

# Report of Operations

## Consolidated results of operations Progress and outcomes of operations

We are pleased to report results of the operations for the 49<sup>th</sup> term (the period from April 1<sup>st</sup> in 2018 to March 31<sup>st</sup> in 2019)

During the period although some regions lost momentum, overall the global economies showed a mild recovery. Eurozone's and China's GDP growths went down to 1.8% and 6.6% respectively.

Due to the trade conflict between the US and China, Brexit etc. risk of economies downturn is getting higher, however in the US improvement in employment and personal income increase supported the economy recovery continuously. As for ASEAN5s, although there was discrepancy in growth by country, based on the steady growth in Thailand and Vietnam, the region kept GDP growth rate of 5.2%. As to India based on improvement in personal consumption environment, the economies were strong enough to lift GDP growth rate to 7% range. Regarding Japan although the trade conflict between the US and China also gave a negative impact, steady improvement in employment, recovery of personal consumption and capital investment increase helped improve business confidence.

Under such a circumstance, our group companies went into the second year for the 5-year plan towards 2021 where in April 2018 ARBROWN INDIA TRADING Pvt. Ltd. started operations and the Korean entity started trading businesses changing company name to AR BROWN KOREA Co., Ltd. so that we could be real "Asia AR Brown".

AR Brown's FY2018 financials were JPY10,049 million in sales which was 1.8% decrease compared to the previous fiscal year due to decline in export business for chemicals, JPY379 million in operating income which was 11.5% decrease due to proactive workforce increase in order to achieve the 5-year plan and expense for offices' infrastructure enhancement. Thanks to decrease in temporary expenses such as Headquarters' relocation that had occurred in the previous fiscal year, ordinary income became JPY465 million which was 1.9% increase. Including AR BROWN (Shanghai) Co., Ltd., AR BROWN (THAILAND) Co., Ltd. and Brown Technologies Co., Ltd., the consolidated financials were JPY11,453 million in sales with a growth of 1.6%. This was brought by a substantial growth in continental Asia represented by China. As a result, the consolidated operating income and ordinary income resulted in JPY877 million and JPY844 million, which were a growth of 12.8% and 16.7% respectively.

In the upcoming 50<sup>th</sup> term AR Brown goes through 70<sup>th</sup> year anniversary. Aiming to contribute to new values creation in line with the Management Philosophy, our group companies are moving forward as a family, minimizing risks which may come from the economy uncertainties.

# Overview of each of the businesses in this period

## —— Consolidated basis ——

### **Electronics Materials Business**

---

The consolidated financials resulted in a negative growth of 0.4% in sales and a growth of 11.1% in profit respectively. Due to export decrease based on Thailand local sourcing started from Autumn for Coatings and a middle size business transfer from Japan to China, Japan sales went down, while China, Thailand and Korea grew. As for Automotive Electronics segment, all the regions grew following the previous fiscal year, which brought the above-mentioned profit increase. Thermal Management materials business for ADAS (Advanced Driver Assistance System) related devices and Coating business for Infotainment related devices contributed. As to Home Appliance & IT segment, Thailand grew continuously at Home Appliance sector, while China was negatively impacted in the last quarter due to the economy downturn in China. Regarding Electronics Chemical segment which is regarded as an investment segment, Thermally Conductive fillers increased number of customers who qualified, and product offerings became richer by increasing filler kinds, where the business reached the point that sizable revenues should come up from next fiscal year. The Korean entity changed business focus to trading at the same time as the company name change where Automotive Electronics and Electronics Chemical targeting at 5G related applications are 2 primary priorities.

### **Performance Chemical Business**

---

Sales and profit declined by 6.2% and 5.9% respectively. Business acquisition, that had reached the agreement, started generating revenues from June, which contributed to a considerable growth in Chemical Intermediate segment. Regarding Biocide segment despite supply issues with Chinese suppliers happened, the segment grew overcoming the difficulty. As for Tire segment, growth in China contributed to the segment growth. Evaluation for a new product at a key customer moved ahead, with which the segment has reached the point that from sometime in 2020 it may bring a ramp-up. On the other hand, Paint & Ink segment struggled with a resin business lost due to a price increase, which was not able to be offset by growth in additive business. As for Adhesive segment although supply issues happened with some American products due to a hurricane attack, thanks to efforts made, the segment only declined slightly. Personal Care & Toiletry segment had a few products newly started to be used by customers, unfortunately due to a quality problem happened with a product, the segment had a negative growth.

### **Fine Chemical Business**

---

Sales and profit grew by 7.7% and 13.7% respectively. New Medicine segment grew through existing businesses. As to Bio-medicine segment feasibility study business started for ADC (Anti-body Drug Conjugate) based on a project initiated by a large Japanese pharmaceutical customer. Regarding Generic Medicine segment although it had a negative growth in sales, including OTC (Over the Counter) Medicine sector, collaboration between the Japan and the India entities made it possible to increase offerings for APIs (Active Pharmaceutical Ingredient) and Intermediates which are currently under evaluation at several Japanese Pharmaceutical customers. Food Inspection segment grew nicely thanks to a substantial amount of residual agricultural chemicals inspection kit that was shipped to the Ministry of Health in Indonesia as well as growth in Livestock food inspection kit business following the previous fiscal year. Aerospace & Aviation segment grew as well doing continuous spec-in activities for new chemicals for the next generation of satellite rockets.

## **Life Science Business**

---

The business grew by 0.2% and 1.5% in sales and profit respectively. Bioresearch segment grew, both Sterilization segment for Pharmaceutical firms & Medical Instrument companies and Livestock Breeding segment grew at a double digit following the previous fiscal year, which offset a loss from a product family business ceased at the end of the previous fiscal year. As for Nano-membrane business although one of the main customers decided to quit from the relevant business filed, new projects with a considerable number of new customers started. At Brown Technologies PGT (Preimplantation Genetic Testing) workshops were organized several times where demonstration for the relevant equipment took place and active discussions with many experts in the field were held, which led to the equipment sales.

## **Test & Measurement Business**

---

Both consolidated sales and profit grew by 20.5% and 18.4% respectively. As for Automotive segment, both Japan and China increased sales significantly with ADAS (Advanced Driver Assistance System) related testing systems, in addition Japan increased Pressure Mapping equipment business. Regarding Tire sector, in addition to growth in traditional business field, sales for new test & measurement equipment took off, which widened product offerings. Aerospace & Aviation segment was steady driven by acceleration sensor business. In Electronics segment, Thermo-Streamer promotion started. As a new segment, promotion for an automated medicine packaging machine started in China targeting at large hospitals there and first delivery was made in January.