

BUSINESS REVIEW

JOHNSON ELECTRIC'S BUSINESS DESCRIPTION

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

The core of our business is "Johnson City", a large scale manufacturing operation located in Shajing, Guangdong Province, China, which constitutes our primary production platform serving our global customers. Motors produced at this facility cover all product applications: automotive, power tools, home appliances, personal products, business equipment, and audio-visual products.

From 2001/02, as part of its on-going organisational development, Johnson Electric established two principal operating divisions for the Corporation's range of businesses: the Automotive Motors Group, and the Commercial Motors Group.

Over the past few years, Johnson Electric has also made selective acquisitions designed to complement the Corporation's skills and business focus. Upon acquisition, these new businesses have been integrated into the Corporation's operations and organization structure.

The acquisition of the former Electric Motor Systems businesses ("EMS") of United Technologies Corporation, was completed on 25th June 1999. Immediately upon acquisition, EMS was re-named Johnson Electric Automotive, Inc. ("JEAI"). JEAI is comprised of two motor systems businesses: Gate S.p.A. ("Gate") in Europe, and Johnson Electric Automotive Motors ("JEAM") in North America. From the year 2001/02, Gate, a pre-eminent producer of automotive radiator cooling fan modules in Europe, was reorganized into two business units, namely Johnson Electric Air Flow ("JEAF") and Johnson Electric Geared Automotive ("JEGA"). Each business unit has global responsibilities for a particular market or application segment, and will be accelerating their growth beyond Europe.

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 motor 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.

In July 2001, Johnson Electric acquired certain manufacturing assets of the electric motor components business of Textron Automotive Company's Kautex Textron division for a purchase consideration of US\$12.5 million. Based in Manchester, New Hampshire, U.S.A., the business manufactured fuel pump armatures and cruise control stators for automotive tier-one suppliers and has annual sales of approximately US\$16 million. Under a related transition services agreement, Kautex Textron employees at the Manchester facility assisted Johnson Electric for several months in the manufacture of stators and armatures while Johnson Electric implemented the transfer of production to its plants in Mexico and China. The transfer was completed in January 2002.

In August 2001, Johnson Electric further acquired certain manufacturing assets of the automotive electric seat motor business of ArvinMeritor's Light Vehicle Systems division, for a purchase consideration of US\$11.7 million. ArvinMeritor manufactured seat motors at plants in Esson, France; Queretaro, Mexico; and Gordonsville, Tennessee, in the U.S.A., with annual sales of approximately US\$50 million. Under a related subcontracting, supply and transition agreement, ArvinMeritor acts as a manufacturing subcontractor to Johnson Electric to ensure continuity of motor supply to customers, while Johnson Electric arranges to consolidate such seat motor production at our manufacturing complex in Shajing, China. The transfer of production to China is expected to be completed in mid-2002.

In November 2001, the Corporation acquired the remaining 49 percent shares of Manufactura de Motores Argentinos S.r.l. ("MMA") and of Gate do Brasil Ltda. ("Gate do Brasil"), for a total consideration of US\$5.8 million. MMA manufactures cooling fan modules in Argentina for local automotive markets, and Gate do Brasil is an assembly plant for cooling fan modules in Brazil to support local automotive manufacturers.

SALES OVERVIEW

In the year under review, trading conditions were particularly difficult as the world's three leading economies slowed simultaneously for the first time since 1974, and the events of September 11th in the United States created a degree of political and economic uncertainty unprecedented in recent times.

Total Corporate sales decreased only marginally by 2% to US\$774 million, due to the inclusion of sales of US\$54 million contributed by the acquisitions completed during the year. Excluding these acquisitions, total sales decreased nearly 9%. For the first time, the Corporation experienced declines in sales across virtually all of its product application segments and across all its geographic regions.

Excluding acquisitions, sales to North America and Europe decreased 13% and 9% respectively. Sales to Asia (including Hong Kong/China and Asia Pacific) were reduced only modestly by 3%.

AUTOMOTIVE MOTORS GROUP

The Automotive Motors Group supplies motors for the following vehicle applications.

AUTOMOTIVE MOTORS HONG KONG

<i>Door locks</i>	<i>Head lamp adjusters</i>	<i>Air pumps</i>
<i>Fuel pumps</i>	<i>Electronic throttle controls</i>	<i>Seat adjusters</i>
<i>Water pumps</i>	<i>Mirror adjusters</i>	<i>Sensor fans</i>
<i>Climate control actuators</i>	<i>Head lamp washers</i>	

JEAF

Cooling fan modules

JEGA

<i>Window lifts</i>	<i>Pump systems</i>	<i>HVAC fans</i>
<i>Windshield wipers</i>		

JEAM

<i>Anti-lock braking systems (ABS)</i>	<i>Wipers</i>	<i>Transfer cases</i>
<i>Starters</i>		



Window lift



Climate control actuator



Seat adjuster

AUTOMOTIVE COMPONENTS



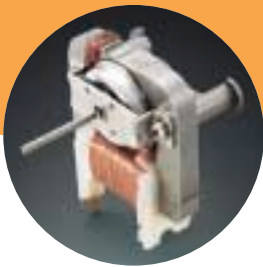
Motor for blower



Power washer pump

POWER TOOLS





Microwave oven fan



HOME APPLIANCES

The principal goal of the Automotive Motors Group 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 permanent magnet DC motors and selected motor systems applications.

Overall sales to the automotive components sector increased 4% to a record of US\$481 million, accounting for over 62% of Johnson Electric's total Corporate revenues.

Sales of Automotive Motors Hong Kong, representing the core automotive motor business based in Hong Kong/China, increased 32% to US\$188 million, as a result of the inclusion of the sales of US\$52 million contributed by the acquisitions from Textron and ArvinMeritor. Such sales have since become the responsibility of Automotive Motors Hong Kong immediately upon completion of the acquisitions, because their production will mostly be transferred to and consolidated at our manufacturing complex in Shajing, China. Excluding the acquisitions, sales of Automotive Motors Hong Kong decreased nearly 5%, with unit volume down only modestly by 3%. Slower demand for relatively mature products was partly offset by continuing growth due to increasing customer outsourcing in such product applications as fuel pumps, electronic throttle control and mirror adjusters.

Sales of JEAF and JEGA (formerly, Gate) based in Europe decreased slightly to US\$187 million, reflecting the impact of currency translation, as sales in Euro terms were flat. Unit volume, however, increased 12%.

Sales of JEAM in North America declined 18% to US\$104 million, with unit volume down nearly 7%, reflecting in part the economic recession in the U.S. With the exception of anti-lock braking systems ("ABS"), double-digit sales declines were experienced in each of the major applications, namely starters, wipers and transfer cases. The starter motor business, accounting for 44% of JEAM's sales one year ago, saw demand in its key markets - marine, and lawn and garden sectors - contract by approximately 20%.

JEAM's operations, as previously reported, were also affected by a major restructuring programme which involved 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 transfer, which was completed in the third quarter of the year, has since resulted in a significant improvement in profitability of the major product transferred, namely the motor for the ABS application.

Looking ahead, we have observed encouraging trends that are expected to increase JEAM's sales for the new financial year 2002/03. Consumer interest in motorized automotive options remains high, which is expected to boost such product applications as the ABS and transfer cases for 4-wheel drive vehicles. The restructuring initiatives undertaken during the year have also enabled JEAM to improve its value proposition to its customers. Significantly improved contributions to the Corporation in both sales and profitability, are expected from JEAM in the coming years.

The acquisitions made during the last three years, from United Technologies in 1999, and from Textron and ArvinMeritor in 2001, have clearly strengthened Johnson Electric's competitive position in the automotive components sector where our business has excellent potential for market share growth.

COMMERCIAL MOTORS GROUP

POWER TOOLS

<i>Drills</i>	<i>Screw drivers</i>	<i>Angle grinders</i>
<i>Hand vacuums</i>	<i>Rotary sanders</i>	<i>Heat guns</i>
<i>Saws systems</i>	<i>Bilge pumps</i>	<i>Outdoor sprayers</i>
<i>Gardening tools</i>	<i>Auto polishers</i>	<i>Machine actuators</i>

Sales declined 21% to US\$82 million, with unit volume down nearly 10%. Sales were considerably reduced by an unprecedented combination of several factors: lower consumer demand in the more depressed and uncertain economic environment; customer inventory reduction actions; and pricing pressures coupled with the unfavorable shift in the sales mix with lower sales in new products and larger-sized motors. Most major product applications such as drills, saws, and gardening tools, reported double-digit declines.

Nevertheless, towards the end of this very challenging year, we started to see more favorable trends which included some signs of a recovery in the customer demand for the coming year, as well as certain new potential outsourcing opportunities. Johnson Electric's superior cost position is expected to remain an attraction for any producer considering the outsourcing of its motor production in the power tools sector.

HOME APPLIANCES

<i>Floor care products</i>	<i>Can openers</i>	<i>Electric knives</i>
<i>Mixers</i>	<i>Juice extractors</i>	<i>Slicers</i>
<i>Fans</i>	<i>Vacuum sealers</i>	<i>Coffee makers</i>
<i>Blenders</i>	<i>Grinders</i>	<i>Dish washer actuators</i>

Sales decreased 3% to US\$105 million, with a decrease of nearly 12% in unit volumes. Most of the sales weakness was experienced in small kitchen appliances and fans. Sales to floor care product applications, on the other hand, continued to demonstrate strong growth - up by 29% year on year.

With the revenue base that we have established for the floor care products now accounting for over 40% of the total home appliances business, we expect products in this area to become one of our fastest-growing markets in coming years and underpin the overall performance of this business unit.

BUSINESS EQUIPMENT AND PERSONAL PRODUCTS

Business Equipment

Printer products

Gear box products

Copiers

Joysticks

Shredders

Paper cutters

Projectors

Satellite actuators

Cameras

Bill validators

Sales to the business equipment sector decreased 18% to US\$45 million, with unit volume down nearly 10%, reflecting significantly weaker consumer markets and inventory corrections following the 25% growth rate experienced in the prior year. Sales to printer products, which account for 66% of the business equipment segment sales, decreased by more than 16%.

Personal Products

Hair dryers

Massagers

Hair trimmers/Air curlers

Toys

Tooth brushes

Shavers

Dental jets

Blood pressure pumps

Aquarium products

Sales to the personal products sector decreased 18% to US\$35 million, with unit volume down over 15%. In major applications such as hair dryers and massagers, we experienced a reversal of the prior year's strong growth rates. The best performance came from motors for toys, which achieved sales growth of over 24%.

AUDIO-VISUAL

CD-ROM applications

DVD product applications

Game controllers

Overall sales increased over 36% to US\$26 million, with unit volume growth of nearly 48%.

This business sector is still in a relatively early stage of development following the commencement of a joint venture with Nidec Corporation of Japan in July 2000. As expected for a new business which is only one and half years old, with its associated start-up costs, the audio-visual business unit is required to grow beyond its current scale in order to achieve its planned profitability levels. As it begins to achieve critical mass, we are optimistic that audio-visual products will generate above average sales growth and attractive returns for shareholders.

ENTERPRISE RESOURCE PLANNING ("ERP")

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

The live run of the ERP Financial System took place in December 2001. This phase of the ERP was the first step towards building a disciplined and accurate information infrastructure.

The ERP Internet Procurement (known within Johnson Electric as JMART) internally, and



Motor for hair dryer



Gear-box component



Motor for printer

BUSINESS EQUIPMENT/ PERSONAL PRODUCTS

AUDIO-VISUAL



CD-ROM



Sled

Project Accounting System went live in April 2002. The system streamlined procurement processes within the Corporation, and allowed it to decentralize transaction processing to the employees' desktops. This also enables a competitive and efficient contracting process, with shorter overall procurement and delivery cycle times.

The ERP Supply Chain Management System just went live recently in June 2002. This comprises a suite of modules including Flow and Discrete Manufacturing, Procurement, Planning, Engineering and Costing, which provide such capabilities as "Just-in-time" production and delivery; multi-site optimization of demand and supply; improved vendor management and capacity planning; and so forth. The new system will fundamentally change the way Johnson Electric works, and enables it to achieve scalability as it grows its market shares.

INVESTING IN PEOPLE

MOTORS ARE OUR PRODUCTS **DIVERSITY OF PEOPLE IS OUR STRENGTH**

It has been a productive year on the people front. We have continued to strengthen our knowledge workforce by selective recruitment in North America, Europe and Asia, including the People's Republic of China. We reaffirm our commitment to people development as we believe continuous learning provides the only assurance to our ability to compete and adapt to change in the global marketplace.

We narrowly escaped a prolonged recession in the last financial year while our employee populations declined as a result of a company-wide hiring freeze. Strong demand for our products brought a swift recovery early in 2002 and that necessitated a rapid reversal of hiring policy in all business units. Following a dip to below 23,000 late last financial year, we expect to see employee growth to over 25,000 this year.

DIVERSITY OF PEOPLE

We have to leverage diversity to our advantage because we are a global player. The strength of our diversity lies not only in cultures, but also the diverse skills and experience that we have been able to mobilize to achieve our market leadership. In the upcoming year, we are going to increase our knowledge exchange across continents and step up international assignments as a medium for high potential development.

LEARNING ORGANIZATION

Johnson University (JU) established in 1998 now has seven colleges providing a wide range of vocational and technical training programmes. The JU Master of Science (M.Sc.) in engineering degree programme is yielding its first batch of graduates this year. Kicking off this September will be a "Crotonville" style virtual learning organization for our international high potential development. In those sessions, we are going to engage our emerging managers in a learning environment with real life business cases. Apart from the learning, they will also be afforded the opportunity to no-holds barred sessions with the Chairman and Chief Executive.

In addition to the above, we continue to explore and utilize various media for training, management, leadership and executive development.

COMPETENCY DEVELOPMENT

Johnson Electric has developed a set of leadership competencies which will form the basis for our performance management, career development and selection. In an era where people have access to essentially the same sources for acquiring academic education and hard skills, emotional intelligence remains the principal differentiating factor for job success.

We will be implementing in this financial year a new global performance management system that focuses on employee development, in addition to meeting objectives or key result areas. This system, which will supersede all current performance management systems in Johnson Electric, will be integrated with our succession planning process, our internal selection process and high potential development.

INTERNAL EMPLOYEE COMMUNICATION AND CASCADING

Employees in top performing companies are more aware of their companies vision and business strategies than the employees of poorer performing companies. This is a fact that has been proven by numerous studies. From Johnson Electric's perspective, therefore, the more we can help our employees understand how the company's priorities and initiatives align with corporate vision and strategies, the better chance we will have of realizing JE's vision and strategic business objectives.

We have developed and implemented a process for internal communication and cascading of key information, which are of interest to our employees. The semi-annual communication performance survey will ensure that we stay focused on and committed to making communication the top priority in Johnson Electric.

PAY FOR PERFORMANCE

We continue to work on refining our pay for performance system. Corporate and business unit financial goals form the threshold and base level reward criteria along with individual non-financial objectives to help focus on initiatives. At Johnson Electric, we are committed to double-digit annual compound revenue and earnings growth and our compensation system has been designed to support that commitment.

Incentive compensation plans at both the sales and factory floor levels are working to expectation.

RESPONSIBLE CORPORATE CITIZEN

We recognize the need to formally state and cascade our social responsibility statement this year. This includes our policy on a variety of issues such as human rights, non-discrimination and environmental care.

We continue to make progress on our environmental, health and safety (EH&S) initiatives including reduction of accident frequency and severity, reduction of Johnson Electric's impact on the global environment and registration under the ISO 14000 environmental standard.

COME GROW WITH US

We are the growth company in our industry. We continue to cultivate our network to scout talents in all leading marketplaces. In so doing, we are increasing our diversity and our calibre of people. So irrespective of whether you are American, Canadian, German, Italian, Indian, or Chinese or of any other national origin, if you are well educated and smart, and you have the desire to succeed and the ambition to grow with the best, Johnson Electric wants You!

QUALITY AND RELIABILITY

Johnson Electric continued with another year of outstanding results in 2001/02 for Quality and Reliability. The key Quality and Reliability initiatives begun two years ago achieved milestone performance, catapulting Johnson Electric to a new level of Quality excellence. The complementary efforts of TCM (Total Control Methodology) and Gemba Kaizen activities resulted in even more dramatic improvements in process control effectiveness, driving In-process and outgoing defect rates to record lows in most business units. In the coming year, TCM will be extended to all component manufacturing operations. The TCM Phase 2 plan carried over from last year focuses on process optimization, and will also commence in motor assembly operations. This effort is expected to drive the Quality performance of those operations down to world-class levels.

The second major Quality initiative is 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 occur due to scrap and defective products, as well processes not fully optimized. Those areas are then analyzed and resolved utilizing cross-functional teams and root cause analysis. As a result, Johnson Electric's Quality Costs were reduced by approximately US\$1.2 million during the past year. This represents an 20% improvement in the overall Cost of Quality, with a similar degree of improvement expected in the coming year.

The Six Sigma Breakthrough process was a third initiative, initially introduced in the Commercial Motors Group last year. Six Sigma was pioneered by companies like Motorola and Allied Signal, and then later embraced company-wide by General Electric and numerous others. For Johnson Electric, this programme has been part of the Johnson Electric Continuous Improvement Process, or JCIP, as described in our previous year's Annual Report. To support this programme, our cadre of statistical Black Belts has been training people in manufacturing operations in the use of statistical analysis methods and the Six Sigma Breakthrough process. We expect to see more dramatic results in the coming year as the JCIP programme rolls-out to the remainder of the business units.

The last major Quality initiative is the ongoing global integration of our Quality Systems, which will be completed by December 2002. This initiative not only supports the Corporate direction to "Simplify, Standardize and Globalize (SS&G)" but also addresses our Customers' desire for uniform Quality practices throughout Johnson Electric. With this programme, the Quality Systems of Johnson Electric's facilities world-wide will be upgraded and certified to ISO 9000:2000, as well as to the TS-16949 standard for our automotive business. This upgrading will facilitate a comprehensive re-assessment and updating of all our Quality processes and procedures to ensure their effectiveness, and guarantee Johnson Electric's continued commitment to high Quality products and customer delight.