

CAPACITY AND PLANT DEVELOPMENT

Due to poor market demand, 2001 was not a year of capacity expansion or new facilities. This provided an excellent opportunity for our production management to focus on quality and efficiency improvement, training of staff and better utilization of the CNC machines already installed. More production capacity was allocated for our R&D prototypes and pilot production to expedite the time-to-market of our new products.

To sustain profitability at a much reduced business volume, many steps were taken to reduce our fixed and variable costs. Apart from minor layoffs and self-attrition to reduce headcount and remove marginal performers, we also introduced pay cuts, froze salary reviews and slashed overtime payments to trim fixed personnel expenses. In addition to savings on utilities and supplies due to plant shutdown, this soft period also helped to use up our employees' accrued annual leave. These prudent cost control measures permitted us to sustain our track record of profitability since inception, i.e. full year operation starting 1976.

Reflecting the market situation, we trimmed our capital investment in 2001 to HK\$153 million, some 20% below our original budget. In line with current business levels and typical of past years, we have budgeted HK\$150 million for 2002, intended for analytical equipment, hardware and software to support R&D, logistics and management information, stamping dies for additional matrix leadframe products, machines for boosting QFN etched frame production, and to enhance our production capabilities.

RESEARCH AND DEVELOPMENT

In addition to our technological prowess, ASM's success is built on our ability to innovate faster than our competitors and to exceed customer expectations with our products and services. In this regard, ASM aims not only to provide customers with world class hardware, but also with continuous process enhancement, packaging development support, factory automation solutions and software to help them manage their valuable assets. To fund these growing activities, it is our policy to spend 10% of our equipment sales on R&D. In 2001, our gross R&D expenses amounted to HK\$170 million, second highest in our corporate history, representing 13.7% of our equipment sales.

As in previous years, we have a program to launch many new and exciting products in 2002. To maintain ASM's leadership in fine pitch wire bonders and to offer customers better return on their investment dollar and factory space, the enhanced version of our Eagle wire bonder - the Eagle 60 - will be ready by the end of the first quarter. Featuring 15-20% higher productivity to lower customers' cost of ownership, easier looping control, off-line programming and portability, this new model will further challenge our competitors' market presence. Additional developments to achieve finer pad pitch bonding and better output per given floor area are in our roadmap.

生產力及廠房發展

由於市場需求欠佳，在二零零一年並無擴充生產力或增加新廠房，但藉著這難得的機會，本集團的生產管理層可專注提升品質與效率、培訓員工及更充份利用現有的電腦數控機床，並且在研究發展原模及試驗式生產方面加強生產能力，以加快新產品的產銷週期。

為了在營業額大幅減少的情況下依然維持盈利能力，本集團採取多項措施削減固定成本及變動成本。在進行小幅度裁員及讓員工自然流失，從而削減人手及辭退表現欠佳的員工之餘，本集團亦實施減薪、凍結薪酬檢討及削減超時工資等措施，務求減省固定人力開支。除工廠停工而節省水電及供應品開支外，市場放緩期間亦有助僱員使用累積年假。以上審慎的成本控制措施讓本集團成功保持自創立(即自一九七六年起全年運作)以來一直錄得盈利的往績。

本集團把二零零一年的資本性投資削減至港幣一億五千三百萬元，較原預算低百分之二十左右，藉以反映當前市況。按照現時業務水平及貫徹過往數年的慣例，本集團撥出港幣一億五千萬元作為二零零二年的預算，現計劃用作添置分析設備、支援研究發展、物流及管理資訊的軟硬件、用於其他矩陣引線框架產品的沖壓模具、提升QFN蝕片生產的機器，與此同時增強本集團的生產能力。

研究及發展

ASM之成功，關鍵除了在於技術出類拔萃之外，亦建基於ASM能夠快人一步，較競爭對手更早推出嶄新產品，並為客戶提供超過其所想所求的產品及服務。就此，ASM不單以向客戶提供世界級硬件為目標，更旨在不斷改良工序，支援包裝發展，制訂生產自動化解決方案及軟件，務求協助客戶管理價值不菲的資產。為了提供以上日益增加工作所需的資金，我們訂有一項政策，就是將銷售設備所得收益百分之十撥作研究及發展經費。於二零零一年，本集團的研究及發展總開支達港幣一億七千萬，是本集團歷年以來第二大的研發開支金額，佔銷售設備所得收益百分之十三點七。

一如往年，本集團於二零零二年訂定計劃，推出多款令人驚喜的嶄新產品。為了保持ASM在微距焊線機的領導地位，並為客戶帶來更優厚的投資回報及更充份利用廠房空間，Eagle焊線機的改良版Eagle 60將會在第一季末面世。Eagle 60的生產力較現有產品高百分之十五至二十，令客戶擁有焊線機的成本下降，亦使扭曲控制、離線設定及移動機器更為方便容易，從而進一步挑戰競爭對手的市場地位。我們將致力將墊距焊接改良至更加精細，同時提高產量對每寸空間的比率。

RESEARCH AND DEVELOPMENT (CONTINUED)

During the past three years we have supported the photonics industry with our laser diode die and wire bonders. Now, as part of our long term diversification plan to serve the optical communication component industry, we have decided to broaden our product offerings with an optical fibre alignment and welding machine capable of sub-micron accuracy. We will be working closely with some selected customers and get our prototype machines ready within 2002.

To differentiate ASM as the leader of its industry and to help customers make the best use of their assets, we have been developing a cluster controller and IDEALnet software for monitoring ASM or foreign equipment. With 2D laser marking on the substrates and vision camera at each processing station, the cluster controller provides error prevention and traceability for the integrated circuits to be processed. The equipment management software, IDEALnet, permits the tracking of equipment performance, gaining remote access to information and diagnostic, as well as offering a vehicle to improve machine Overall Equipment Effectiveness (OEE).

We have already successfully developed a bonder to address one segment of the flip chip market. Now, as the pacesetter in the microelectronics assembly and packaging equipment industry, we intend to allocate additional R&D resources to expand our product range. We will provide a reflow station to be linked to our AD900 flip chip bonder to satisfy in-line processing requirements. An optional larger force bonding head module will address the higher complexity I/O dies. To cater for different bumping media, we will develop a machine for making gold stud bumps, and equip our flip chip bonder with thermocompression and thermosonic chip attach capabilities. Development efforts will be expanded to adapt transfer moulding and eliminate the underfill process for some selected applications. Our packaging development team will work closely with our customers to explore high performance but cost-effective flip chip packaging.

These and other groundbreaking, innovative development projects distinguish ASM from our competitors in the market, and safeguard our future business success.

研究及發展(續)

過往三年，我們一直以鐳射二極管芯和焊線機支持光能(photonics)業務。時至今日，本集團決定擴闊產品系列，研發光纖調準及有超微米準確度的焊接機，作為長遠多元化發展計劃的一部分，藉以進軍光纖通訊配件業。我們將會與多位選定客戶緊密合作，並在二零零二年內完成原型機器。

為了令ASM能夠在業內同儕中脫穎而出，並且協助客戶充份利用其資產，我們正致力開發群集控制器(cluster control)和IDEALnet軟件，監察ASM或其他設備。藉著在底層加上平面鐳射標記及在每個工序點裝設攝錄機，群集控制器能夠防止錯誤，並可追查所處理的集成電路。設備管理軟件IDEALnet協助客戶監察設備表現，遙距索取資料和分析，並且提供一個改善機器整體設備效率的方法。

我們已成功開發一部焊接機，以滿足覆晶焊接市場其中一個範疇。本集團身為微電子組裝及包裝設備業的領導者，現正計劃調配更多研發資源擴展產品系列。我們將會提供與AD900覆晶焊接機連接的回焊站(reflow station)，以滿足線上工序的需要。可隨意替換的強力焊接頭組件(optional larger force bonding head module)將適用於更為複雜的I/O管芯。為了切合不同撞擊媒介，我們將會開發一部專門進行金打線成球突塊(gold stud bumps)的機器，並在覆晶焊接機中增添熱壓及熱超聲波晶片焊接功能。開發工作將會擴展至在若干選定應用範疇採用傳遞模塑技術，並刪除未曾充份運用的工序。我們的包裝發展隊伍將會與客戶緊密合作，開拓高效能而符合成本效益的覆晶片包裝解決方案。

憑藉以上及其他嶄新獨創的發展計劃，ASM能夠在市場上眾多競爭對手中突圍而出，確保業務穩操勝券，前景一片光明。

FINANCIAL

ASM's strong financial position is the result of our profitable and cash generating business performance in past years, as well as our conservative fiscal policy, prudent investment planning and strict liquidity control.

In spite of the most severe downturn in the history of semiconductor and its equipment industries, ASM remained profitable and generated strong positive cash flow last year. Although HK\$459.5 million was paid as dividend and HK\$153 million spent in capital investment during the twelve-month period, cash on hand at 31 December 2001 was only slightly reduced to HK\$478.5 million (2000: HK\$648.8 million). In fact, the majority of capital investments were funded by the current year depreciation of HK\$151.8 million.

Except for a JPY479 million loan raised in July 2001 to hedge against our yen-based assets' exposure to currency fluctuation, with no other bank borrowing, this resulted in an all bank debt to equity ratio of only 1.6%. With no long-term borrowing, as in the previous year, gearing ratio is again zero. Net interest income amounts to HK\$ 22.1 million for the year.

Receivables were tightly monitored during 2001, resulting in 65 days sales outstanding, the same as the previous year. Management has closely scrutinized all receivable accounts and concluded that bad debt exposure, if any, is immaterial and well covered by provisions made in conformity with the Company's policy. Through better management of working capital, our current ratio significantly improved to 4.39. Order backlog exceeded US\$20 million as of 31 December 2001.

Having established a solid foundation in the microelectronics market, the Group intends to further its organic growth strategy in the near term. With no short term need for major cash outlay and in view of our strong liquidity and rising equity base, as evidenced by the recent dividend proposals, we aim to operate the Group with the optimum shareholder fund and return any excessive cash holdings to our shareholders. The strong financial position of the Company should allow ASM to weather the slowdown and emerge as a formidable leader in our industry.

財務表現

ASM擁有雄厚的財政狀況，除了有賴過往持續錄得盈利及帶來現金的業務表現之外，亦有賴本集團多年來貫徹採取穩健的財政策略、審慎的投資計劃及嚴格的流動資金控制。

儘管半導體及半導體設備行業出現史無前例的嚴重衰退，但ASM去年仍可排除萬難，取得盈利及大量現金流入。雖然在過往十二個月期間派發了港幣四億五千九百五十萬元股息，並斥資港幣一億五千三百萬元作為資本性投資，惟於二零零一年十二月三十一日的手頭現金僅輕微下降至港幣四億七千八百五十萬元（二零零零年：港幣六億四千八百八十萬元）。事實上，大部分資本性投資均以本年度的折舊港幣一億五千一百八十萬元撥付。

本集團於二零零一年七月籌措四億七千九百萬日圓貸款，以對沖日圓資產所面對的匯率波動，而除此之外，本集團並無其他銀行借貸，因此所有銀行負債與資本比率僅為百分之一點六。一如往年，由於本集團並無長期借貸，故資本負債比率為零。本集團年內的淨利息收入合共達港幣二千二百一十萬元。

本集團於二零零一年繼續嚴格監控應收賬款，導致應收賬款維持於與去年相同的六十五天數期。管理層已詳細審查所有應收賬款，審查結果認為縱使出現任何壞賬風險，亦屬微不足道，且有關賬款已依據本公司的政策撥備。通過更有效管理營運資金，本集團的流動比率大幅改善至四點三九。截至二零零一年十二月三十一日，積存訂單總額逾二千萬美元。

本集團已在微電子市場奠定穩固基礎，現計劃在不久將來進一步加強推動本體增長策略。在並無短期重大現金支出需要的情況下，加上本集團具備雄厚的流動資金，且從近期的派息建議可見資本基礎不斷上升，管理層旨在利用最適量的股東資金經營本集團的業務運作，繼而把所持的額外現金回饋股東。本公司穩健的財政狀況應有助ASM安然渡過業內的衰退困境，並崛起成為業內出類拔萃的領袖。