64700415
Ownership Stock company
G. Manager Ma Zufe
Number of Staff 12,000

1. MAJOR PRODUCTS OF THE COMPANY: "Jinxing" color TV set.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
449,412	261,176	14,118

3. CURRENT PACKAGING STATUS: Corrugated carton.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic packaging machine	2	1,176	Japan Nittoh, Matsuhi	1993-96
2	Automatic packaging machine	2	71	Entrusted imitation	1992-93

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We are satisfied with the packaging machinery in use because the package requirement for electronic products is simple.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No substantial purchase is made in the recent few years and there will be no great investment in the near future.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Hardly attend any. Our Japanese machine was bought years before when our executives visited Japan for business, according to which the other two sets of equipment are modeled in some domestic privately owned enterprises. The two machines are in good performance owing to the small technological content.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The Japanese machinery had a warranty the first two years after it was purchased, and the manufacturers inquired about the maintenance from time to time. After that, we have to depend our own engineers to tackle the technical problems, however, the machinery is simple to handle.



Interviewee TCL Group Co., Ltd.
Address TCL Industrial Mansion, Eling Rd. S., Huizhou, Guangdong
Phone 0752-2260838
Fax 0752-2261868
Ownership Joint venture
G. Manager Li Jiansheng
Number of Staff 30,000

1. MAJOR PRODUCTS OF THE COMPANY: Color TV sets, telecommunication products.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
1,000,000	1,764,706	40,000

3. CURRENT PACKAGING STATUS: Corrugated carton.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Semi-automatic carton packing machine	10	35	Imitation	1993-94
2	Nailing machine	20	1	Imitation	1993-94
3	Wrapping machine	10	3	China: Ningbo Lianfeng	1993-94

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

The package won't change very soon. We hope for higher degree of automation to reduce the manual involvement.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

No budget for imported machinery. All packaging machinery is produced in imitation to the machines of foreign manufacturers.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Occasionally. We learn from our counterparts there and get to know about the foreign machines.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

We have never uses imported machinery, and the modeled machine in use satisfies our production.



Interviewee Legend Group Control-stock Co., Ltd.
Address 10 Xueyuan Rd. S., Zhongguancun, Beijing
Phone 010-6298888
Fax 010-62318070
Ownership Stock company
G. Manager Liu Chuanzhi
Number of Staff 10,678

1. MAJOR PRODUCTS OF THE COMPANY: Computer and components.

2. THE ASSETS, TURNOVER, AND PROFIT AS OF 1999 IS LISTED BELOW:

(Unit: USD 1000)

Assets	Turnover	Profit
1,109,412	1,388,235	67,059

3. CURRENT PACKAGING STATUS: Corrugated carton.

4. NAME, QUALITY, AND MANUFACTURER OF PACKING MACHINERY IN USE

(Unit: USD 1000)

	Name	Quantity	Unit Value	Manufacturer	Year of Purchase
1	Automatic carton packing machine	20	600	Germany	1993-98
2	Semi-automatic sealing machine	25	2	China: Guangdong Light Industry Machinery Factory	1993-94

5. EXPECTATIONS AND PLANS ON IMPROVEMENT OF PACKAGING QUALITY

We tend to use more imported machinery for higher degree of automation and faster speed. This is also necessary for our development. However, the current packaging quality and workmanship are satisfactory.

6. KIND OF PACKAGING MACHINERY TO BE PURCHASED AND ESTIMATED COST

We will invest a minimum of USD 800 thousand in packaging machinery. Over recent years we have purchase some equipment continuously from Germany and kept good relations with the manufacturers.

7. DO YOU ATTEND ANY EXPOS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES. ANY EQUIPMENT PURCHASED ON THE OCCASION.

Seldom.

8. REMARKS ON USE OF BOTH DOMESTIC AND FOREIGN PACKAGING MACHINERY

The main gap between the domestic machinery and the imported ones is demonstrated in two respects: (1) packaging speed; (2) degree of automation.

14.7 Domestic Suppliers

INTERVIEWEE Hefei Light Machinery Factory
 Address 287 Qianshan Rd, Hefei, Anhui Province
 Phone 0551-5562448
 Fax 0551-5575119
 E-mail hfqgjxc@mail.hf.ah.cn
 Ownership State-owned
 Assets US\$ 13,194,000
 Number of Staff 1,200
 G. Manager Xia Yaowu

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

No.	Product Name
1	Beverage processing line (canned) 3000~36000 bottles/hour
2	500ml mineral water, tea-drink, fruit juice processing line (canned) 3000~36000 bottles/hour
3	640ml beer processing line (canned) 3000~36000 bottles/hour
4	Processing line (canned) 100~800 bottles/hour

2. THE ASSETS, TURNOVER, AND PROFITS AS OF 1997~1999 IS LISTED BELOW:

(Unit: USD 1000)

Year	Output	Turnover	Profits
1997	3,746	5,212	1,041
1998	4,968	4,945	988
1999	7,220	6,531	1,924

3. MARKET COVERAGE OF INTERVIEWEE'S PRODUCT AT HOME OR ABROAD :

Product	Market Coverage at Home
Beverage processing machine	30%
Beer processing machine	10%

4. PRICE TACTICS AND MARKETING MEANS:

To adopt low price tactics as the major means to dominate the market.

5. MAJOR CLIENTS OF THE INTERVIEWEE:

No.	Client Name
1	Guangzhou Sanshui Jian Li Bao (Group) Ltd.
2	Hebei Xurisheng (Group) Ltd.
3	(Beijing), (Chongqing), (Guilin) PEPSI cola Ltd.

6. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST:

No.	Fair Name
1	Shanghai International Beer & Beverage Tech & Equipment Fair
2	China International Beer & Beverage Tech & Equipment Fair



Interviewee Ningbo Shenyu Light Machinery Factory
Address 3 Xinying Rd, Juxi Town, Xiangshan County, Zhejiang Province
Phone 0574-5601427
Fax 0574-5601210
E-mail info@shenyu.com
Ownership Joint-stocked
Assets US\$ 4,118,000
Number of Staff 380
G. Manager Zhou Nengyong

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

No.	Product Name
1	Beverage processing line (bottled) BGS 24000~40000 bottles/hour including cap-pressing and bottle-washing bacteria-killing machines
2	Beverage processing line (canned) G2X150-300 including cap-pressing and bottle -washing bacteria-killing machines
3	Carton wrapping machine 2X1334
4	Beverage processing line (bottled, canned) 12000~36000 bottles/hour including loading and unloading, chest-washing machines

2. THE ASSETS, TURNOVER, AND PROFITS AS OF 1997~1999 IS LISTED BELOW:

(Unit: USD 1000)

Year	Output	Turnover	Profits
1997	2,118	2000	71
1998	2,941	2,706	165
1999	3,529	3,294	282

3. MARKET COVERAGE OF INTERVIEWEE'S PRODUCT AT HOME OR ABROAD :

Product	Market Coverage at Home
Beverage processing line (pop-pull can)	60%
Beer processing line	8%

4. PRICE TACTICS AND MARKETING MEANS:

To lower the price 15% of the level of Guangdong Light Industrial Ltd. and Nanjing Light Industrial Factory, offer good after-sales service.

5. MAJOR CLIENTS OF THE INTERVIEWEE :

No.	Client Name
1	He'nan Xinyang Beer Factory
2	Jiangxi Jingde Beer Factory
3	Hebei Baoding Jingyuan Factory
4	Tangshan Guquan Beer Ltd.
5	Hebei Wanquan Beverage Ltd.



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6. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST:

No.	Fair Name
1	2000 China International Beer & Beverage Equipment Fair
2	2000 Chongqing Foodstuff Machinery Fair



Interviewee Zhejiang Baochun Packaging Machinery General Factory of
King Star Group Ltd.
Address 19 Lane 185, Lucheng Rd, Wenzhou, Zhejiang Province
Phone 0577-8716482
Fax 0577-8716210
E-mail kingstar@kingstar-group.com
Ownership Collective
Assets US\$ 31,253,000
Number of Staff 238
G. Manager Jin Shaofen

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

No.	Product Name
1	Multi-use vacuum & air-pressing packaging machine
2	Multi-use bottle-sealing machine
3	Shrink packaging machine
4	All-auto liquid packaging machine

2. THE ASSETS, TURNOVER, AND PROFITS AS OF 1997~1999 IS LISTED BELOW:
(Unit: USD 1000)

Year	Output	Turnover	Profits
1997	5,294	5,212	400
1998	5,353	5,294	373
1999	6,118	6,012	171

3. MARKET COVERAGE OF INTERVIEWEE'S PRODUCT AT HOME OR ABROAD:

Product	Market Coverage at Home
Vacuum packaging machine	32.5%
Bottle-sealing machine	31%
Shrink packaging machine	11%
Liquid packaging machine	13%

4. PRICE TACTICS AND MARKETING MEANS:

Small profits but quick turnover; to establish 100 distribution agencies across the country and seek agents abroad, to promote our fame.

5. MAJOR CLIENTS OF THE INTERVIEWEE:

No.	Client Name
1	Shanghai Baimiao Ltd.
2	Guangzhou Procter & Gamble Ltd.



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6. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST:

No.	Fair Name
1	Shanghai International Foodstuff Packaging Machinery Fair
2	International Agricultural Product & Equipment Tech Exhibition Fair
3	Spring and Autumn Guangzhou Commodity Fair
4	20-year China Packaging Industry Exhibition Fair
5	Spring and Autumn China Sugar, Tobacco & Wine Fair



Interviewee Hangzhou Zhongya Packaging Machinery Ltd.
Address 16F Weixing Tower, 252 Wenshan Rd, Hangzhou
Phone 0571-8855808
Fax 0571-8855682
E-mail zhongya@mail.hz.zj.cn
Ownership Joint-ventured
Assets US\$ 5,409,000
Number of Staff 300
G. Manager Shi Zhongwei

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

No.	Product Name
1	Plastics cup processing line including molding, filling, cutting and sealing machines DXR-9000
2	Plastics cup processing line including molding, filling, cutting and sealing machines DXR-6000
3	All-auto revolving filling sealing machine GFR32-460
4	All-auto revolving filling sealing machine DGD-200F
5	All-auto plastics cup processing line SJ-50D

2. THE ASSETS, TURNOVER, AND PROFITS AS OF 1997~1999 IS LISTED BELOW:
(Unit: USD 1000)

Year	Output	Turnover	Profits
1997	1,880	1,174	612
1998	2,955	2,875	1,053
1999	2,529	2,525	480

3. MARKET COVERAGE OF INTERVIEWEE'S PRODUCT AT HOME OR ABROAD:

Product	Market Coverage at Home
DXR-9000	85%
DXR-6000	88%
GFR32-460	80%
DGD-200F	85%
SJ-50D series	85%

4. PRICE TACTICS AND MARKETING MEANS:

Aim at the most advanced equipment; introduce and digest international technology, develop products of high tech and high auxiliary value; price the products with absolute superior of 1/5~1/10 that of the same ones on the international market, occupy home market, extend foreign market; promote the sales by high quality, low price, and good after-sales service.

5. MAJOR CLIENTS OF THE INTERVIEWEE :

No.	Client Name
1	Beijing Sanyuan Group
2	Guangdong Lebvaishi Group
3	Shanghai Guangming Group
4	Wenzhou Junyao Group
5	Jiangsu WeiWei Group

6. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST:

No.	Fair Name
1	China International Foodstuff Processing & Packaging Machinery Tech Fair
2	International Packaging Machinery & Foodstuff Processing Fair
3	2 nd International Foodstuff Processing & Packaging Machinery Fair



Interviewee Guangdong Zhaoqing Jialong Packaging Machinery (Group) Ltd.
 Address 30 the 3rd Jianshe Rd, Zhaoqing, Guangdong Province
 Phone 0758-2233120
 Fax 0758-2233133
 E-mail autoc@163.net
 Ownership Limited-reliability company
 Assets US\$ 36,918,000
 Number of Staff 800
 G. Manager Wu Di

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

No.	Product Name
1	Corrugated paper processing machines
2	Dissolvable printing machine,
3	All-auto label-sticking machine
4	3-layer Rose air machine
5	Computer-controlled half-auto high speed carton-binding machine

2. THE ASSETS, TURNOVER, AND PROFITS AS OF 1997~1999 IS LISTED BELOW:

(Unit: USD 1000)

Year	Output	Turnover	Profits
1997	14,118	10,087	1,348
1998	13,099	9,682	1,273
1999	14,205	10,496	1,296

3. MARKET COVERAGE OF INTERVIEWEE'S PRODUCT AT HOME OR ABROAD:

Product	Market Coverage at Home
Corrugated paper processing machines	33%

4. PRICE TACTICS AND MARKETING MEANS:

There have been set up distribution agencies in Beijing, Shanghai, and Guangzhou;
 Small profit but quick turnover.

5. MAJOR CLIENTS OF THE INTERVIEWEE:

No.	Client Name
1	Yunnan Kunming Fubao Carton Factory (7 layers)
2	Jiangsu Shuangdie (Group) Ltd. (7 layers)
3	Jiangsu Wujiang Carton Factory (5 layers)
4	Packaging Factory of Yunnan Qujing Tobacco Ltd. (7 layers)
5	Shanghai Huanuo Industrial Ltd. (5 layers)



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6. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST:

No.	Fair Name
1	(Spring and Autumn) China Export Commodity Fair
2	China Packaging Machinery 20-year Exhibition Fair
3	China Packaging Machinery 50-year Exhibition Fair
4	China International Packaging Fair (Beijing)
5	Fairs held in other provinces



Interviewee Tianjin Huayi Ltd.
Address 8 the 3rd T-gu Rd, Hongqiao District, Tianjin
Phone 022-26530274
Fax 022-26378264
E-mail huayi@public.tj.cn
Ownership State-owned
Assets US\$ 7,262,000
Number of Staff 797
G. Manager Zhang Guowei

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

No.	Product Name
1	Tobacco processing machines (hard packed packaging machines)
2	Foodstuff packaging machines
3	Alkali battery processing line

2. THE ASSETS, TURNOVER, AND PROFITS AS OF 1997~1999 IS LISTED BELOW:
(Unit: USD 1000)

Year	Output	Turnover	Profits
1997	6,158	6,158	300
1998	6,587	6,587	353
1999	6,994	6,994	495

3. MARKET COVERAGE OF INTERVIEWEE'S PRODUCT AT HOME OR ABROAD:

Product	Market Coverage at Home
Tobacco processing machines	40%

4. PRICE TACTICS AND MARKETING MEANS:

Fairs, sales promoting.

5. MAJOR CLIENTS OF THE INTERVIEWEE:

No.	Client Name
1	Peiling Tobacco Factory
2	Xiamen Tobacco Factory

6. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST:

No.	Fair Name
1	1999 Lanzhou Packaging Machinery Fair
2	2000 Wuxi Packaging Machinery Fair
3	1999 Beijing Packaging Machinery Fair



Interviewee China Liangfang Packaging Equipment (General) Ltd.
Address 11 Outer street of nanmen, Langfang
Phone 02316-2022778
Fax 0316-2050615
E-mail lfpea@lf-user.he.cninfo.net
Ownership State-owned
Assets US\$ 1,921,000
Number of Staff 700
G. Manager Du Zhenqing

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

No.	Product Name
1	Filling processing lines of beer, beverages, and pure water

2. THE ASSETS, TURNOVER, AND PROFITS AS OF 1997~1999 IS LISTED BELOW:
(Unit: USD 1000)

Year	Output	Turnover	Profits
1997	6,613	6,604	382
1998	6,553	6,541	368
1999	6,353	6,353	353

3. MARKET COVERAGE OF INTERVIEWEE'S PRODUCT AT HOME OR ABROAD:

Product	Market Coverage at Home
Filling processing lines of beer, beverages, and pure water	10%

4. PRICE TACTICS AND MARKETING MEANS:

As recommended by home agencies and same-traders, to set our products at a high and medium grade, occupy 30% market at home, offer free test run for some intimate partners, and actively expand international market in Japan, Egypt, and Saudi Arabia.

5. MAJOR CLIENTS OF THE INTERVIEWEE:

No.	Client Name
1	Lianjian Group (beer, cola)
2	Beijing Tap-water Ltd. (pure water)
3	Hanjian Group (mineral water)

6. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST:

No.	Fair Name
1	Fair for same-traders of CMPI & CLMPI (light machinery) every 2 years
2	Harbin Fair
3	Urumchi Fair
4	Guangzhou Fair (autumn)



Interviewee Nanjing Light Machinery Factory
Address 532-1 Zhongshan Rd (E), Nanjing
Phone 025-5600335
Fax 025-4611804
E-mail sales@njqi.com
Ownership State-owned
Assets US\$ 17,647,000
Number of Staff 1,300
G. Manager Jiao Xuansheng

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

No.	Product Name
1	Filling processing lines of beer and beverages

2. THE ASSETS, TURNOVER, AND PROFITS AS OF 1997~1999 IS LISTED BELOW:
(Unit: USD 1000)

Year	Output	Turnover	Profits
1997	21,994	21,526	247
1998	22,598	22,460	224
1999	23,582	23,308	212

3. MARKET COVERAGE OF INTERVIEWEE'S PRODUCT AT HOME OR ABROAD:

Product	Market Coverage at Home
Filling processing lines (beer and beverages)	30%

4. PRICE TACTICS AND MARKETING MEANS:

Agencies have been set in Tsingtao and Xiamen and will be set up in Beijing, Chongqing, and Shenyang. There is a specific distribution company that includes parts sub-company and after-sales service sub-company. Our products have been exported to S.E. Asia. We also promote our impact through attending the fairs held by China Light Machinery Department.

5. MAJOR CLIENTS OF THE INTERVIEWEE:

No.	Client Name
1	Beijing Yanjing Beer (Group) Ltd.
2	Tsingtao Beer (Group) Ltd.
3	Huiquan Beer
4	Shenyang Huarun

6. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST:

No.	Fair Name
1	Fairs held by China Light Machinery Department



Interviewee Shandong Anqiu Light Machinery Ltd.
Address 276 Weixu Rd (S), Anqiu, Shandong Province
Phone 0536-4381686
Fax 0536-4381562
E-mail luquan@public.wfptt.sd.cn
Ownership Collective
Assets US\$ 10,588,000
Number of Staff 1,000
G. Manager Dong Hongyu

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

No.	Product Name
1	Packaging processing line that includes machines of can-filling, bottle - sealing, bottle washing, label sticking, cap pressing, and heat-drying.

2. THE ASSETS, TURNOVER, AND PROFITS AS OF 1997~1999 IS LISTED BELOW:
(Unit: USD 1000)

Year	Output	Turnover	Profits
1997	9,258	9,169	955
1998	8,786	8,638	904
1999	7,435	7,306	824

3. MARKET COVERAGE OF INTERVIEWEE'S PRODUCT AT HOME OR ABROAD:

Product	Market Coverage at Home
Packaging processing line	40%

4. PRICE TACTICS AND MARKETING MEANS:

Marketing means: sales onto the door, PMMI meetings, and ad promotion (mainly in some trade publications: Packaging Paper, Light Machinery Paper).

After-sales service: Free test run and personnel training, one-year guarantee, 8 flow service departments across the country, a company producing parts and components, machinery problems shall be settled within 24 hours inside the province and within 3 days out of the province.

5. MAJOR CLIENTS OF THE INTERVIEWEE:

No.	Client Name
1	Sichuan Yibin Wuliangye (Group) Ltd.
2	Sichuan Jiannanchun (Group) Ltd.
3	Luzhou Laojiao Ltd.

6. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST:

No.	Fair Name
1	Packaging Machinery Fair held in Beijing, Guangzhou and Chengdu



Interviewee Guangdong Light Machinery (Group) Ltd.
Address 12 Shimin Rd—Industrial Boulevard, Guangzhou
Phone 020-84336972
Fax 022-84356616
E-mail gmbeer@public.guangzhou.gd.cn
Ownership State-owned
Assets US\$ 69,608,000
Number of Staff 1,593
G. Manager Cai Wen

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

No.	Product Name
1	Filling processing lines of beer and beverages

2. THE ASSETS, TURNOVER, AND PROFITS AS OF 1997~1999 IS LISTED BELOW:
(Unit: USD 1000)

	Output	Turnover	Profits
Year	33,741	31,788	2,635
1998	28,989	28,876	966
1999	12,844	15,407	75

3. MARKET COVERAGE OF INTERVIEWEE'S PRODUCT AT HOME OR ABROAD:

Product	Market Coverage at Home
Filling processing lines of beer and beverages	65%

4. PRICE TACTICS AND MARKETING MEANS:

Small profit but quick turnover, promote the market coverage actively.

5. MAJOR CLIENTS OF THE INTERVIEWEE:

No.	Client Name
1	Beijing Yanjing Beer Group Ltd.
2	Fujian Xuejin Beer Group Ltd.
3	Fujian Liquan Ltd.
4	Ha'erbin Beer Ltd.
5	Shandong Qufu Beer Ltd.

6. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST:

No.	Fair Name
1	Beijing International Beer & Beverage Packaging Machinery Fair

14.8 Overseas Suppliers

Interviewee Korea Han Yang Packaging & Engineering
 Phone 010-65858467
 Fax 010-65060955

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

	PRODUCT
1	Horizontal Flowrapper
2	Vertical Pillow Wrapper
3	Auto Palletizing and Depalletizing System
4	U-Board Feeder

2. THE TURNOVER OF 1997,1998 AND 1999 IS LISTED BELOW:

(Unit: USD 1000)

Year	Turnover
1997	329
1998	353
1999	294

3. MAIN CLIENTS:

	Client
1	Henan Luohe Shuang Hui Industrial Group Corp.

4. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST.

	Exhibition
1	China International Packaging Technology Exhibition
2	International Food Processing Packaging Machinery Exhibition

5. PRICING STRATEGY AND MARKETING METHOD

a) Pricing Strategy

Interview adopts medium pricing strategy to develop its market share.

b) Marketing Method

Promoting through sales reps as well as attending exhibition and doing advertisements in professional magazines and newspapers to promote its products.



Interviewee Beijing Representative Office, German Krones Co. Ltd.
Phone 010-65156597
Fax 010-65156599

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

	PRODUCT
1	Bottling Machinery
2	Filling Machinery
3	Capper
4	Labeling Machinery
5	Case Packer

2. THE TURNOVER OF 1997, 1998 AND 1999 IS LISTED BELOW:

(Unit: USD 1000)

Year	Turnover
1997	10,824
1998	11,765
1999	14,118

3. MAIN CLIENTS:

	Client
1	Beijing Yanjing Beer Group Corp.
2	Tsingtao Beer Group Co., Ltd.
3	Zhujiang Beer Group Co., Ltd.

4. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST.

	Exhibition
1	China International Beer and Beverage Exhibition
2	China International Beverage Manufacturing Technology and Equipment Exhibition

5. PRICING STRATEGY AND MARKETING METHOD

a) Pricing Strategy

Domestic food manufacturing enterprises prefer to buy interviewee's products despite of its comparatively high price because of its high quality.

b) Marketing Method

Promoting through sales reps as well as attending exhibition to promote its products.



Interviewee American Liquid Packaging Machinery Company
Phone 021-64387461
Fax 021-64085081

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

	PRODUCT
1	Filling Machine
2	Capping Machine
3	Labeling Machine

2. THE TURNOVER OF 1997, 1998 AND 1999 IS LISTED BELOW:

(Unit: USD 1000)

Year	Turnover
1997	450
1998	550
1999	500

3. MAIN CLIENTS:

	Client
1	Shanghai Grain and Oil Group Corp.
2	Shanghai Monsanto Company

4. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST.

	Exhibition
1	China International Food Processing and Packaging Machinery Exhibition
2	China International Packaging Machinery and Processing Technology Exhibition

5. PRICING STRATEGY AND MARKETING METHOD

c) Pricing Strategy

Interviewee adopts high pricing strategy aiming to raise the technological price of its products in Chinese market.

d) Marketing Method

Promoting through sales reps as well as attending exhibition to promote its products.



Interviewee China Technology Information Import and Export Corp. (General Agency of Japan Hitachi Co., Ltd.)
Phone 021-62866297
Fax 021-62866297

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

	PRODUCT
1	Numbering Machine

2. THE TURNOVER OF 1997, 1998 AND 1999 IS LISTED BELOW:

(Unit: USD 1000)

Year	Turnover
1997	3,353
1998	4,023
1999	4,541

3. MAIN CLIENTS:

	Client
1	Kunshan Tongyi Food Co., Ltd.
2	Hangzhou Wahaha Group Corp.
3	Guangdong Robust Group Corp.
4	Chongqing Aoni Cosmetics Co., Ltd.

4. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST.

	Exhibition
1	Shanghai Beauty Saloon Cosmetics Exhibition
2	China International Packaging Machinery Exhibition
3	China International Alliance Packaging Machinery

5. PRICING STRATEGY AND MARKETING METHOD

a) Pricing Strategy

Interviewee's product price is at medium level in importing products while comparatively high in products made in China.

b) Marketing Method

Promoting through sales reps as well as attending exhibition, recommending by packaging association and doing advertisements in professional magazines and newspapers to promote its products.



Interviewee Tai Cang Tai Gang Machinery Co., Ltd.
Phone 0520-3588099
Fax 0520-3587789

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

	PRODUCT
1	Semi-automatic Bundling Machine
2	Automatic Bundling Machine
3	Automatic Case Sealer
4	Automatic Closing Shrinker
5	Automatic Closing Machine

2. THE TURNOVER OF 1997,1998 AND 1999 IS LISTED BELOW:

(Unit: USD 1000)

Year	Turnover
1997	424
1998	506
1999	659

3. MAIN CLIENTS:

	Client
1	Privately-owned enterprises in Jiangsu and Zhejiang Province and North China

4. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST.

	Exhibition
1	International Food Processing Packaging Machinery Exhibition
2	China International Packaging Machinery Exhibition
3	China International Beverage Manufacturing Technology and Machinery Exhibition

5. PRICING STRATEGY AND MARKETING METHOD

a) Pricing Strategy

Interviewee's product price is acceptable to its clients.

b) Marketing Method

Since interviewee has entered China for five to six years, it promotes its products mainly through attending exhibitions and advertising in professional magazines like China Packaging Newspaper.



Interviewee Xiao Kang Food Packaging Machinery Co., Ltd.
(Exclusively-owned by a Taiwan company)

Phone 0536-6161188

Fax 0536-6214068

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

	PRODUCT
1	Vacuum Packer
2	Automatic Closing Machine

2. THE TURNOVER OF 1997,1998 AND 1999 IS LISTED BELOW:

(Unit: USD 1000)

Year	Turnover
1997	529
1998	659
1999	824

3. MAIN CLIENTS:

	Client
1	Shandong Delicious Group Corp.
2	Shandong Jinluo Group Corp.

4. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST.

	Exhibition
1	Dalian International Food Processing Packaging Machinery Exhibition
2	Shanghai International Beverage and Beverage Technology Exhibition
3	Jinan International Food and Food Packaging Machinery Exhibition
4	International Medicine and Personal Care Product Packaging Machinery Exhibition

5. PRICING STRATEGY AND MARKETING METHOD

a) Pricing Strategy

Interviewee's product price is at medium level, which is quite competitive in packaging machinery made by China.

b) Marketing Method

Promoting through attending all kinds of food and beverage packaging machinery as well as clients' recommendation.



Interviewee Zhongli Stationery Packaging Co., Ltd. (General Agency of SIAT in China)
Phone 021-63272228
Fax 021-63274918

1. MAJOR PRODUCTS OF THE INTERVIEWEE:

	PRODUCT
1	Binding Film Machine
2	Case Sealer
3	Baler

2. THE TURNOVER OF 1997, 1998 AND 1999 IS LISTED BELOW:

(Unit: USD 1000)

Year	Turnover
1997	529
1998	588
1999	682

3. MAIN CLIENTS:

	Client
1	Shanghai Shenmei Beverage Co., Ltd.
2	Shanghai HP Co., Ltd.
3	Shanghai Kimberley Paper Product Co., Ltd.
4	Shanghai Bright Furniture Co., Ltd.

4. DO YOU ATTEND ANY EXHIBITIONS FOR PACKAGING MACHINERY? PLEASE SPECIFY THE NAMES OF THE EXHIBITIONS YOU ATTEND MOST.

	Exhibition
1	China International Food Processing and Packaging Machinery Exhibition
2	China International Packaging Technology Exhibition

5. PRICING STRATEGY AND MARKETING METHOD

- a) Pricing Strategy
Interviewee adopts medium pricing strategy to attract more clients.
- b) Marketing Method
Promoting mainly through attending exhibitions and distributors.