

# BUSINESS REVIEW



Johnson Electric Chairman and Chief Executive Patrick Wang, named Businessman of the Year 2000 by the DHL/SCMP Hong Kong Business Awards, at the press conference announcing the awards.



Gate S.p.A., the Italian motor systems division of Johnson Electric Automotive, Inc., received the "International Best Factory Award 2000", which acknowledges the best practice in Italian Factory Management. The award was issued and sponsored by the "IL Sole 24 Ore" newspaper and The Luigi Bocconi University.

## RECOGNITIONS

We are pleased to report that our Chairman and Chief Executive Mr. Patrick Wang was recently honoured as the Businessman of the Year in Hong Kong by the DHL/SCMP Hong Kong Business Awards 2000. The award, which is one of the most prestigious honours in Hong Kong, is a recognition of the contribution that Johnson Electric, as a global leader in precision motors, has made in advancing Hong Kong's stature as an international commercial and manufacturing centre.

In addition, our Gate operations in Italy were named "The Best International Factory in 2000" by the IL Sole 24 Ore newspaper and The Luigi Bocconi University.

These two awards illustrate Johnson Electric's commitment to management excellence.

## JOHNSON ELECTRIC'S BUSINESS DESCRIPTION

**JOHNSON ELECTRIC** is one of the world's largest manufacturers of micromotors and integrated motor systems. Founded in Hong Kong in 1959, the Group today has a presence in 14 countries worldwide and its production capacity exceeds two million motors per day.

The acquisition of the former Electric Motor Systems business ("EMS") of United Technologies Corporation, was completed on 25th June 1999. Hence, Johnson Electric's financial year 2000/01 is the first financial year that includes a full twelve months' results of the acquired business. Immediately upon acquisition, EMS was re-named Johnson Electric Automotive, Inc. ("JEAI"). JEAI comprises of two motor systems divisions: Gate S.p.A. ("Gate") in Europe, and Johnson Electric Automotive Motors ("JEAM") in North America.

On 11th May 2000, Johnson Electric and Nidec Corporation, a public company listed on the Tokyo, Osaka and Kyoto stock exchanges in Japan, agreed to establish a joint venture, named "Nidec Johnson Electric", to focus on the micromotor needs of the fast growing audio-visual and computer peripheral industries. Nidec Johnson Electric, formed by the integration of existing staff and assets from both companies, commenced operations on 1st July 2000.

As part of its on-going organisational development, Johnson Electric has recently established two principal operating divisions for the Group's businesses: the Automotive Division, and the Commercial Motors Division.

The Automotive Division consists of a business unit within the Hong Kong core micromotor business, Gate, and JEAM. Each automotive business unit has global responsibility for a particular market or product application. The Commercial Motors Division consists of four business units based according to their particular product application focus: power tools; home appliances; business equipment and personal products; and audio-visual.

## SALES OVERVIEW

- Trading conditions in our major areas were relatively stable. Sales rose 17% to US\$790 million, notwithstanding that a general slowing in global demand already had begun to set in during the year.
- Excluding JEAI, sales increased 11% to US\$472 million, with all businesses posting positive sales growth.

Geographically, sales increased 16% to US\$313 million in Europe, and 18% to US\$249 million in the USA. These increases were due to the inclusion of JEAI's full twelve months' sales in the year, compared to nine months' sales in the previous year, partly offset by the impact of a weak Euro in the case of Europe, and the limited growth of JEAI's starter motor business in the USA.

Excluding JEAI, the Group's core automotive micromotor sales to North America increased 3%, and sales to Europe increased by 11%, after translation into US dollars.

Sales to the Hong Kong/China and Asia Pacific regions continued to post healthy double-digit growth rates of 15% and 17%, respectively.

## AUTOMOTIVE COMPONENTS

<i>Door lock</i>	<i>Head lamp adjuster</i>	<i>Window lift</i>
<i>Water pump</i>	<i>Electronic throttle control</i>	<i>Air pump</i>
<i>Climate control actuator</i>	<i>Mirror adjuster</i>	<i>Seat adjuster</i>
<i>Fuel pump</i>	<i>Head lamp washer</i>	<i>Sensor fan</i>

Overall sales to the automotive components sector increased 21% to a record of US\$398 million, accounting for over 50% of Johnson Electric's total revenues.

The 1999 acquisition of Gate and JEAM has strengthened our competitive position in the automotive components sector where our business has excellent potential for market share growth.

Excluding Gate and JEAM, the core automotive micromotor business increased 7%. Growth in a number of major applications continued to be healthy: sales to the door lock application, up 14%; and to fuel pumps and electronic throttle control applications, each up 25%.

Gate, a pre-eminent producer of automotive radiator cooling fan module in Europe, was recently reorganized into two business units, namely Air Movement and Engine Cooling; and Geared Motors. Each business unit has global responsibilities for a particular market or application segment, and from the year 2001/02, Gate will be accelerating its growth beyond Europe.

Gate's sales increased 27% to US\$191 million, due mainly to the inclusion of full twelve months' sales for the first time, compared to nine months' sales in the previous year. In Euro terms, however, sales increased 44%.

JEAM's sales to the automotive components sector increased 42% to US\$64 million, again reflecting a full year's contribution for the first time, as well as sales increases from anti-lock braking systems and window lift.

As previously announced on 3rd March 2001, JEAM is undergoing a major restructuring programme designed to enhance its competitiveness that will result in the closure of its manufacturing plant in Columbus, Mississippi, in the U.S.A., and the transfer of its production responsibilities to plants in China and Mexico. The closure affects 350 employees in Columbus, and the anticipated completion date is 31st October 2001.

The principal goal of the Automotive Division is to leverage Johnson Electric's core competencies and low cost position in the global automotive supply chain to build a sustainable competitive advantage in the supply of micromotors and selected motor systems applications.



Washer Pump

# AUTOMOTIVE COMPONENTS



Fuel Pump Armature



Window Lift and Gear Box



Electronic Throttle Control



Motor for trimmer



POWER  
TOOLS





Motor for vacuum cleaner

# HOME APPLIANCES



**POWER TOOLS**

<i>Drill</i>	<i>Screw driver</i>	<i>Angle grinder</i>
<i>Saw system (including spiral saw)</i>	<i>Rotary sander</i>	<i>Heat gun</i>
<i>Hand vacuum</i>	<i>Bilge pump</i>	<i>Machine actuator</i>
<i>Gardening tools</i>	<i>Auto polisher</i>	<i>Outdoor sprayer</i>

Overall sales increased over 5% to US\$167 million.

Sales of the core micromotor business (excluding the starter motor business of JEAM) to power tools applications were up 1% to US\$104 million – reflecting partly the competitive price pressures in the Hong Kong/China region and partly the negative effect of a weak Euro on our sales performance in Europe. Sales to Europe were reduced, although only a relatively small proportion of sales to this business segment was in Euro. Sales highlights for the year were saw systems, gardening tools and hand vacuum cleaners, which recorded annual sales increases of 142%, 13% and 11%, respectively.

JEAM is one of the world's largest producers of starter motors for small gasoline engines found in lawnmowers and other gardening equipment, as well as in outboard marine engines. JEAM delivered a 13% increase in sales to US\$63 million compared to the previous year for which only nine months of sales were included. This relatively weak sales performance reflected the difficult market conditions in the USA, as well as the constraints on growth associated with JEAM's already high market share in this particular product segment.

Notwithstanding the challenging second half of the year, we remain optimistic about Johnson Electric's prospects in the power tools sector given the Group's strong relationship with leading branded power tool producers and its superior cost position that will remain an attraction for any producer considering the outsourcing of its motor production. A number of new projects have also been started that seek to introduce new micromotor products to power tools segment where Johnson Electric is presently under-represented.

**HOME APPLIANCES**

<i>Floor care product</i>	<i>Can opener</i>	<i>Electric knife</i>
<i>Mixer</i>	<i>Juice extractor</i>	<i>Slicer</i>
<i>Fan</i>	<i>Vacuum sealer</i>	<i>Coffee maker</i>
<i>Blender</i>	<i>Grinder</i>	<i>Dish washer actuator</i>

Sales increased over 7% to US\$109 million. Sales to the top three product applications, namely floor care products, mixers and electric fans, grew 29%, 12% and 16%, respectively. Overall sales performance to this segment did not improve more significantly, however, due partly to certain changes in the buying channel of a major customer involving inventory reductions at our distribution level in Europe. It is anticipated that the impact of this on Johnson Electric's sales was one-off and plans are in place for a significant recovery during 2001/02.

Our efforts to grow sales are on-going through a more competitive value proposition and new product offerings to customers. Growing competitive pressures and weak prices continue to impact the home appliances industry, but Johnson Electric is better positioned than ever to compete in this environment.

In addition, with the revenue base that we have established for the floor care products now accounting for over 30% of the total home appliances business, we expect these products to become one of our fastest-growing areas in the foreseeable future and underpin the overall performance of this business unit.

## BUSINESS EQUIPMENT AND PERSONAL PRODUCTS

### Business Equipment

*Printer product*  
*Gear box product*  
*Copier*  
*Joystick*

*Shredder*  
*Paper cutter*  
*Projector*  
*Satellite actuator*

*Camera*  
*Bill validator*

Micromotor sales to the business equipment sector increased 25% to US\$55 million.

Sales to printer products, accounting for over 60% of the business equipment segment sales, increased 22%, reflecting continued market share gains by our customers. Sales to other major applications such as vending machines, copiers and joysticks, recorded even higher rates of growth. Increasing market share of existing and new customers will be a major growth driver for this business.

Sales to audio-visual products, formerly part of this segment, have become a separate business during the year, as part of an international joint venture with Nidec Corporation of Japan. Johnson Electric's existing audio-visual business together with certain assets and production lines was injected into the new business, which commenced operations on 1st July 2000.

### Personal Products

*Hair dryer*  
*Massager*  
*Hair trimmer/Hair curler*  
*Toy*

*Tooth brush*  
*Shaver*  
*Dental jet*  
*Blood pressure pump*

*Aquarium product*  
*Vibrator*

Sales to the personal products sector increased over 24% to US\$42 million. Sales to such new applications as massager and electric toothbrushes, grew at triple-digit rates. Sales of micromotors for hair dryers and hair curlers also increased 14% and 20% respectively.

Continuing growth is expected to be sustained by new product introductions and market share gains.

As a result of organisation enhancements within Johnson Electric, the business equipment and personal products sectors are now managed as one business unit. This combined business unit is now on an attractive growth trajectory and is expected to deliver strong sales gains over the next several years.

## AUDIO-VISUAL

*CD-ROM loading*  
*CD-ROM sled*

*CD-ROM spindle*  
*Games controller*

*VCR loading*  
*Mouse*

Overall sales increased 111% to US\$19 million, which included the sales of Johnson Electric's original audio-visual business for the period from April to June 2000, and the sales of the new re-organised business within the international joint venture with Nidec Corporation of Japan for the remainder of the year.

As expected for a new business with its associated start-up costs, the audio-visual business unit is required to grow beyond its current size in order to achieve its planned profitability levels.

This business unit enters 2001/02 with expanded capacity and a well-defined product and market strategy. As it begins to achieve critical mass, we are optimistic that audio-visual will generate above average sales growth and attractive returns for shareholders.

## ENTERPRISE RESOURCE PLANNING (“ERP”)

On 24th October 2000, Johnson Electric announced its decision to work with Oracle Greater China, Oracle Corporation, in changing its system to ERP.

The ERP project covers the implementation of the Oracle e-Business Suite in major Johnson Electric locations by phases. The system, with Oracle’s web-based applications and database technologies, will become the platform for the “e-transformation” of the Group’s supply chain and marketing channels.

Supply chain improvement being a priority at Johnson Electric, has been chosen for the first phase of implementation. This covers purchasing, logistics, engineering and manufacturing areas in Johnson Electric’s facilities in Hong Kong and China. Phase 1 already started in November of last year and is expected to be completed in the financial year 2001/02.

Other systems including Financial System and Order Management System will follow. A roll-out to other manufacturing facilities, engineering centres and area operations worldwide is being planned.

ERP aims to improve significantly our operational efficiencies and responsiveness in the coming years.

## ORGANIZATION DEVELOPMENT

To maximize organic growth of the Group, we have entered the financial year 2001/02 with an organization change. We have created two new operating divisions: the Automotive Division and the Commercial Motors Division. This organization development is consistent with the existing business unit structure of the Group. The historical success of the existing business units is enhanced by the alignment of each division to market segments and product application areas.

The Automotive Division consists of five business units that are located throughout the world. Each of these automotive business units has global responsibility for a particular market or application. Ron Harrod, a Johnson Electric Executive Committee member, has been appointed as Director of the Automotive Division.

### AUTOMOTIVE BUSINESS UNITS:

1. Air Movement & Engine Cooling
2. Geared Motors
3. Brushless Technology Motors
4. JE Automotive Motors
5. Automotive Motors HK.

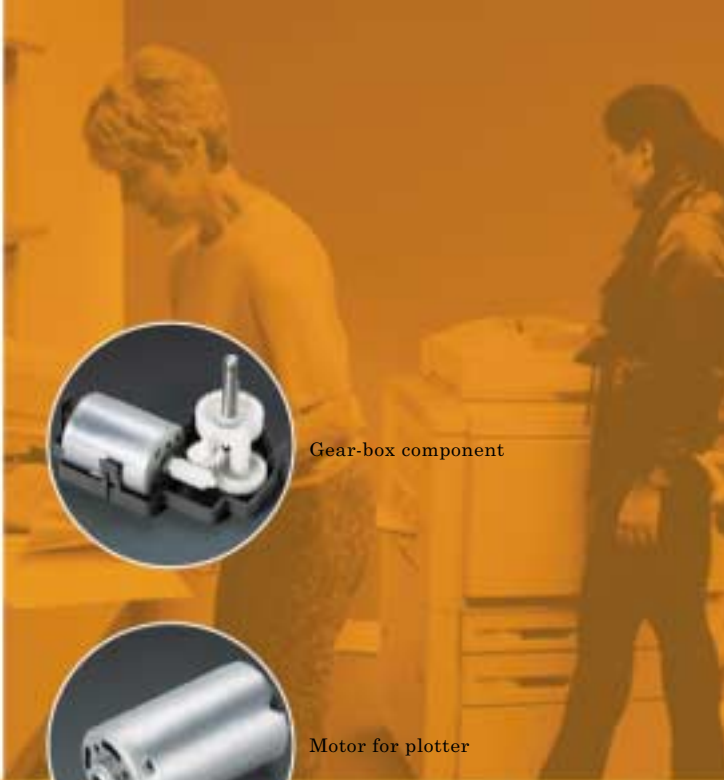
The Commercial Motors Division consists of four business units with global responsibility for their market segment. Dennis Ibarra, a Johnson Electric Executive Committee member, has been appointed as Director of the Commercial Motors Division.

### COMMERCIAL BUSINESS UNITS:

1. Power Tools
2. Home Appliances
3. Business Equipment & Personal Products
4. Audio-visual.

This organization focus will allow Johnson Electric to grow faster than industry rates in all segments. Aligning management in this way makes a great deal of sense from an operational and marketing perspective. In this era of Globalization, Johnson Electric needs to Standardize and Simplify our business processes.





Gear-box component



Motor for plotter



Key component of water spa

# BUSINESS EQUIPMENT/ PERSONAL PRODUCTS

## AUDIO-VISUAL



## INVESTING IN PEOPLE

### ***MICROMOTOR IS OUR PRODUCT*** **DIVERSITY OF PEOPLE IS OUR STRENGTH**

It is almost trite to say that people are our most valuable asset. At Johnson Electric, our strength lies in our ability to leverage the talents and skills of our 25,000-strong employee population in 14 countries to work towards common goals. Our continued success will only be assured by the continuous learning of our people.

#### DIVERSITY OF PEOPLE

We are very proud of the diverse cultures that exist in our global organization. The strength of our diversity lies not only in cultures, but also in the diverse skills and experience that we have been able to mobilize to achieve our market leadership. In the corporate office location in Hong Kong alone, we have over 10 nationalities working together in harmony. Of the company's Executive Committee, more than half are foreign nationals who come with multi-continental business experience in various disciplines.

#### LEARNING ORGANIZATION

Continuous learning holds the key to achieving our corporate strategy of growth and profitability. In January 1998, we established Johnson University ("JU") with the aim to provide the appropriate development opportunities to all levels of employees in order to optimize their performance. Today, six (6) colleges are actively engaged in providing comprehensive training to our employees: Component & Services, Engineering, Final Assembly, Quality, Tool & Die and Supply Chain colleges; the Management College will shortly be launched in this current fiscal year. JU has also coordinated with a few prestigious universities in China to start Bachelor, Master and language programmes.

#### COMPETENCY DEVELOPMENT

We continue to refine our performance management process in which quantifiable performance results are determined based upon achievement of key result areas and objectives. In the coming year, greater emphasis will be given to employee development. In order to tie performance management to employee development, we must focus not only on hard skills, but also styles and behavioural competences which we refer to as management competencies. These are the competences which we believe are, and will be, required to enable Johnson Electric to achieve its strategic goals in both the immediate and longer terms. Along with the above, leadership development will commence this current year starting at our general management level.

This way, we can effectively integrate performance management and people development into our succession planning process.

### **PAY FOR PERFORMANCE**

Pay and performance must be aligned with the corporation's strategic goals. At Johnson Electric, we are committed to double-digit annual compound revenues growth and earnings growth. Our short and long term incentive plans have been designed for that purpose. In the coming years, variable compensation programmes will be pushed further down the organization. Sales compensation plans will also be modified to achieve better alignment with current strategic goals.

At our factory and assembly levels, multi-skilled pay system is in place to encourage the learning and maintenance of key skills. Those entitled to skills premium are required to undergo testing every six (6) months to re-qualify for such premium.

### **CORPORATE CITIZENSHIP**

We have moved our environmental health and safety ("EH&S") organization and activities in Asia, Europe and North America under the stewardship of our corporate human resources function in order to give EH&S the importance and profile it deserves. Apart from the attention demanded of a responsible corporate citizen, this move will enable more formal measurement and monitoring of safety and environmental performance as well as the sharing of best practices within the Johnson Electric organization. Best practices include reduction of accident frequency and severity, and registration under the ISO-14000 environmental standard.

The other corporate citizenship that we are particularly proud of is the operation of our *Johnson City* in Shajing in China where a workforce of almost 20,000 live, work and play. As the main micromotor manufacturing facility of Johnson Electric, Johnson City boasts several multi-storey canteen restaurants, a medical clinic complete with medical staff, a ballroom cum karaoke bar, exercise gyms, tennis courts, basketball courts, badminton courts, Johnson University, living accommodation for all levels, a hostel with a restaurant, bar and cyber café, its own electricity generating station and firemen.

## QUALITY AND RELIABILITY

2000/01 was another excellent year for Quality and Reliability at Johnson Electric. The two key Quality initiatives begun last year began to bear fruit. Total Control Methodology (“TCM”) was introduced to all motor assembly business units, resulting in dramatic improvements in process control effectiveness, driving in-process defective rates to record lows in all business units. TCM has already become the most successful Quality improvement programme in Johnson Electric’s history. In the coming year, TCM will be extended to all component manufacturing operations and Phase 2, which focuses on process optimisation, will also commence at motor assembly operations. These are expected to drive the performance of those operations to even lower defective levels.

The other major Quality initiative was our Cost of Quality programme. Johnson Electric has been using a comprehensive Quality Cost tracking system to capture internal, external, appraisal and prevention costs for all operations company-wide, with detailed reports available for each Business Unit. These reports enable our business units to identify and focus on where unnecessary costs are being incurred due to scrap and defective products. These areas are then addressed and resolved utilising cross-functional teams and root cause analysis. As a result, Johnson Electric’s Quality Costs were reduced by approximately US\$1.8 million during the past year. Another reduction of more than US\$1.6 million is forecast for the coming year. This represents 9.7% improvement annually in the Cost of Quality.

We will continue these initiatives into the coming year and will be introducing Six Sigma Breakthrough as the next major thrust to improve Johnson Electric’s Product Quality. Six Sigma was initially pioneered by companies like Motorola and Allied Signal, and later embraced company-wide by General Electric. The Six Sigma programme has been hugely successful in those companies, repaying its cost many times over. Johnson Electric now has defined Six Sigma Breakthrough as part of the Johnson Electric’s Continuous Improvement Process, or JCIP programme, described in last year’s Annual Report. We have our own cadre of statistical Black Belts who are busy training people in manufacturing operations with the use of statistical techniques, and rolling-out the Six Sigma Breakthrough process. Improvement projects have been identified which will strongly contribute towards reduced cost and improved Quality. We expect to see dramatic results from this programme in the coming year.

The last major Quality initiative for 2001/02 will be the global integration of our Quality Systems. This will support our Customers’ desire for uniform Quality practices throughout all of Johnson Electric’s manufacturing organisations world-wide. With this programme, our ISO-9001 and QS-9000 Certifications will continue to be supported. We are also conducting a comprehensive re-assessment and updating of all our quality processes and procedures to ensure their effectiveness. These programmes will guarantee Johnson Electric’s products continue to achieve high Quality levels and meet all Customer requirements.