

RESEARCH AND DEVELOPMENT (CONTINUED)

Driven by the electronics industry's continuous drive for greater miniaturization, improved speed, more efficient electrical and thermal performances as well as cost reduction objectives, device manufacturers demand their equipment suppliers constantly push the technology envelope to find process solutions for their advanced packages such as ultra fine pitch BGA, QFN, stacked die and flip chip. To cement our business relationship with major customers and to win over new strategic clients, we have provided them with continuous process enhancements in wire looping control, packaging development support (such as using copper wire for bonding), and factory automation solutions for process integration and small lot production. Together with our in-house technology development teams focusing on advancing ASM's enabling technologies such as motion control, vision systems, optics, materials and reliability, our product development teams are chartered to design higher performance products without a corresponding cost increment in each new generation, so that ASM can share the benefits with our customers.

Apart from coming up with the now standard work-horse in die and wire bonding, in recent years we have developed several first generation processing equipment models to offer our packaging solutions; gold and copper stud bumping, eutectic solder and thermosonic flip chip, soft solder attachment, thick copper wire bonding, reel to reel encapsulation and solder ball placement are just some of the processes available. However, with customers' demands for advanced packages and cost reduction showing no signs of abating, our product development roadmap contains new and significantly higher throughput die bonder, aluminum and gold wire bonders, as well as an integrated test handler, all scheduled to be launched later this year. For better line balancing of the high density matrix frames, we have also prepared an innovative, lower cost and smaller footprint molding system.

In addition to providing unrivalled mainline solutions, we believe in catering for our customers' niche applications. To this end we offer a range of equipment that provides cost-effective solutions to customer needs, and are continually adding new capabilities. A lens holder assembly machine for image sensors is currently under development, and a wafer level package handling system and management software are in the pipeline.

研究及發展 (續)

在電子業對提升纖細度、增加速度、更具效率的電熱性能及降低成本不斷提出要求等目標帶動下，裝置製造商要求設備供應商不斷提升技術水平，為其超微距BGA、QFN、管芯及覆晶等先進包裝工序尋找解決方案。為鞏固與重要客戶的業務關係及贏取新的策略性客戶，我們不斷為客戶改良焊線環軋控制工序、包裝發展技術支援（例如應用銅線焊接）和工序整合及小批量生產的各種生產自動化解決方案。配合集團內部專注提升ASM技術（如機動控制、視頻系統、光學系統、材料及可靠性等）的技術發展隊伍，既可設計出較高性能的新一代產品，又不會令相關成本增加，讓ASM能與客戶分享利益。

除現有的標準管芯及焊線工具外，集團近年更開發出多個第一代工序設備模型作為包裝解決方案；部分可供應的工序包括金及銅釘頭沖壓、易熔焊料及熱能超聲波覆晶、軟焊料焊接、粗銅線焊接、卷軸至卷軸塑封工序及焊球放置。然而，由於客戶對先進包裝及削減成本的訴求並無減少跡象，我們的產品發展藍圖包括生產力大幅提高的嶄新管芯焊接機、鋁及金線焊接機，以及整合式測試處理器，均預定於今年較後時間推出。除高密度矩陣框架外，我們亦製作了一款成本較低及較小型的嶄新沖壓模具。

除提供無可比擬的主流解決方案外，集團深信應滿足客戶各項獨特應用所需。為此，我們提供一系列的設備，以具成本效益的解決方案滿足策略性客戶的需要，並不斷增添新的技術。目前正開發一套用於影像感應組件的鏡片裝嵌機器，而一套晶片包裝處理系統及管理軟件正在生產中。

FINANCIAL

In spite of the semiconductor equipment industry just exiting from the most severe downturn in its history, ASM remained healthily profitable and expanded its turnover 41.1% to US\$334.5 million. ASM's strong financial position is the result of our consistently profitable and cash generating business performance in past years, as well as our conservative fiscal policy, prudent investment planning and strict liquidity control.

Although now having a wider spectrum of products, after two successive years of inventory reductions totalling HK\$186.0 million in 2001 and 2002, we only need to slightly (4.7%) raise our inventory by HK\$23.7 million to HK\$529.5 million in 2003, despite achieving an increased inventory turnover of 5.03 times, much better than the previous years. As such, we generated a free cashflow of HK\$392.6 million and a return on invested capital of 39.7% in 2003.

Notwithstanding that HK\$383.3 million was paid as dividends and HK\$160.5 million was spent in capital investments during the twelve-month period, cash on hand as of 31 December 2003 was increased to HK\$513,078,000 (2002: HK\$465,569,000), with the majority of the capital investments being funded by the current year's depreciation of HK\$153.5 million.

With no bank borrowing either for short or long term, ASM achieved an all bank debt to equity ratio of zero and no gearing for the Group, the same situation for the latter as in the past four years. The Group's shareholders' funds increased 9% to HK\$1,915,502,000 as of 31 December 2003 (2002: HK\$1,756,072,000).

Due to a significant drop in interest rates in the recent years, net interest income only amounted to HK\$3.9 million for the year. Receivables are mostly from the 4th quarter shipments and have been tightly monitored during the year, resulting in 96.4 days sales outstanding. 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. With our rigorous monitoring of current assets and current liabilities, current ratio stood comfortably at 3.20. Due to the strengths of order inflows in the 4th quarter, order backlog was significantly raised to US\$119 million as of 31 December 2003, a level comparable to year 2000 period.

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, we aim to continue our policy of operating the Group with the optimum shareholder fund and returning any excessive cash holdings to our shareholders. The strong financial position of the Company should allow ASM to fund the capital investments and rising working capital requirements to sustain leadership position in its industry.

財務表現

儘管半導體設備業剛走出有史以來最嚴重的衰退，但ASM仍錄得可觀的盈利，營業額更增加百分之四十一點一，達三億三千四百五十萬美元。ASM財政狀況雄厚穩健，除了有賴過往持續錄得盈利及帶來現金進賬的業務外，亦有賴本集團多年來貫徹採取審慎的財政策略、精明的投資計劃及嚴格的流動資金管制。

雖然集團目前擁有一系列範圍較廣的產品，加上二零零一及二零零二年連續兩年成功把總存貨量減少港幣一億八千六百萬元，但我們於二零零三年僅需把存貨量輕微增加(百分之四點七)港幣二千三百七十萬元至港幣五億二千九百五十萬元，儘管存貨週轉率提升至五點零三週次，表現較過去數年大幅改善。因此我們於二零零三年產生港幣三億九千二百六十萬元的自由現金流量，及錄得投入資本回報率達百分之三十九點七。

雖然在過去十二個月期間派發了港幣三億八千三百三十萬元股息，並斥資港幣一億六千零五十萬元作為資本性投資，二零零三年十二月三十一日的手頭現金仍增加至港幣五億一千三百零七萬八千元(二零零二年：港幣四億六千五百五十六萬零九千元)，而主要的資本性投資乃由是年港幣一億五千三百五十萬元的折舊所支付。

由於集團並無短期或長期銀行借貸，ASM的銀行貸款對股本比率及資本負債比率均為零，而後者在過去四年均為零。於二零零三年十二月三十一日，集團的股東資金增加百分之九，至港幣十九億一千五百五十萬零二千元(二零零二年：港幣十七億五千六百零七萬二千元)。

由於近年利率大幅下調，年內的淨利息收入只有港幣三百九十萬元。集團的應收賬款主要來自第四季的收入。在嚴謹的監控下，應收賬款週轉率維持在九十六點四天。管理層已詳細審閱所有應收賬款，審閱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政策撥備。由於集團嚴格監控流動資產及流動負債，令流動比率處於三點二的充裕水平。由於第四季接獲大量訂單，於二零零三年十二月三十一日，積存訂單大幅增加至一億一千九百萬美元，與二零零零年的水平相若。

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之策略。由於短期內並無重大現金支出，加上本集團擁有充裕的流動資金和股東資金增加的情況下，管理層旨在繼續其政策，預留適量的股東資金作集團營運之用，而將剩餘現金回饋予股東。本集團穩健的財政狀況應有助ASM為資本性投資及不斷上升的營運資金要求提供充裕資金，並繼續於業內保持領導地位。