### Management Discussion and Analysis 管理層討論及分析

#### **Overview**

Developing and marketing multiple products to serve diversified market segments is certainly more challenging than the narrowly focused approach adopted by most of our competitors. However, this business strategy has time and again proven to be a powerful weapon to protect us against inevitable industry fluctuation and enabled ASM to build a thriving company. We experienced 47% Group revenue growth in the previous year, but starting off 2005 from the trough of the business cycle, the sequential improvement in quarterly bookings and billings during the year could not offset the setback of the first six months. Yet ASM's drop in turnover, common to all leading players in the assembly equipment industry, was smaller than most of its competitors and better than those changes estimated by industry analysts. Our Group turnover, profitability and returns were the third best in our corporate history, clearly reflecting ASM's seamless execution of its winning strategies and continuously increasing momentum in the market place.

The proliferation of package types in leaded, unleaded, ball grid array (BGA), chip scale/size package (CSP) and wafer level package (WLP), as well as those high density packages like stacked die, stacked package (PoP) and system-in-package (SiP) demands a lot more equipment, process and packaging solutions. We intend to win customers by using ASM's technology, cost structure (the most efficient in the industry) and human and financial resources accumulated over the years to further broaden our innovative product offerings, simultaneously pursuing differentiation and low cost with value innovations unmatched by our rivals. This unique business strategy truly distinguishes us from all our competitors, enabling ASM to sustain its global leadership.

#### 總覽

儘管開發和推廣多元化產品以迎合不同市場的需要,比大部份競爭對手所採用專注於某個範疇之策略更富挑戰性,然而時間證明這種多元化的策略正是ASM能經得起行業起伏的最佳武器,促使集團蓬勃發展。集團去年的收益增長達47%,但於二零零五年初因經歷行業低潮,故雖然本年度隨後的季度訂貨及付運額持續上升,仍未能抵銷首六個月的跌幅。在裝嵌設備行業各主要企業的營業額均下跌的情況下,ASM雖仍未能倖免,惟與大部份競爭對手比較,ASM所錄得的跌幅已較為溫和,表現亦較行業分析員預測為佳。集團的營業額、盈利能力和回報是ASM有史以來的第三高,顯示ASM能全面執行其致勝策略,並持續提升其市場競爭能力。

包裝種類日漸增多,如有針、無針、球柵陣列封裝 (BGA)、晶積體封裝 (CSP) 及晶片包裝 (WLP)等,再 加上如多層管芯、多層包裝 (PoP) 及組裝系統 (SiP)等 高密度包裝技術,均需要更多設備、加工及包裝解決方案。ASM憑藉先進科技、業內最具效益的成本結構及多年來累積豐富的人力和財力資源爭取客戶,進一步擴闊嶄新的產品種類,推出非競爭對手所能媲美的多元化、低成本及高價值的創新產品。這個獨特的業務策略將有助ASM從芸芸競爭對手中突圍而出及保持其全球領導地位。

#### AD9012+SR902 Line

Two top-ten IDMs have adopted our eutectic-solder-reflow-process flip chip bonder for their SiP volume production.

兩間十大集成裝置製造商(「IDMs」)亦已於他們的SiP應 用上採用ASM的易熔焊料重熔程序覆晶焊機。



decades of profitable growth

三十年內每十年利潤持續增長

#### **Overview** continued

Buoyed by strong demands for semiconductors in portable electronics such as cell phones, MP3 players and digital cameras, healthy consumption of the same in PCs, servers, games and automotive applications, and a positive macroeconomic outlook, pundits are currently projecting a moderate single-digit (6.7 – 8.0%) growth for the semiconductor industry in 2006. In fact, assembly equipment orders have been strong in the recent months resulting in a higher order backlog for ASM. While every industry analyst projects a gain for the assembly equipment market in 2006, their numbers are somewhat divergent, ranging from 3.6 - 22.1% (VLSI Research 3.6%, SEMI 9.0%, Dataquest 22.1%). Although most customers are indicating a positive outlook for the first half, order visibility remains limited. The growth of the assembly equipment market this year is generally believed to depend on whether the industry can sustain the strong momentum of the first two quarters into the second half of 2006.

#### **Market and Product Development**

**EQUIPMENT DIVISION** 

In a year of double-digit decline (Dataquest -11.1%, VLSI Research -13.3%, SEMI -19.1%) for the assembly equipment industry, ASM once again outperformed most of its competitors in revenue change. Building on our industry-largest market share, our equipment business dipped slightly by 11.9% to US\$368.4 million, representing 81% of the Group's turnover in 2005 and the third highest in our corporate history. We maintained the number one position in the assembly and packaging equipment industry we have held since 2002 with a revenue gap of US\$75 million or 25% between us and our closest rival.

#### 總覽續

受惠於可攜式電子產品如手提電話、MP3機和數碼相機等對半導體的需求強勁,而個人電腦、伺服器、遊戲和汽車的半導體應用亦十分穩定,再加上市場利好的宏觀經濟預測,專家目前預料二零零六年半導體行業將出現單位數字(6.7%-8.0%)的溫和增長。事實上,ASM在最近幾個月接到大量裝嵌設備的訂單,令未完成訂單總值上升。行業分析員一致看好二零零六年的裝嵌設備市場,預期錄得正增長,然而他們所預測的增長率較為參差,介乎3.6%至22.1%之間(VLSI Research 3.6%、SEMI 9.0%、Dataquest 22.1%)。儘管大部份客戶對上半年的業務前景表示樂觀,但集團難以就未來的訂單數目作出預測。市場普遍相信,裝嵌設備市場於本年度的增長率,須視乎行業於下半年能否承接首兩季的強勁勢頭而定。

#### 市場及產品發展

設備系列

儘管裝嵌設備行業全年出現雙位數字跌幅(Dataquest -11.1%、VLSI Research -13.3%、SEMI -19.1%),ASM 的營業額表現再次超越大部份競爭對手。憑藉擁有 最大的市場佔有率,集團的設備業務僅微跌11.9%至3.684億美元,佔集團二零零五年營業額的81%,並為 ASM有史以來的第三高。集團自二零零二年以來在 裝嵌及包裝設備業一直獨佔鰲頭,收益較最接近的競爭對手高出7,500萬美元或25%。

Image Sensor Line

ASM is the sole leader in providing particle-controlled image sensor in-line assembly solutions, supplying all major manufacturers of such cleanliness-sensitive devices.

ASM是粒子操控影像感應裝嵌解決方案的唯一供應商, 為所有主要之製造商提供高潔凈度的產品。

hundred fifty-five million US dollars turnover in 2005

> 二零零五年 營業額達四億 五千五百萬美元



#### Market and Product Development continued

**EQUIPMENT DIVISION CONTINUED** 

The electronics industry is characterized by its continuous drive for greater miniaturization, faster speed, more efficient electrical and thermal performances, and higher functionalities with lower cost for each generation of product. To support device manufacturers facing these challenges, equipment suppliers increasingly have to deliver customized solutions that answer the specific customer's needs. ASM now has multiple platforms for almost every major assembly process: die bonding, aluminum wire bonding, gold wire bonding, flip chip bonding, encapsulation, package singulation, test handling and LED die sorting. In particular, ASM provides two unique products not offered by our competition: the dual-head gold wire bonder (Twin Eagle) and our Osprey molding system. The unmatched low cost-of-ownership of the former, and the built-in flexibility and tooling-investment protection for the latter have attracted many customers who recognize the huge potential savings these new ASM products can generate.

While small relative to our die and wire bonder businesses, we have seen our chip size/scale packaging (CSP) equipment sales rising at a much higher pace in the recent years. Two top-ten IDMs have adopted our eutectic-solder-reflow-process flip chip bonder for their SiP application, whereas some customers have already selected this cost-efficient flip chip bonder for image sensor volume manufacturing. Last year we also shipped newly-developed RFID (radio frequency identification device) bonding machines to two customers for their pilot-line production. Concurrently ASM has become the sole leader in providing particle-controlled image sensor in-line assembly solutions, supplying all major manufacturers of such cleanliness-sensitive devices.

#### 市場及產品發展續

設備系列續

電子行業的特色是要求新一代產品無論在纖細度、速度、電熱性能及一般性能這幾方面均需不斷提升,而成本則需持續下降。為支持裝置製造商應付這些挑戰,設備供應商越來越需提供度身訂造的解決方案,以滿足客戶的特定需要。ASM目前擁有適用於任何主要裝嵌工序的複合應用平台:管芯焊接、鋁線焊接、電線焊接、覆晶焊接、塑封工序、包裝切割、測試處理及LED晶片分類。此外,ASM更擁有兩項競爭對手沒有的獨家產品:雙頭金線焊機(Twin Eagle)及Osprey塑封工序設備系統。前者極具成本效益,後者則具有內置靈活性及模具投資保障,可大幅節省成本,故廣受客戶認同及歡迎。

儘管晶積體封裝(CSP)設備只佔集團管芯和焊線機業務很小比例,但其銷售額正迅速上升。兩間十大集成裝置製造商(「IDMs」)亦已於他們的SiP應用上採用ASM的易熔焊料重熔程序覆晶焊機,而若干客戶亦已選用我們極具成本效益的覆晶焊機,以大量生產影像感應組件。去年,我們亦已付運新開發的射頻識別(RFID)焊接機予兩名客戶作試產之用。與此同時,ASM是粒子操控影像感應裝嵌解決方案的唯一供應商,為所有主要製造商提供高潔淨度的產品。

#### **Osprey**

The world's smallest encapsulation system, a very unique product of its kind only offered by ASM, has attracted many customers who recognize the huge potential savings this unique product can generate.

至今只有ASM擁有之獨家產品 — Osprey,世界 最小型之塑封工序設備系統,具有內置靈活性及 模具投資保障,可大幅節省成本,故廣受客戶認同 及歡迎。



factories in Hong Kong, Sha Tou Jiao and Fu Yong in Shenzhen, PRC, Singapore and Malaysia

> 五間廠房分佈於 香港、深圳沙頭角、 深圳福永、新加坡 及馬來西亞

#### Market and Product Development continued

#### **EQUIPMENT DIVISION CONTINUED**

The underlying strength of our equipment business lies not just in our leadership position in the wire and die bonder market segments – the largest and 2nd largest sectors in our industry – but also in our host of product offerings in CSP equipment, encapsulation, solder ball placement, package singulation, integrated test handling, LED sorting and power LED assembly. As ASM only entered most of these medium-size market segments during the past five years, we stand a good chance of securing a larger share of them in time. With continuous product enhancement and market development efforts, we expect these products to generate valuable dividends in the not too distant future.

#### **LEADFRAME DIVISION**

Thanks to increased market demands, capacity expansion and operational improvements in our China, Singapore and Malaysian plants, ASM achieved a 16.8% gain in leadframe turnover last year, with the US\$86.5 million revenue representing 19% of the Group's total sales. In fact, our sales in the 2nd half year exceeded US\$50 million and we made record billings in the last three consecutive quarters. This compares very favourably with the SEMI November 2005 report estimating the leadframe industry to have grown 1.7% in 2005, and is evidence of our good progress in strengthening our leadframe competitive position through strategic realignment.

Last year, we also succeeded in developing fine pitch, high leadcount TQFP stamped leadframe products at our China factory, generating higher business volume to share the necessary overhead. While the qualification process of our new Malaysian plant for some customers was longer than expected, we have been busy installing and characterizing new plating machines and producing first articles for customers, aiming to complete the transfer of our plating operation from Singapore to Malaysia by mid-2006. This restructuring, when fully operational, should enable us to boost the output of QFN frames and position ASM for further gain in market share.

#### 市場及產品發展續

#### 設備系列續

集團在設備業務方面的優勢不僅在於我們於業內的領導地位(我們是業內最大及第二大的焊線機和管芯焊機供應商),同時我們在CSP設備、塑封工序、焊球放置、包裝切割、綜合測試處理、LED分類及高性能LED組件等方面亦能提供多元化產品。由於ASM於過去五年始進軍此等中型市場,故未來集團在該等市場中擁極佳商機,進一步提升佔有率。透過不斷改進產品及發展市場,我們預期這些產品於不久將來將提供更具價值的回報。

#### 引線框架系列

受惠於市場需求增長,加上集團設於中國、新加坡和馬來西亞廠房的產能擴充和營運能力提升,ASM去年來自引線框架業務的營業額增長16.8%達8,650萬美元,佔集團總銷售額19%。事實上,我們在下半年的銷售額超逾5,000萬美元,連續三季之付運數量更創新高。與SEMI二零零五年十一月份報告估計引線框架業於二零零五年增長1.7%比較,集團的成績相當理想,足以證明集團在透過策略性調整後,其引線框架業務的市場競爭能力已取得成效。

去年,集團的中國廠房成功開發微距焊點、高針數 TQFP沖壓引線產品,令業務量增加以分擔基本運作 成本。儘管集團新設的馬來西亞廠房因若干客戶的 品質審核程序較預期長,集團現正加緊安裝和調適 新的電鍍機器,為客戶生產首批產品,目標是在二零 零六年中以前把電鍍業務由新加坡遷至馬來西亞。 是次調整在全面投產後,將有助ASM提升QFN框架 的產量,以進一步擴大其市場佔有率。

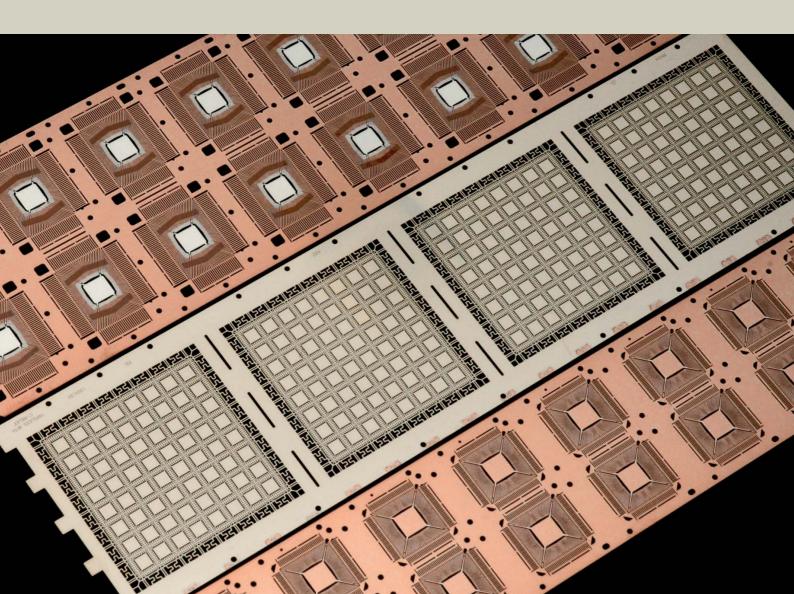
#### ATM Plating lines

A substantial portion of our HK\$194.8 million capital expenditure in 2005 was used to equip our new Malaysian factory with parts fabrication and leadframe processing capabilities to cope with the enlarged volume.

集團於2005年的資本性支出港幣1.948億元,其中 大部份為新的馬來西亞廠房增設部件生產及引線 框架加工能力,以應付擴大後的產量。

# hundred plus R&D staff

六百多名 科研人員



#### Market and Product Development continued

**LEADFRAME DIVISION CONTINUED** 

Commercializing our past development efforts in super fine pitch etching and stamping, converting our pilot lines for ultra-high precision plating, bleed control and moisture sensitivity level (MSL 1) into high volume automated manufacturing, improving production yield and shortening our manufacturing cycle time all require significant capital investments and further developments in more capable machinery. Fortunately, the migration to lead-free electronics and QFN packaging has provided golden opportunities for ASM. Our palladium-plated leadframes have facilitated ASM's market penetration into several target integrated device manufacturers (IDMs), while we have leveraged on our total packaging solution and QFN frame etching capabilities to build a strong presence in the rapidly expanding QFN leadframe market segment.

#### **Financial**

Riding on our market-share gains in the gradually recovering assembly equipment and leadframe markets, we achieved earnings in excess of HK\$850 million in 2005, although turnover dipped slightly by 7.6% to US\$454.9 million. Even though the diversity of ASM's products expands year on year, amidst production run rates in the 4th quarter significantly higher than twelve months ago we only needed to slightly increase (by HK\$54.5 million) our total year-end inventory to HK\$609.3 million, attaining an inventory turnover of 6.08 times. Receivables have been tightly monitored, resulting in 88 days sales outstanding. Bad debt exposure, if any, is immaterial and well-covered by provisions made in conformity with the Company's policy. As such, a cash conversion cycle of 143.8 days, a free cash flow of HK\$619.7 million and a return on invested capital of 55.1% were achieved in 2005.

#### 市場及產品發展續

引線框架系列續

要把集團開發超微距浸蝕及沖壓技術所取得的成果商品化,及把超高精密電鍍、漏鑄控制及濕度敏感性水平(MSL 1)的試產線轉作大規模自動化生產,以提高產量和縮短生產週期的計劃均需要龐大資金投入及開發更高性能的機械。幸而,轉用無鉛電子產品及QFN包裝為ASM締造了黃金機會。集團的鍍鈀引線框架有助ASM打入若干IDMs目標市場,同時我們亦利用全面包裝解決方案及QFN引線浸蝕技術在不斷迅速擴大的QFN引線框架市場上建立穩固地位。

#### 財務

隨著集團於逐步復甦的裝嵌設備及引線框架市場的 佔有率不斷提升,儘管ASM於二零零五年的營業額 微跌7.6%至4.549億美元,但我們的盈利仍超逾港幣 8.5億元。即使ASM產品種類正逐年擴大,而運作率於 第四季明顯較十二個月前為高,我們的年終總存貨量 亦僅輕微增加港幣5,450萬元至港幣6.093億元,達到 6.08週次的存貨週轉率。在嚴格的監控下,應收賬款 週轉率達至88天。若縱使存在壞賬風險,亦屬微不足 道,且有關賬款已依據本公司政策作出撥備。因此 二零零五年的資金週轉週期相當理想,達143.8天, 自由現金流量 (Free Cash Flow) 達港幣6.197億元, 投入資本回報率達55.1%。

#### Matrix QFP and QFN Leadframes

Our leadframe sales in the second half of 2005 exceeded US\$50 million and we made sequential record billings in the last three consecutive quarters.

公司在2005年下半年之引線框架銷售額超逾 5,000萬美元,連續三季之付運數量更創新高。



thousand plus employees worldwide

七千多名員工分佈世界各地

#### Financial continued

Notwithstanding that HK\$674.2 million was paid as dividends and HK\$194.8 million spent in capital investments during the twelvemonth period, cash on hand as of 31 December 2005 was HK\$728,927,000 (2004: HK\$763,359,000) with the majority of the capital investments being funded by the current year's depreciation of HK\$154,445,000.

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, essentially the same situation as during the past six years. Net interest income amounted to HK\$15.0 million for the year. With rigorous control over our current assets and liabilities, the current ratio stood comfortably at 3.42. The Group's shareholders' funds increased 9.9% to HK\$2,393,534,000 as of 31 December 2005 (2004: HK\$2,177,465,000). Order backlog amounted to US\$102 million on the same date.

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 working capital management. With no short term need for major cash outlay while we continue our organic growth strategy, we aim to continue our policy of operating the Group with the optimum shareholder fund and returning any excessive cash holdings to our shareholders.

#### **Capacity and Plant Development**

In addition to our continuous investments to augment our research and development (R&D) and information technology (IT) infrastructure, substantial portion of the capital expenditure in 2005 were for equipping our new Malaysian factory with parts fabrication and leadframe processing capabilities, as well as expanding our China leadframe operation in Fu Yong with new stamping presses and dies to cope with the enlarged volume. HK\$194.8 million was invested last year, in line with our budget announced twelve months ago.

#### 財務續

雖然集團在過去十二個月期間派發了港幣6.742億元股息,並斥資港幣1.948億元作為資本性投資,其於二零零五年十二月三十一日的手頭現金仍達港幣728,927,000元(二零零四年:港幣763,359,000元),而主要的資本性投資乃由是年度港幣154,445,000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為零而資本負債比率與過去六年一樣均為零。年內的淨利息收入為港幣1,500萬元。集團嚴格監控流動資產及流動負債,令流動比率處於3.42的充裕水平。於二零零五年十二月三十一日,集團的股東資金增加9.9%,至港幣2,393,534,000元(二零零四年:港幣2,177,465,000元),於同一日期的未完成訂單總值為1.02億美元。

ASM的財政狀況雄厚穩健,除了有賴過往持續錄得盈利及正現金流的業務表現外,亦有賴集團多年來 貫徹審慎的財務策略、謹慎的投資計劃及嚴格的營運 資金管理。由於短期內並無重大現金支出,加上集團 持續推動本體增長之策略,管理層旨在繼續其政策, 預留適當的股東資金作集團營運之用,而將剩餘現金 回饋予股東。

#### 生產力及廠房發展

除不斷投放資金於加強研發及資訊科技基建外,集團亦於二零零五年作出龐大資本性支出,為新的馬來西亞廠房增設部件生產及引線框架加工能力,以及擴充集團在中國福永的引線框架業務,添置沖壓機及模具,以應付擴大後的產量。去年集團共投資港幣1.948億元,與一年前公佈之預算相符。

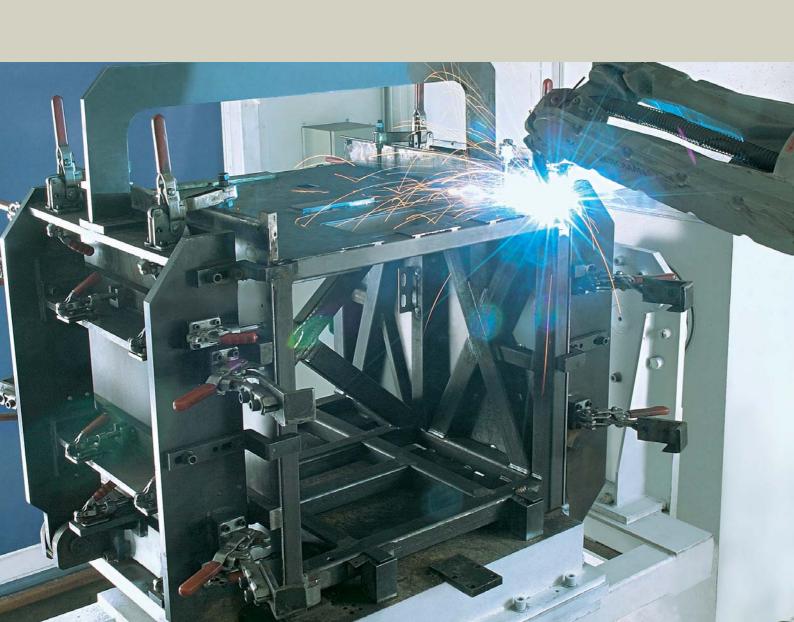
#### Multi-chip die bonder development

We have dedicated R&D resources to develop equipment for the growing multi-chip die bonding application, aiming for marketable products in 2007.

集團積極投放更多資源開發多晶片管芯焊接應用所需的 設備,期望於2007年完成推出市場。

hundred fifty million Hong Kong dollars profit after tax in 2005

> 二零零五年之 除税後溢利達八億 五千萬港元



#### **Capacity and Plant Development** continued

While our capital investment strategy for 2006 will follow the traditional path of enhancing our R&D analytical equipment, IT infrastructure, parts fabrication and leadframe production capacity, we intend to upgrade our Singapore etching plant to address the increased QFN demands and also create a new parts fabrication centre at our leadframe plant in Fu Yong, China. The latter move is part of our long-term strategic plan to boost our CNC parts fabrication capacity to support our growing equipment business. Furthermore, we also specifically aim at proliferating laser tube-cutting and robotic welding at our Sha Tou Jiao, China plant to automate our chassis manufacturing for higher quality and efficiency. Altogether HK\$200 million has been budgeted for capacity and plant development in 2006.

#### **Research and Development**

After three decades of IC packaging format creations such as through-hole plastic dual-in-line (DIP), surface-mounted device (SMD), ball-grid array (BGA), flip chip (FC) and quad-flat pack with no lead (QFN), and constant evolution towards miniaturization, the semiconductor industry continues its packaging journey in basically two directions: application-driven devices and high-density packaging integrating the known assembly processes. Examples of the former include smart cards, RFID, sensors (a CMOS image sensor as a camera module is one well-known example), MEMS, high brightness LED, photonic devices, etc., and they all require customized equipment to achieve certain performance and cost objectives. On the other hand, high-density packaging such as stacked die (SD), stacked package (PoP), system-in-package (SiP) and multi-chip module (MCM) are typically based on the traditional assembly processes. However, these high-density packages tend to stretch the technology envelopes of the processing machines, requiring new generation of assembly systems with refined capabilities.

#### 生產力及廠房發展續

一如既往,集團二零零六年的資本性投資策略將是繼續強化研發分析設備、資訊科技基建、部件生產及引線框架生產力。此外,集團亦計劃提升新加坡浸蝕廠房的效率,以應付市場對QFN不斷增加的需求。作為集團長遠策略的一部份,我們亦將於中國福永引線框架廠房增設新的部件生產中心,旨在提高集團電腦數控機床的部件生產力,以支持不斷增長的設備業務。集團亦將擴展中國沙頭角廠房的激光截管及機械焊接技術,以達致自動化底盤生產,提升品質及效率。整體而言,集團預期將投入港幣2億元,作為於二零零六年提升生產力及發展廠房之用。

#### 研究及發展

過去三十年間,集成電路包裝形式不斷推陳出新,如 孔塑雙列直插式封裝(DIP)、表面焊接式封裝設備 (SMD)、球柵陣列封裝(BGA)、覆晶焊接及無針方形 扁平封裝(QFN),並持續提升纖細度,半導體包裝行 業因而繼續朝著應用主導裝置及整合已知組裝程序的 高密度包裝這兩個主要方向發展。前者包括智能卡、 RFID、感應組件(最為人熟悉的例子為如相機組件的 CMOS影像感應組件)、MEMS、高亮度LED及光子 器件等,全部均需特定設備以達致若干表現及成本 目標。另一方面,高密度包裝,如多層管芯(SD)、 多層包裝(PoP)、組裝系統(SiP)及多片組件(MCM) 基本上均根據傳統組裝程序進行。然而,此等高密度 包裝均需要新一代精密的組裝系統,以符合於處理 過程中對設備之更高要求。

#### Manufacturing automation

We also specifically aim at proliferating laser tube-cutting and robotic welding at our Shatoujiao plant in China to automate our chassis manufacturing for higher quality and efficiency.

集團亦將擴展中國沙頭角廠房的激光截管及機械焊接技術,以達致自動化底盤生產,提升品質及效率。

#### Research and development continued

While different application niches and known processing technologies will coexist in the future, to sustain our continued leadership in this dynamic industry, management believes ASM should address these challenges simultaneously. Until now we have prioritized our product development programs according to talent availability and market maturity. Building on our advanced enabling technologies such as motion control, vision systems, optics, materials and reliability, in addition to coming up with a new generation of existing products, we have dedicated R&D resources to develop equipment for the growing multi-chip die bonding and chip-on-glass (COG) flip chip applications, aiming for marketable products in 2007. It is our firm belief that solution-selling is the most effective marketing tool in this knowledge-based economy.

Unlike all our major competitors who have consistently reduced their R&D spending and trimmed their development projects due to profit squeeze, we have enlarged our research and development teams based in Hong Kong and Singapore to over 600 people and embarked on further product development. In 2005, our net R&D expenditure increased by 1.9% to HK\$267.6 million (2004: HK\$262.6 million), representing 9.3% of our equipment sales and in line with our R&D funding guidelines.

#### 研究及發展續

要在此瞬息萬變的行業維持領導地位,管理層相信 ASM必須同時應付未來不同應用特性及已知加工技術 並存的情況及所帶來的挑戰。至目前為止,集團已 按人才及市場之成熟程度為產品開發計劃制定優先 次序。利用ASM先進技術(如機動控制、視頻系統、 光學系統、材料及可靠性等),集團不僅可為現有產 品系列研製新一代產品,更積極投放更多資源開發多 晶片管芯焊接及覆晶晶片直接玻璃封裝應用所需的 設備,並期望目標於二零零七年推出市場。我們 深信,嶄新的解決方案銷售模式已成為知識型經濟下 最有力之市場推廣工具。

有別於集團的主要競爭對手因利潤下降而持續減少研發開支及縮減發展項目規模,集團年內擴充駐香港及新加坡的研究發展隊伍至逾600人,並進一步開發產品。於二零零五年,集團的研究開發淨開支增加1.9%至港幣2.676億元(二零零四年:港幣2.626億元),佔銷售設備收入9.3%,與集團的預算指引相符。