



Left: 3-panels display optics

BUSINESS REVIEW

Review of Operations

As a result of an extremely tough and adverse business environment during 2001, the Group's sales dropped by 16.9 per cent in comparison with the prior year and a decrease in profit attributable to shareholders of 77.7 per cent. During the second half of 2000 and the beginning of 2001, the Group embarked on an ambitious growth target which aimed at a turnover level of more than

double the actual results in 2001. The shortfall compared to this target was a result of the extremely adverse business climate in 2001 coupled with a steep decline in business volume. The hardest hit sector has been in the MNC volume business and Varitronix Malaysia suffered the most because its total focus was on the MNC accounts, which demanded a much higher inventory level and planning. As a consequence, the turnover of 2001 for Varitronix Malaysia dropped by 62% in comparison with the prior year. So drastic and immediate a cut back would necessarily incur losses.

The special and significant write-off of inventories and other accounting provisions was largely made in the audited financial statements of our subsidiary, Varitronix (Malaysia) Sdn Bhd. Resource and production planning were based on MNC customers' forecasts which unfortunately and eventually did not materialize. In order to meet the MNC customers' demand for just-in-time deliveries, finished goods and work-in-progress were produced in advance along with a build-up of raw material inventories. These became excessive or redundant when orders were truncated by customers. In addition, there were several claims against customers for the losses caused by order cancellation. Part of the aforesaid claims has yet to be settled. The Directors consider it prudent to write off these items.

In comparison with the figures for 2000, the staff costs and the other operating expenses increased significantly during 2001 by an aggregate of approximately HK\$79 million. The build up of the aforesaid costs started in the second half of 2000 and continued during 2001 in anticipation of growth and targeting more MNC business which eventually did not materialize. The management has already endeavored to control the costs in the new climate. In addition, although cash reserves increased significantly during 2001, interest and other income decreased by more than HK\$20 million as the result of declining interest rates in 2001. All these contributed to the poor result for the year ended 31st December 2001.

Despite all the negative factors mentioned above, the Group's financial status is stronger than ever. As of 31 December 2001, the cash and cash equivalents were up by 92 per cent in comparison with the end of year 2000. Inventory, not including the aforesaid special write-off, decreased by 29.1%. Margins for 2001 would have improved were it not for the sharp increase in staff costs and other expenses, a result of the overhang from a too aggressive expansion. Cost control measures are currently implemented to improve quality, efficiency and productivity

On the operation side, the Group has successfully transformed its quality system to cope with the

automotive industry standard, the QS9000 Quality System. During the year, our plants in Hong Kong, Shenzhen and Penang were certified for QS9000 standard. This milestone would be the key to participating in the automotive industry market.



*Left: Bistable Cholesteric Display
Right: Electrochromic (EC) Mirrors*

PROSPECTS

It is difficult to say when the economy will recover in view of the present uncertainty in the market which presently offers low visibility. Nevertheless the Group will do their utmost in controlling costs and more realistic planning. However the Group will not compromise on our research and product development for future competitiveness and profitability. The Group is committed to continue its strong research and development for new products ahead and these are summarized below:

Reflective Color STN

With its internal reflector and single polarizer architecture, the technology offers higher light throughput than existing color STN which utilizes two polarizers. Reflective color STN is readable under ambient light. It consumes little power and provides vivid colors. 256- and 4k-color versions are now ready for production. Samples are presently under evaluation with some customers. The Group is currently working on a fast response 65k-color version to be used by next generation 3G mobile phones.



Transflective Colour STN Display

Bistable Cholesteric Display

With its zero-power image retention capability, high resolution, wide viewing angle, and readability under ambient light, BCD is best applied to handheld applications where low power consumption is a must. One of those applications is the electronic book. By utilizing BCD in electronic books, minimal system power consumption can be achieved between turning of pages. VGA and XGA versions are currently developed and the Group expects to commercialize this technology in the very near future.

Reflective Liquid Crystal on Silicon Microdisplay

Microdisplay is a high resolution display built upon existing CMOS, VLSI and liquid crystal technologies. With its advantages of low cost and excellent optical properties, microdisplay can be very competitive to existing TFT or DLP counterpart in projection TV

application. Presently the Group is providing foundry service to companies who are developing the CMOS backplanes.

Organic Light Emitting Diode

OLED, being an emissive display, requires no external lighting. It has no limitation in viewing angle and provides extremely fast response time. It is said to be a technology that is complementary, if not supplementary to LCD. The company has completed a facility for R&D and pilot production and has been working with various renowned institutes and companies on material and process development. Samples will be available by Q2 2002.

In particular, the Group had recently closed a five-year agreement with Beijing University on OLED material development. Meanwhile, the Group and the Chinese University of Hong Kong have been granted a three-year Innovation & Technology Fund, administered by Innovation and Technology Commission of the HKSAR Government to work on display material research and fabrication process. Through those research projects, the company shall be able to get access to the universities' state-of-the-art scientific equipment and their expertise in the fields of physics, chemistry, and material science.

Wide Operating Temperature STN Modules

To meet the stringent requirements of military and automotive industries, the Group has developed a complete solution for STN modules to operate under very wide operating temperatures, which is hard to achieve by conventional modules. The technology uses not only thermal and optical compensation, but it also utilizes intelligent electronics for temperature compensation. The result is a module that works perfectly under the most adverse environmental conditions.

With our new products, innovative technologies, improved productivity, above industry standard quality and strong balance sheet, the directors believe the Group will weather this storm and emerge better than other players.

On behalf of the directors, I would like to take this opportunity to thank our staff for their dedication and perseverance. They have worked even harder in the face of stiff market environment and shown great fortitude during the rationalization process. I would also like to express our sincere appreciation of the support from our customers, suppliers and shareholders throughout the year without which we would not have achieved our results.

Dr C. C. Chang
Chairman

Hong Kong, 18 April 2002

We Put Our Heart on **DISPLAY** 

