



**Fiscal year ending Mar.31, 2017**

# **Interim financial review**

**(from Apr.1, 2016 to Sep. 30, 2016)**

**Nov. 21, 2016**

 **ワイエイシー株式会社**

**(証券コード: 6298)**

**<http://www.yac.co.jp>**



## About figures.

**Amounts stated are rounded down to the nearest million yen, and the ratio is rounded to two decimal places.**

**The forecasted figures stated are based on the information currently available to us and certain assumptions that are regarded as legitimate. We do not promise that the forecasts or estimates will be accurate. Large discrepancies may be seen in the actual results due to various factors.**



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Director & General manager  
Administration Div.
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President & Representative Director
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Director & General manager  
Corporate Strategy Div.
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# 1. Message from president & summary of the Interim financial result of year ending Mar. 31, 2017.

..... **Mr. Takefumi Momose,  
President & Representative Director.**



## ■ Increase in sales and income.

**Sales and income increased in three all business segment.**

**Consolidated result exceeded the previous corresponding financial period.**

# 1. Summary of interim financial result.



- **Display related business.**  
Manufacturing equipment of panel for smart phone and tablet.
- **Mechatronics related business.**  
YAC Garter Co., Ltd. contributed from the starting time of this financial period.
- **Cleaning and other related business.**  
Business went well with grasping customer's needs.



## **2. Outline of interim financial result of year ending Mar.31, 2017.**

- ..... Mr. Kazumasa Teramoto,  
Director and General Manager  
Administration Div.**

# 2-1. Business results.



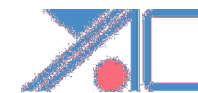
Increase in sales and income comparing the previous corresponding period.

( Millions of ¥)

	The previous corresponding financial period	First 6 months of fiscal year ending Mar.31, 2017	Increased(decreased) amount against previous corresponding period	Increased(decreased) percentage against previous corresponding period
Net sales	11,102	17,264	6,161	55.5%
Operating income (Operating income ratio)	461 (4.2%)	584 (3.4%)	122	26.6%
Ordinary income	462	338	△124	△26.9%
Profit for the period attributable to owners of parent.	236	263	26	11.3%
Profit for the period per share(¥)	26.52	29.49	2.97	—
R&D expenses	120	209	89	73.8%
New capital investment.	81	109	28	35.0%
Depreciation	166	243	77	46.5%



# 2-2 Net sales by business.



Manufacturing equipment of panel for smartphone and tablet went well.

YAC Garter Co., Ltd. which consolidated 2<sup>nd</sup> half of previous fiscal year contributed from the starting time of this fiscal period.

(Millions of ¥)

	The previous corresponding financial period	First 6 months of fiscal year ending Mar.31, 2017	Increased(decreased) amount against previous corresponding period	Increased(decreased) percentage against previous corresponding period
<b>Display related business.</b>	7,189	10,407	3,218	44.8%
		Manufacturing equipment of panel for smartphone and tablet went well.		
<b>Mechatronics related business.</b>	3,234	6,120	2,886	89.2%
		YAC Garter Co., Ltd. contributed from the starting time of this fiscal period.		
		Realized the sales of big order of voltaic and HDD related business.		
<b>Cleaning and other business related.</b>	679	736	57	8.4%
<b>Total</b>	<b>11,102</b>	<b>17,264</b>	<b>6,161</b>	<b>55.5%</b>

## 2-3. New order received and backlog ordered by business.



Display related business segment decreased compare to the previous corresponding period.

Mechatronics, cleaning and others related business will keep on well.

(Millions of ¥)

	Item	The previous corresponding financial period	First 6 months of fiscal year ending Mar.31, 2017	Increased(decrease d) amount against previous corresponding period	Increased(decrease d) percentage against previous corresponding period
<b>Display related business.</b>	New order received	15,062	4,527	△10,535	△69.9%
	Backlog ordered	13,971	4,588	△9,383	△67.2%
<b>Mechatronics related business.</b>	New order received	6,177	6,357	180	2.9%
	Backlog ordered	4,775	4,292	△483	△10.1%
<b>Cleaning and other business related</b>	New order received	1,184	1,358	174	14.7%
	Backlog ordered	338	693	356	105.2%
<b>Total</b>	New order received	22,424	12,242	△10,182	△45.4%
	Backlog ordered	19,084	9,573	△9,511	△49.8%

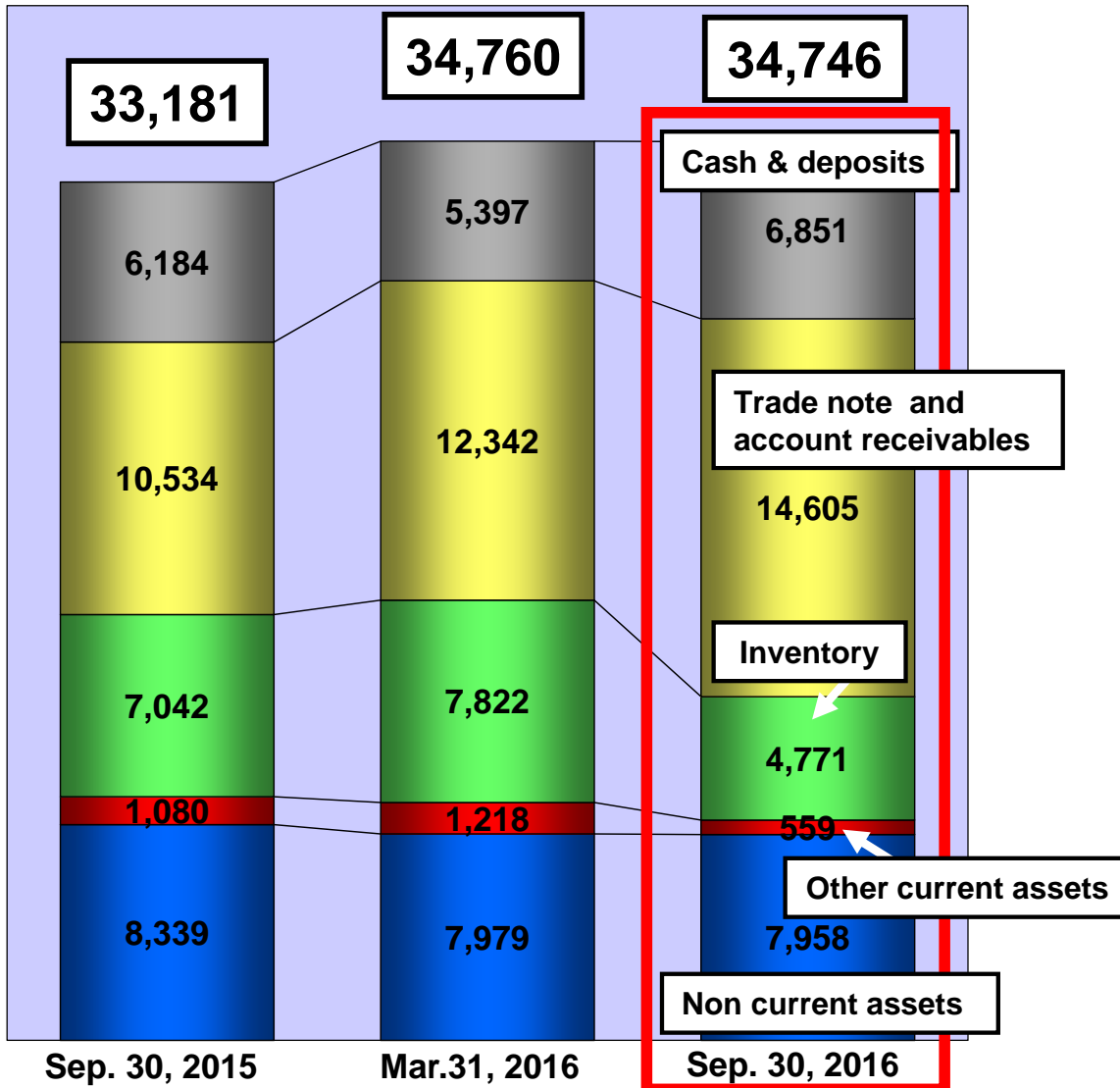
# 2-4. Historical figures of B/S.



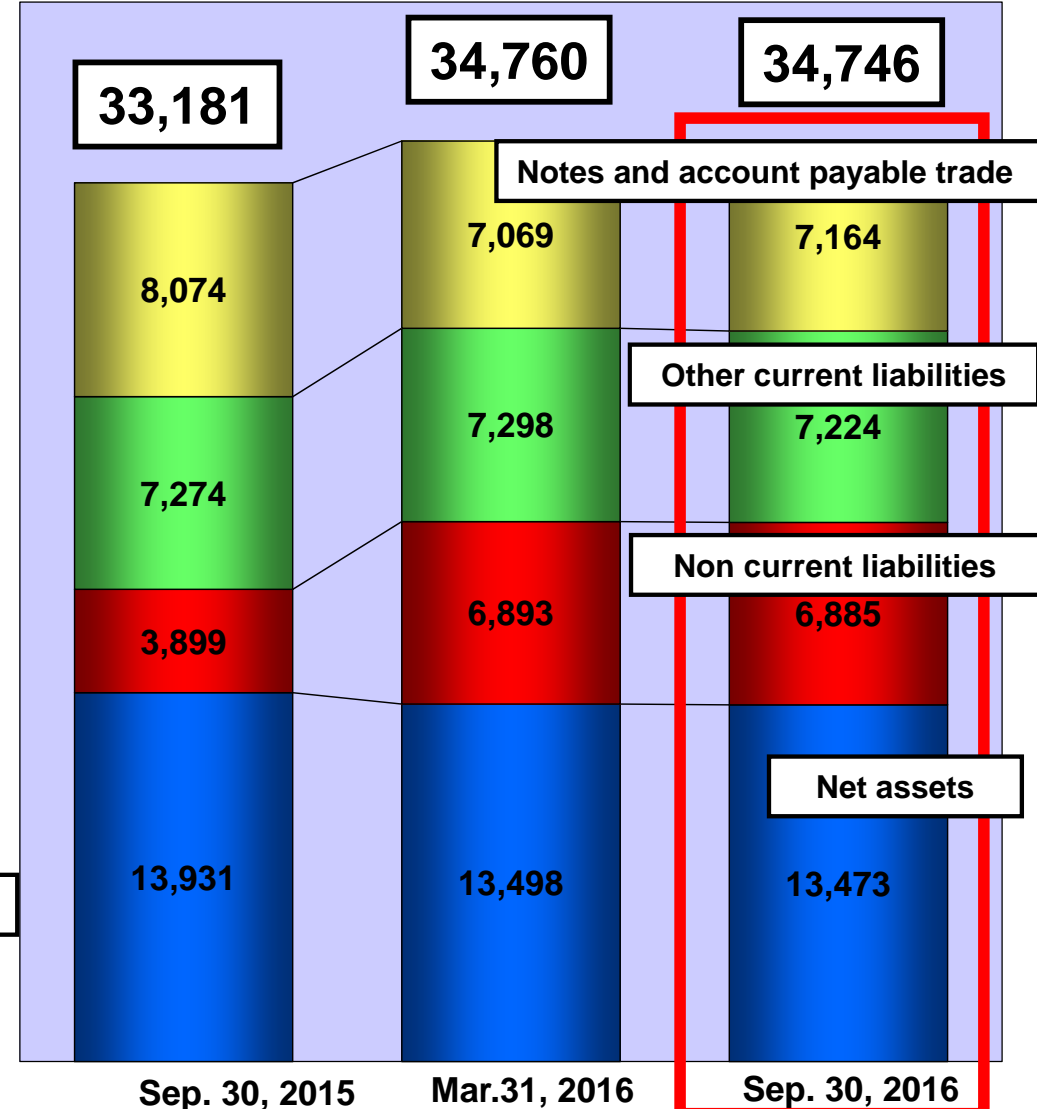
Trade note and account receivable increased with increasing sales and consolidating new merged companies, in spite of collecting account receivables of previous fiscal year.

Decrease of inventory is due to realize sales of big items.

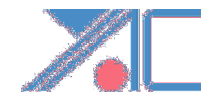
## <Assets> (Millions of ¥)



## <Liabilities and net assets> (Millions of ¥)



## 2-5. Summary of cash flow statements.



Trade note and account receivable increased with increasing sales and cash flow from operating increased  
Cash flow from investment decreased because of new M&A.

(Millions of ¥)

	6 month ended Sep. 30, 2014 (Consolidated)	6 month ended Sep. 30, 2015 (Consolidated)	6 month ended Sep. 30, 2016 (Consolidated)
<b>CF from operating activities</b>	<b>-1,317</b>	<b>-1,105</b>	<b>2,665</b>
<b>CF from investment activities</b>	<b>-44</b>	<b>-3,801</b>	<b>-1,038</b>
<b>CF from financial activities</b>	<b>280</b>	<b>2,950</b>	<b>-64</b>
<b>Cash &amp; cash equivalents at end of period</b>	<b>6,777</b>	<b>5,972</b>	<b>6,564</b>



### **3. Forecast of consolidated financial results of this fiscal year ending Mar.31, 2017.**

**..... Mr. Takefumi Momose,  
President and representative Director.**



## « Display related business »

<b>Atmosphere</b>	<b>Priority strategies</b>
<b>Expansion of FPD demand.</b>	<b>Seeking synergy effect of various products line such as dry etching, wet etching and annealing equipment.</b>
<b>Demand for new type of panel is expanding.</b>	<b>Business promotion for new type of panel such as high-definition panel for smartphone and new panel for 4K, 8K TV receiver.</b>
	<b>Applying for organic EL and flexible panel.</b>
<b>Progressing lower price.</b>	<b>Executing lower production cost program in order to strengthen competitiveness.</b>

# 3-1-2. Business atmosphere and priority strategies.



## «Mechatronics related business.»

Business	Atmosphere	Priority strategies
<b>Semiconductor</b>	<b>Packaging revolution.</b>	<b>Increasing sales of carrier tape and taping machine</b>
	<b>Increasing demand for automobile use power semiconductor</b>	<b>Increasing sales of handler of Si IGBT devices and laser annealing equipment</b>
	<b>Demand for high frequency devices will increase</b>	<b>Increasing sales of ceramic cutter.</b>
<b>HDD</b>	<b>Progressing high density of HDD</b>	<b>Concentrating on receiving new order of next generation HDD applicable to high density.</b>
<b>Controlling and communication.</b>	<b>Increasing renewable energy</b>	<b>Concentrating on receiving new order of backward flow telemeter.</b>

# 3-1-3. Business atmosphere and priority strategies.



## 《Cleaning and other related business》

<b>Business</b>	<b>Atmosphere</b>	<b>Priority strategies</b>
<b>Cleaning</b>	<b>Domestic market is matured</b>	<b>Introducing new machine to increase market share and making marketing plan by area.</b>
	<b>Demand in developing countries are increasing</b>	<b>Expanding marketing area to north America and Europe mainly Asia.</b>
	<b>Demand for linen supply service will be increased by increasing foreign tourists .</b>	<b>Concentrating on marketing to linen supply service business and getting inbound demand.</b>
<b>Mold heater for automobile</b>	<b>Heat source for mold heater is changing from gas to electric furnace.</b>	<b>Providing high productivity and save energy equipment replying the demand of automobile and aircraft parts industries.</b>



## 3-2. Forecast of fiscal year ending Mar.31, 2017.



- **Net Sales** : **¥30 Billion.**
- **Operating income** : **¥1.5 Billion.**

- ◎ Trend of new capital investment by our customer is increasing.
- ◎ Backlog ordered amounted ¥17 Billion as of Mar.31, 2016.
- ◎ YAC Garter Co., Ltd. which was consolidated on the 2<sup>nd</sup> half of the previous fiscal year contributed from the starting time of this financial year.

# 3-3. Forecast fiscal year ending Mar. 31, 2017.



(Millions of ¥)

	Ended Mar. 31, 2016 (Result)	Ending Mar. 31, 2017 (Forecast)	Increased(decreased) amount against previous fiscal year	Increased(decreased) percentage against previous fiscal year
Net sales	25,545	30,000	4,454	17.4%
Operating income	807	1,500	692	85.7%
Ordinary income	546	1,350	803	147.0%
Profit for the period attributable to owners of parent.	28	890	861	3,075%
Profit for the period per share(¥)	3.14	99.68	—	—

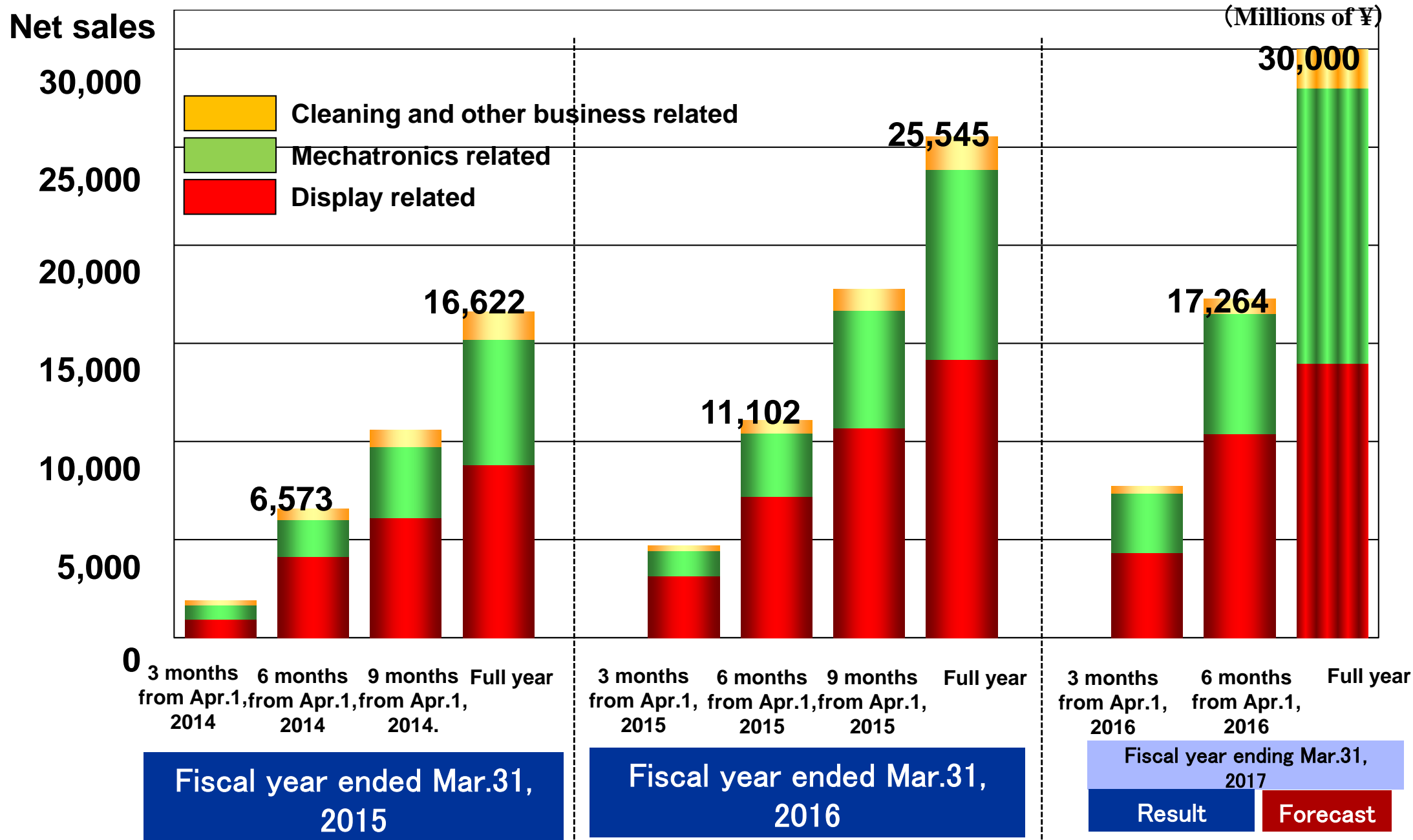
# 3-4. Net sales forecast by business.



(Millions of ¥)

	Ended Mar. 31, 2016 (Result)	Ending Mar. 31, 2017 (Forecast)	Increased(decreased) amount against previous fiscal year	Increased(decreased) percentage against previous fiscal year
Display related business.	14,174	14,000	△174	△1.2%
Mechatronics related business.	9,702	14,000	4,297	44.3%
Cleaning and other business related.	1,668	2,000	331	19.8%
<b>Total</b>	<b>25,545</b>	<b>30,000</b>	<b>4,454</b>	<b>17.4%</b>

# 3-5. Transition of net sales by quarterly result.



# 3-7. Transition to Holding company system.(plan)



In order to strengthen group corporate body by cooperation and competition among group companies, we consider to transitioning to a Holding company system on Apr. 1, 2017.



Number of companies under a Holding company system.	19
Split companies from Y.A.C. Co., Ltd.	4
Domestic group companies	7
Overseas group companies	3
Overseas sub-subsidiary companies	5

NIHON GARTER PHILIPPINES, INC.	(Philippines)
Suzhou Nihon Garter Electronics Co., Ltd.	(Suzhou, P.R.C.)
NGC GARTER(M)SDN.BHD.	(Malaysia)
GARTER TECHNOLOGY CO., LTD.	(Taiwan)

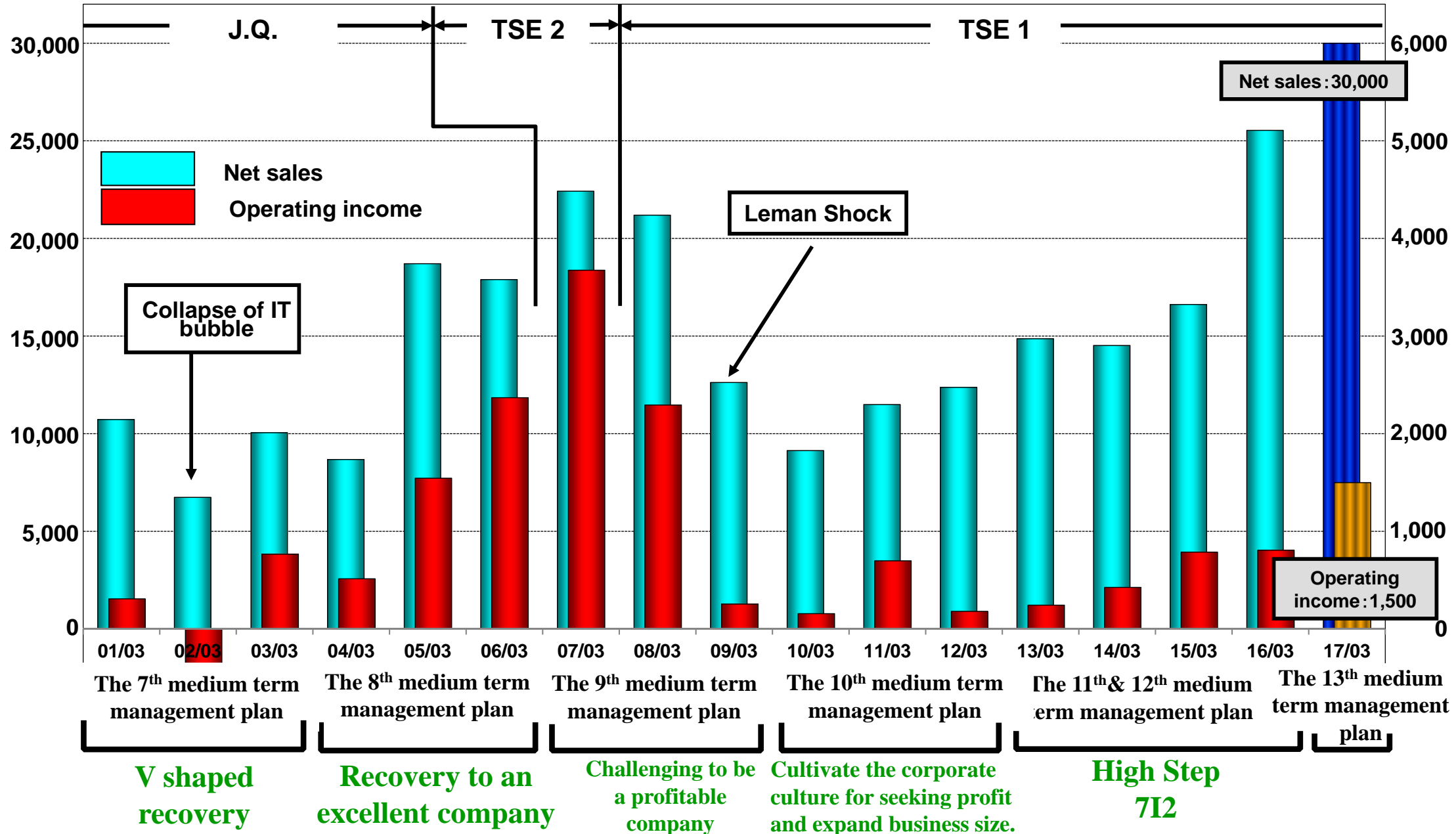
Shaoxing YAC(Shanghai) Electronics Equipment Co., Ltd.	Shaoxing, P.R.C.
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# 3-8. Past result and forecast of ending Mar.31, 2017.



## Net Sales

(Millions of ¥) Operating income





## 4. Topics new business

- **Mr. Yukio Soejima,  
Director and General manager  
Corporate strategy Div.**

# 4-1. New business①



## Miyuki erecs Co., Ltd. joined Y.A.C. group and consolidated

Miyuki erecs Co., Ltd. has grown up as a development and proposal type company which surely reply to clients requests since established in 1947 for 70 years.

At this moment, the company is developing , manufacturing and selling various type of products such as medical equipment like an artificial dialysis machine, infusion pump, and auxiliary artificial heart drive device, security equipment by using updated electronics technologies and label printer and labeling machine by using mechatronics technologies.

Among them, artificial dialysis machine is highly reputed among world wide medical organization. And labeling machine are utilized for attaching the product label at the final production step in paper mill.

Moreover, as a new business, the company started to sell watching system with leaving floor sensor, which is care robot Mi-Ru for elderly nursing home facilities for dementia. This is a watching system which detect elder dementia's condition whether on or leaving from bed and at once notice to plural staffs to confirm the risk situation

Other than the above, the company has been supporting various manufacturing companies through selling electronic parts. The company is handling the products by DDK Ltd., OKAYA Electric Industries Co., Ltd, TO-CONNE CO. LTD. and LEMO S.A. and those products are used by industrial equipment industry and other every industry.

From now on, it is the company's wish that the company get customer's reliance and contribute to society by providing the higher grade products with evolving further electronics technology.



Production line of artificial dialysis machine.



Auxiliary artificial heart drive

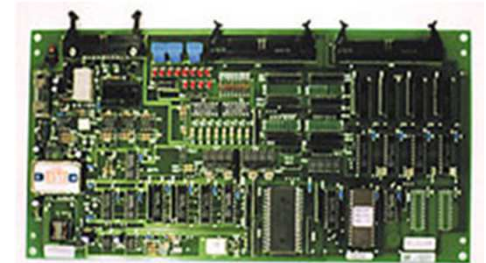


Watching system care robot

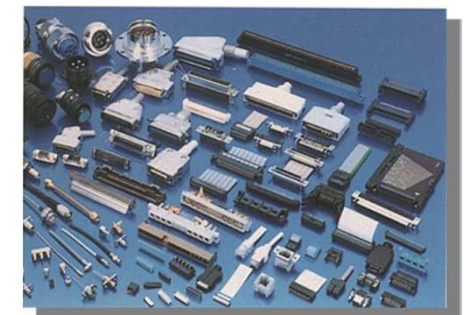
Mi-Ru



Label printer BLP-777U



Development of various type of printed board.



Connector by DDK



# 4-2. New Business ②



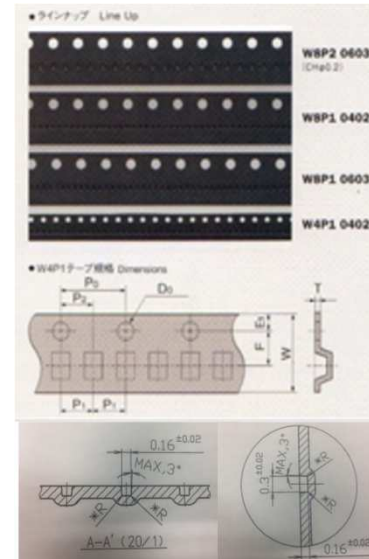
## Y.A.C/Garter Co., Ltd. expanded Wafer Level Package products line .

Recently, in manufacturing of semiconductor production revolution is going on such as thinner semiconductor and electronic parts are required for smartphone and miniaturized and power saving electronic and control parts are required for self driving automobile. Requests from customers are accepted taping in The company have promptly started to develop element technologies of each production step of packaging equipment including tape and already been able to deliver commercial products. And the company is coping with further innovation in order to reply to every customers' requests.

Company's carrier tape business is a pioneer of embossed carrier tape for mounting of surface-mount electronic components and as an automatic machine business, the company is manufacturing and selling of testing and packaging equipment for mounting of surface-mount electronic components. Embossed carrier tape is an essential key device for precise mounting of small thin parts like a 0201 (0.2mmx0.1mmx0.05mm).




Visual inspection taping machine for WLP.



Ultra micro and thin embossed tap



Image checking machine



# **Attachment Corporate outline**

- 1. Basic information.**
- 2. Special features of Y.A.C. Co., Ltd.**
- 3. Global network of YAC group.**
- 4. Group companies.**
- 5. Major products.**

# 1. Basic information



<b>C o r p o r a t e   N a m e</b>	Y.A.C. Co., Ltd.
<b>T i c k e r   c o d e</b>	6298 (TSE 1 <sup>st</sup> section)
<b>E s t a b l i s h e d</b>	May, 1973
<b>R e p r e s e n t a t i v e</b>	Takefumi Momose, President
<b>O f f i c e s</b>	Head Quarter:3-11-10 Musashino, Akishima, Tokyo Japan Sales Office :Osaka, Akishima, Shinchu (Taiwan) Factories :Akishima, Yamanashi, Kumamoto, Ohita
<b>G r o u p   C o m p a n i e s ( c o n s o l i d a t e d )</b>	Ohkura Electric Co., Ltd.(Sakato, saitama Pre.) YAC Denko Co., Ltd. (Ohme, Tokyo) YAC Niigataseiki Co., Ltd. (Myukou, Niigata Pre.) YAC DAStech, Inc.(Toda, Saitama Pre.) Y.A.C. Kokusaidennetsu Co., Ltd(Musashimurayama, Tokyo) Y.A.C. Garter Co., Ltd. (Ohme, Tokyo) Miyuki erecs Co., Ltd.(Itami, Hyougo) YAC Systems Singapore Pte. Lt. (Singapore) YAC (Shanghai) International Trade Co., Ltd. (Shanghai, PRC) Shaoxing YAC(Shanghai) Electronic Equipment Co., Ltd. T.Y.A.C. Corp.
<b>P a i d   u p   C a p i t a l</b>	¥2,756million
<b>M a j o r   P r o d u c t s   a n d s e r v i c e s</b>	Developing, Drawing, Manufacturing & Selling of Manufacturing Equipment for Display related equipment, Mechatronics related equipment and Cleaning related equipment.
<b>A c c o u n t   C l o s i n g</b>	March 31

# 2. Special Features of YAC Co., Ltd.



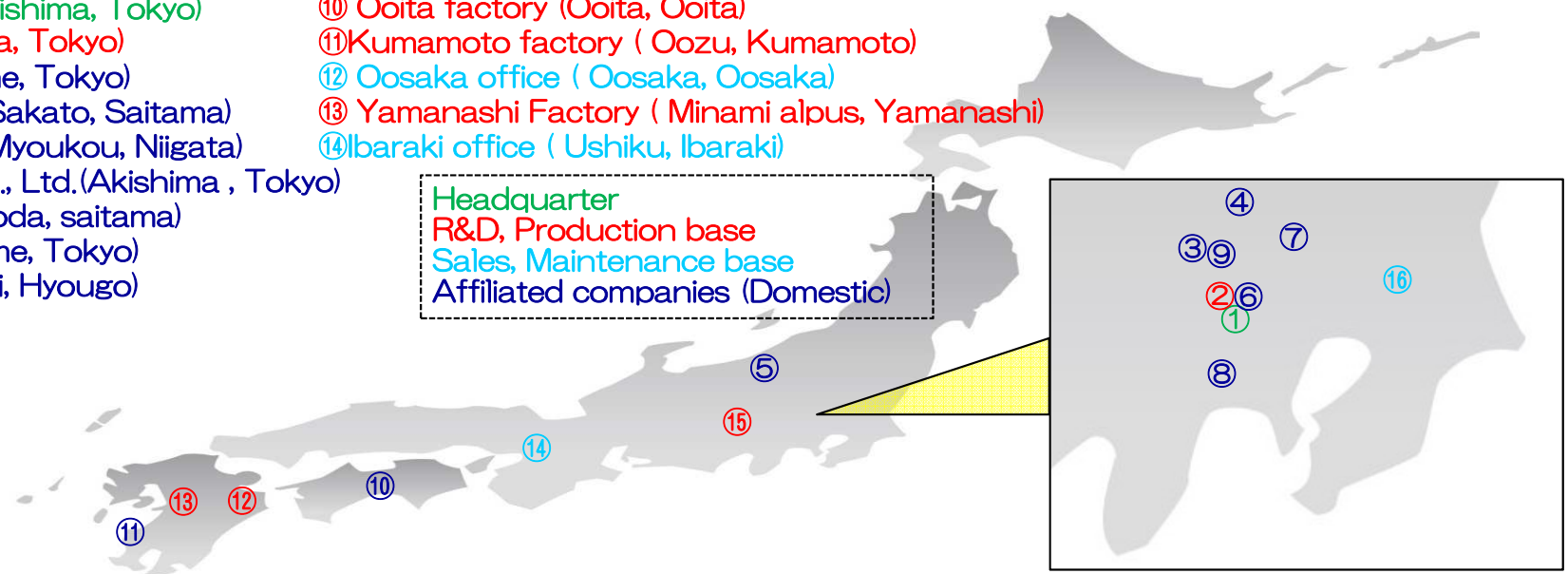
- **This year, adding 1 business and diversified in various fields.**
- **Fables management.**
- **Challenging for M&A, acquired 15 business during past 17 years.**
- **Global enterprise focusing Asia.**
- **All staffs participated management.**

# 3 Global network



- ① Head Quarter/ Factory (Akishima, Tokyo)
- ② Technical Center (Akishima, Tokyo)
- ③ YAC Denko Co., Ltd. (Ohme, Tokyo)
- ④ Ohkura Electric Co., Ltd. (Sakato, Saitama)
- ⑤ YAC Niigata Seiki Co., Ltd. (Myoukou, Niigata)
- ⑥ YAC-Kokusaidennetsu Co., Ltd. (Akishima, Tokyo)
- ⑦ YAC DASTech Co., Ltd. (Toda, Saitama)
- ⑧ YAC Garter Co., Ltd. (Oume, Tokyo)
- ⑨ Miyuki erecs Co., Ltd. (Itami, Hyougo)

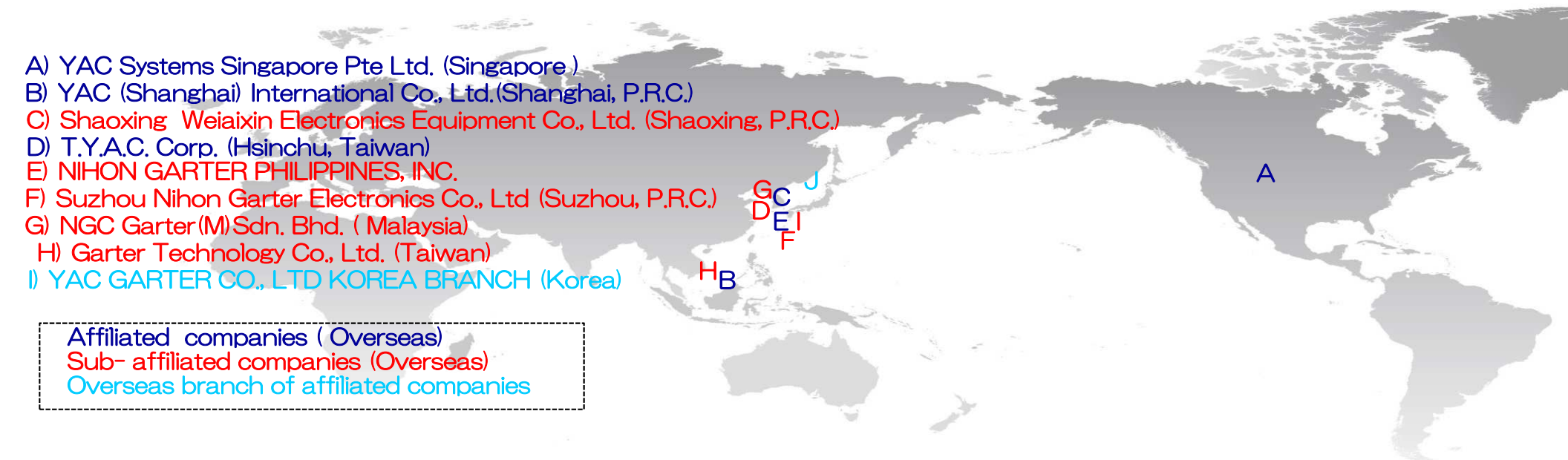
- ⑩ Ooita factory (Ooita, Ooita)
- ⑪ Kumamoto factory (Oozu, Kumamoto)
- ⑫ Oosaka office (Oosaka, Oosaka)
- ⑬ Yamanashi Factory (Minami alpus, Yamanashi)
- ⑭ Ibaraki office (Ushiku, Ibaraki)



Headquarter  
 R&D, Production base  
 Sales, Maintenance base  
 Affiliated companies (Domestic)

- A) YAC Systems Singapore Pte Ltd. (Singapore)
- B) YAC (Shanghai) International Co., Ltd. (Shanghai, P.R.C.)
- C) Shaoxing Weiaixin Electronics Equipment Co., Ltd. (Shaoxing, P.R.C.)
- D) T.Y.A.C. Corp. (Hsinchu, Taiwan)
- E) NIHON GARTER PHILIPPINES, INC.
- F) Suzhou Nihon Garter Electronics Co., Ltd (Suzhou, P.R.C.)
- G) NGC Garter (M) Sdn. Bhd. (Malaysia)
- H) Garter Technology Co., Ltd. (Taiwan)
- I) YAC GARTER CO., LTD KOREA BRANCH (Korea)

Affiliated companies (Overseas)  
 Sub-affiliated companies (Overseas)  
 Overseas branch of affiliated companies



# 4. Group companies



## In Japan

### ■ Y.A.C. Co., Ltd ( 4 Business divisions).

Mechatronics Products Div.	Cleaning Div.
Display business Div.	Laser system business Div.

### ■ 7 Group companies.

YAC Denko Co., Ltd.	Ohme, Tokyo
Ohkura Electric Co., Ltd.	Sakato, Saitama
YAC Niigata Seiki Co., Ltd.	Myoukou, Niigata
YAC DASTech co., Ltd.	Toda, Saitama
YAC-Kokusaidennetsu Co., Ltd.	Akishima, Tokyo
YAC GARTER CO., LTD.	Ohme, Tokyo
Miyuki ercs Co., Ltd.	Itami, Hyougo

### ■ 2 equity method affiliated companies

ND Material Co., Ltd.	Kohchi-Shi, Kouchi
Kohwa electric Co., Ltd.	Izumi, Kagoshima

## Outside of Japan

### ■ 3 Group Companies

YAC Systems Singapore Pte Ltd.	Singapore
Y.A.C. (Shanghai) International Trade Co., Ltd.	Shanghai, P.R.C.
T.Y.A.C. CORP.	Hsinchu,

### ■ 5 sub-subsidiaries and 1 branch

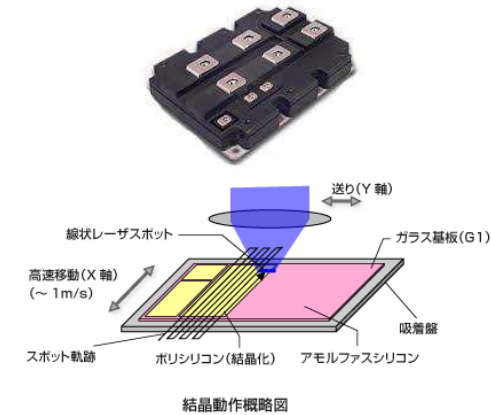
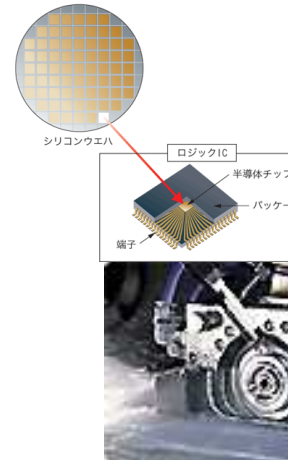
Shaoxing Weiaixin Electronic Equipment Co., Ltd.	Shaoxing, P.R.C.
NIHON GARTER PHILIPPINES, INC.	Philippines
Suzhou Nihon Garter Electronics Co., Ltd.	Suzhou, P.R.C.
NGC Garter(M) Sdn. Bhd.	Malaysia
GARTER TECHNOLOGY CO., LTD.	Taiwan
YAC GARTER CO.,LTD KOREA BRANCH	Korea

4 business divisions, 7 domestic group companies, 3 overseas group companies and 5 overseas sub-subsidiaries.

# 5. Major products and technologies.

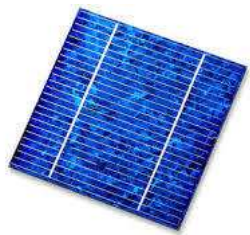


■半導体素子の構造



— Plasma, Vacuum and Heat —  
Etching, Reforming and Diffusion

— Cutting, Laser —  
Dicing and Diffusion



— WET —  
Etching and Texturing

— Handling —  
Handler and Conveyer

— Precise polishing —  
Burnisher

# 5-1. LCD related business



<b>Plasma dry etching equipment</b>	<b>Dry etching equipment by using plasma technology.</b> The most suitable for high definition panel manufacturing such as LTPS and OLED for smart phone , efficient manufacturing process and mask less technology.
<b>Annealing equipment</b>	<b>Heat treatment equipment (RTA) for reforming and improving film quality.</b> Suitable for mass production of high definition panel such as LTPS and contributed for high functionality of smart phone and tablet.
<b>Wet etching equipment</b>	<b>Wet etching equipment using chemical liquid.</b> Applying for small to large panel including high definition panel such as IGZO, OLED and metal wiring.



Plasma dry etching equipment



Annealing equipment



Wet etching equipment



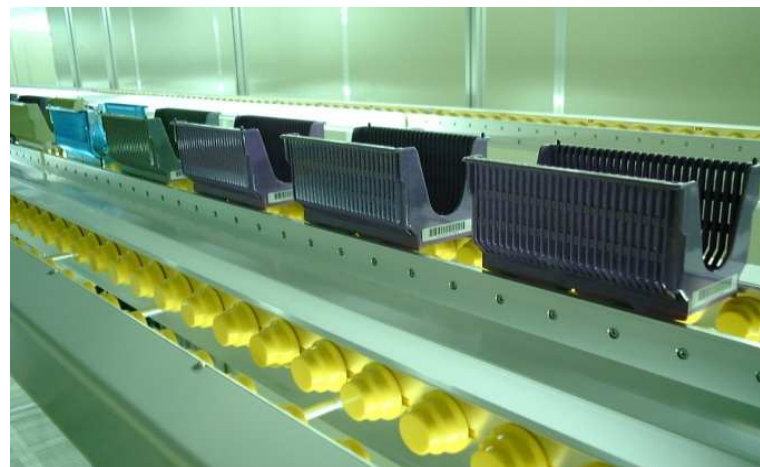
# 5-2 Hard disk related business



<b>Banisher for HDD</b>	The disk surface precise polishing equipment to eliminate the nano-size projections on the disk surface after the process of magnetic film generating.
<b>Wiping System for HDD</b>	The equipment to remove particles on the disk surface and to equalize the lubricant agent after the process of magnetic film generating.
<b>UV Curing</b>	UV Curing Surface-reforming for Hard Disk
<b>Clean Conveyor</b>	For HDD factory: Possible to built various type of transportation line easily by module combination. For semiconductor factory: Achieved high load-bearing performance, impact performance and speed performance for 300 mm wafer pot. Solar sells factory: Transport big size substrate with high load-bearing performance and impact performance.



Banisher



Clean conveyor for hard disk



High speed clean conveyor for semiconductor

# 5-3-1. Semiconductor, testing & cleaning process

<b>Testing handler.</b>	Equipment that screen automatically good or bad after packaging of logic IC. Applicable wide range of temperature between 55 degree C. to 155 degree C.
<b>Semiconductor and parts cleaning equipment.</b>	<ul style="list-style-type: none"><li>•Wet process equipment: Cleaning equipment, resist removal equipment and night ride equipment.</li><li>•Semiconductor peripheral equipment: Quarts tube cleaner, stocker and chemical liquid supplying equipment.</li></ul>
<b>IPA vapor dryer.</b>	Drying wafer by using IPA vapor at the final stage of semiconductor, including LSI, MEMS, and power devices, cleaning process with free from particles.



Test handler for logic IC.



Quarts tube cleaner



IPA vapor dryer

# 5-3-2. Semiconductor laser process related.



## Laser anneal machine

- Laser anneal equipment for IGBT and power semiconductor
  - Heat only on backside by 2 wavelength laser anneal and control anneal depth from 1 to 10 micro mater.
  - High throughput was realized by combination of continuously oscillating laser and turn table.
- Backside Laser Annealing System for Ohmic Contact Formation on SiC.
  - The 1<sup>st</sup> time equipment in the world and applicable development and prototype of products.
  - This equipment will support mas production by its high stability, reproducibility, throughput and low running cost.
- Laser scriber.
  - Exclusive use for SiC and realized debris less.

## Micro multi laser drilling machine

- Ultra precise hole making : Making diameter 15 to 50 micrometer hole.
- High speed great number holes making : Making maximum diameter 100 mill meter and maximum number one million holes by 30 to 500 seconds. (less than 0.1 mill second/hole)
- Precise hole making: Hole position accuracy <0.5micro meter hole diameter accuracy <0.5 micro meter.
- Long term stability, easy control and less downtime:
  - Unaffected from change of razor profile.
  - Easy control because of simple optical system.



Laser anneal machine for IGBT and power semiconductor



Backside Laser Annealing System for Ohmic Contact Formation on SiC



Micro multi laser drilling machine

# 5-3-3. Semiconductor precise dicing and slicing related.

<p><b>Full automated slicer</b></p>	<p>This is a full automatic slicer to cut thick or complex device which have realized to cut device by one pass in stead of step cut even device that old fashioned slicer used to cut by step cut. For: Complex devices such as devices containing sapphire, glass, ceramic and packaged devices such as CSP, QFP, QFN and metallic devices.</p>
<p><b>Slicing and dicing machine</b></p>	<p>Automatic <math>\theta</math>-AXIS, having automatic alignment function. Possible to cut thick device highly precisely by multi blade.</p>
<p><b>Full automated core drilling machine</b></p>	<p>This is full automatic drilling machine which cut the subject such as glass or quarts into circle shape or donuts shape by using core drill. This machine has auto transport and automatic alignment functions . Recently we introduced new equipment DAR806 which is applicable to smaller diameter ( 1to 10) with ultra sonic spindle</p>
<p><b>Resale business</b></p>	<p>We purchase, repair and resell secondhand dicing equipment, cutting equipment and semiconductor manufacturing equipment.</p> <div data-bbox="517 655 2175 1064" style="border: 1px solid black; padding: 10px;"> <p>ダイサー再生・販売ステーションのしくみ (全て自社にてご提供)</p> </div>



DFS1100

Full automatic slicer



DAS110

Slicing/Dicing



DAR806

Automatic core drilling machine

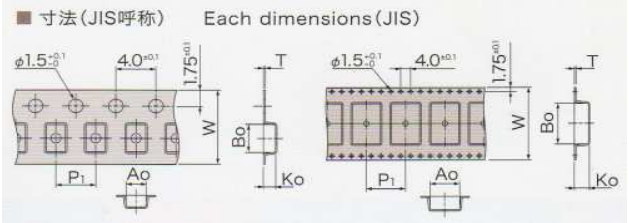
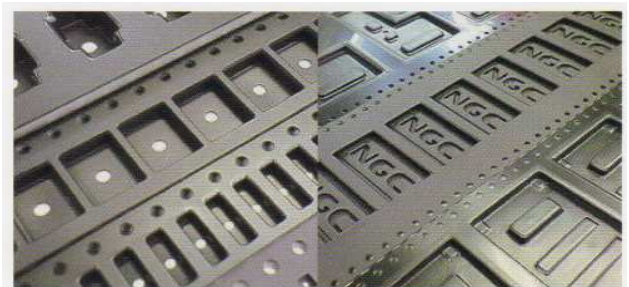


DAR810

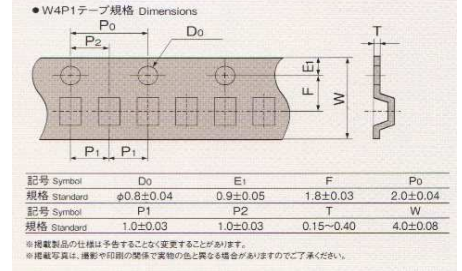
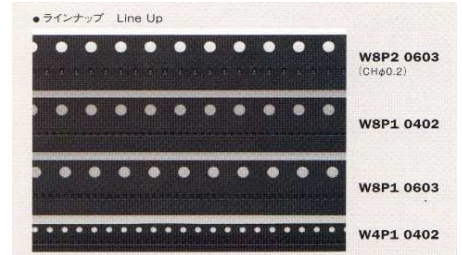
Full automatic core drilling machine

# 5-3-4. Semiconductor embossed carrier tape related.

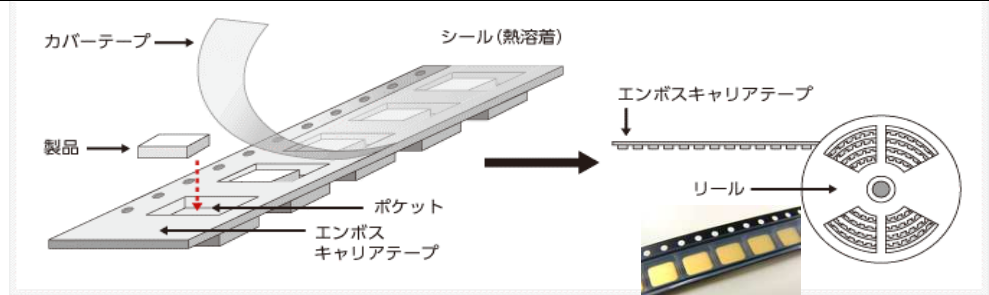
<b>Embossed carrier tape</b>	Packaging material for mounting of surface-mount electronic components such as condenser diode, transistor, semiconductor and LED by using automatic mounting machine.
<b>Ultra micro and thin embossed tape</b>	Embossed carrier tape for small ( 0.2 mm x 0.1 mm) and thin products (less 0.1 mm thin ).
<b>Service business</b>	Taping service business for prototype or small lot products of electronic components by embossed carrier tape including vacuum packaging.
<b>Peeling tester</b>	Testing equipment for setting peel strength of sealed cover tape on emboss carrier tape properly.
<b>Auto reel changer</b>	Continuous operating machine which changes embossed carrier tape reel automatically, raise machine utilization and contribute for laborsaving.



**Embossed carrier tape**



**Ultra micro and thin embossed tape**



**Taping service**



**Peeling tester**



**Auto reel changer**

# 5-3-5. Semiconductor LED & Electronics related.

<b>LED classifier</b>	Classifying bulk of LED after dicing process into maximum 256 groups by optical inspection and electrical characteristic test.
<b>Taping machine</b>	Inserting, sealing with heat and packaging classified bulk LED and electronics parts with inspecting energization, line up in one direction.
<b>Sheet taping machine</b>	Peeling off semiconductor or LED wafer from sheet after dicing process and inserting, sealing with heat and packaging classified bulk LED and electronics parts with inspecting energization, line up in one direction.
<b>LED measuring machine</b>	Mounted on LED classifier or inspecting taping machine and doing optical inspection and electrical characteristic test of LED and transmit the result to classifier or inspecting taping machine
<b>LED alliance</b>	We organize a LED alliance aiming to LED new market such as India and Vietnam with major LED manufacturing equipment and element makers such as Canon machinery, Musashi engineering TOWA, Toyota Gosei, Panasonic, Shin-Etsu Chemical, and Kanematsu and support new markets.



LED Classifier



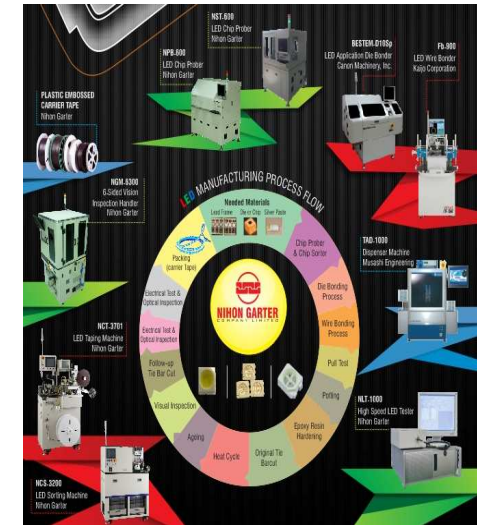
Taping machine



Sheet taping machine



LED Measuring machine



LED Alliance

# 5-4. Photovoltaic related business.



**Wet equipment for manufacturing of crystalline silicon solar cells**

Butch type texturing machine  
Butch type and inline type isolation equipment and PSG etching equipment  
Plating type wiring equipment

**Various type of heat treatment equipment**

Vertical glass substrate heating equipment.  
Eva cross linkage furnace for thin film solar cell.  
Vertical multistage diffusion furnace  
Walking beam continuous drying furnace  
Tube diffusion furnace



**Texturing equipment**



**ISO/PSG**



**Cure/Anneal furnace**

# 5-5.Cleaning related business



<b>Dress shirt pressing machines</b>	Pressing machine by using heated panel and hot air. Standard type of product functions are diversified into 3 unit such as for pressing collar & cuff, tuck & sleeve and body, but operating speed are rapid. We have another type of product which can press tuck & sleeve and body by one unit so called Body sleeve type.
<b>Wool finishers</b>	pressing equipment for jacket and pants
<b>Bagging machines</b>	The machine to bag automatically the finished item we have two type of machine, one is to bag items with dress hanger another is to bag by folding.
<b>Apparel equipment</b>	We have various type of machines which are used in the production line of making apparel such as sponging machine, fusing machine and pressing machine



**Body-sleeve pressing machine for dress shirts**



**Finisher for jacket**



**Finisher for pants**



**Bagging machine (Dress hanger type)**



# 5-6-1. Precise heating treatment, FPD, electronics and automobile related

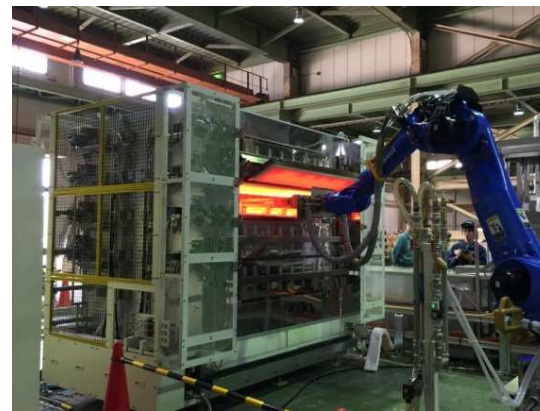
<p><b>Heating equipment for Flat Panel Display (FTP)</b></p>	<p>Heating equipment for LCD panel manufacturing: MB/MS series                  Heating equipment for LCD and OLED panel manufacturing: MT series                  Hot plate type heating equipment for LCD panel manufacturing                  Decompression type drying equipment for LCD and OLED panel and Walking Beam type consecutive heating treatment furnace</p>
<p><b>Heating Furnace equipment for precision parts</b></p>	<p>Consecutive muffle kiln with mesh belt conveyor (Muffle), consecutive muffles kiln with mesh belt conveyor (Muffles) and various type of testing kiln for electronics parts.</p>
<p><b>Heater and other related equipment</b></p>	<p>Radiant pat heater (PD/GPD)                  Infrastructure unit (BD/SG)                  Infrastructure unit heater (PS/PU/PH/PM) another industrial heaters.</p>
<p><b>Heater for automobile parts</b></p>	<p>Furnace for automobile industry (High tension sheet steel tempering equipment)                  Furnace for molding and pre-heater for molding</p>



**Annealing equipment for IGZO/OLED**



**Consecutive muffle kiln with mesh belt conveyor**



**Tempering equipment for automobile high tension sheet steel.**



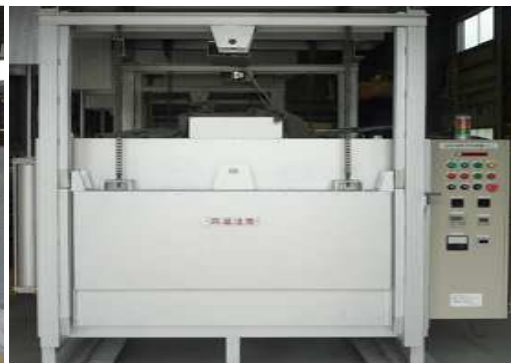
# 5-6-2. Precise heating treatment, molding and industrial furnace related.



<b>Mold heater for forging and casting</b>	<b>Die heater, DH series. Mold heater for hot forging and warm forging.</b>
<b>Industrial furnace, heat treatment equipment</b>	<b>Bogie hearth furnace, T5 T6 heat treatment furnace, Mold heater, Hardening furnace and Pit furnace.</b>
<b>Large forging heat treatment equipment for aircraft.</b>	<b>High temperature mold preheater</b>
<b>High speed heater</b>	<b>Heater for automobile power train.</b>



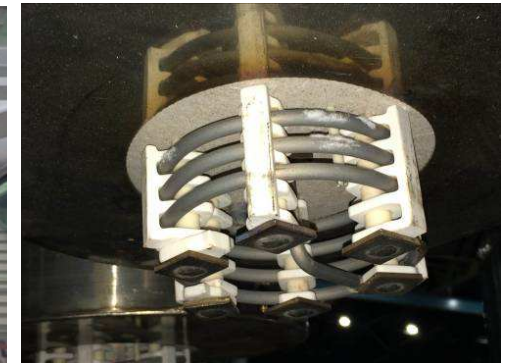
**Mold heater for forging and casting**



**Industrial furnace heat treatment**



**Large forging heat treatment equipment for aircraft**

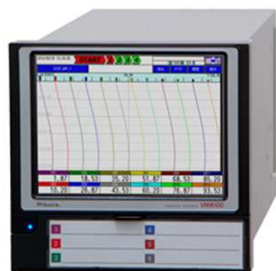


**High speed heater**

# 5-7. Industrial metering and telemetering and controlling related business



<b>Industrial metering equipment</b>	Utilizing metering and controlling technology, we have been contributing to wide range industrial automation from recorder and data processing systems for atomic power plant, precise temperature controlling system to environmental analytical sensor.
<b>Telemetering controlling equipment</b>	We have been contributing to building of social infrastructures with providing information transmitter, distance controlling monitoring system, data processing system as well as precise electric power meter and modem in order to support huge and wide range network of electricity system, city gas providing system, water and sewerage system and railway system.
<b>Semiconductor</b>	We have been providing vertical and horizontal diffusion furnace, diffusion controlling system as well as furnace renewal service by using own metering , controlling and censing technology cultivated as industrial metering manufacturer.



Paperless recorder



Digital indicating controller

Programing controller



High bride controller



Pressure transmitter



IP-enabled information transmitter



IP-enabled information input output device



High precision transducer



Vertical diffusion furnace  
Semiconductor manufacturing equipment

**Industrial metering equipment**

**Telemetering and controlling equipment**

# 5-8. Medical equipment & electronics related .



## Medical equipment

We manufacture, develop with entrust and sell medical equipment and medical products such as artificial dialyzer , infusion pump, drive unit of auxiliary artificial heart under the license of manufacturing and selling of medical equipment.

We also apply regulatory medical approval, develop, manufacture and get regulatory approval for overseas standard compatible medical equipment such as GE mark and CCC mark.

## Electronics

We develop, design and manufacture electronics related products with entrust base.

We manufacture and sell communication equipment, monitoring system equipment, equipment monitoring information transmission device printer and printer related equipment with those software.

## Electronic component.

We sell electronic component as primary agency of DDK Ltd. and OKAYA Electric Industries Co., Ltd. and manufacture and sell various type of harness. We build quick response system for connector of DDK MS series With plentiful stock.

We handle noise suppression parts and surge protection component by OKAYA



Products by DDK Ltd.



人工透析装置

Medical equipment



Drive unit of auxiliary artificial heart



Infusion pump

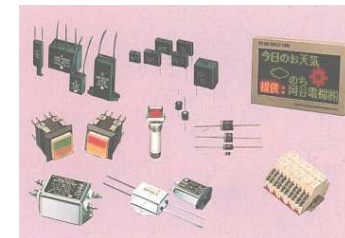


Development various type of printed board

Label printer BLP-777U



Electronics



Products by OKAYA Electric Industries Co., Ltd.

Electronic component handled by Miyuki Electronics Co., Ltd.



*Well, Today should be*

*a Fascinating and Prosperous Day, again!*

**Flexible High-Technology Company**



**Y.A.C. Co., Ltd.**

The prospects described in this document is based on the information we have as of the time this document is published, and the actual result may differ from such prospects due to various unexpected factors.