

MANAGEMENT DISCUSSION AND ANALYSIS

管理層討論及分析

Overview

Widening our product portfolio to support diversified market segments was a more challenging course of action than taking the conservative narrow focus approach, but our decision to do so has served us well. Thanks to this strategy, ASM is subject to less volatility compared to that experienced by a company with a narrowly focused product portfolio. As a result we have been able to build a thriving business which is more resilient to the inevitable industry fluctuations than our competitors. This broader market approach has not only assisted us in surviving market downturns and maintaining consistent profitability, but also given us the freedom to seize opportunities more effectively during market upturns and grow from strength to strength with the introduction of new products.

Our persistent, simultaneous pursuit of differentiation and low cost strategies has resulted in outstanding, internationally recognized products whose value propositions are unmatched by our rivals. Complementing our leadership position in the die and wire bonder market segments, the good progress we made in recent years on flip chip bonders, encapsulation equipment, integrated test handlers and other CSP assembly equipment has laid a solid foundation for future growth, empowering ASM to aggressively pursue new market opportunities.

Paralleling the broad spread of our product range, our customer base continues to be highly diversified, auguring well for our efforts to attain continued growth from a position of strength. This diversification testifies to the growing acceptance of the Group's products by a larger pool of customers. However, it also demands a good sales and support network and infrastructure to provide a high level of service to customers. Commitment to customer-service has been one of ASM's strengths and it will continue to serve us well in the future.

概覽

開發多元化產品以迎合不同的市場需要，比保守地專注於某個範疇更富挑戰性，然而這個決定卻為我們帶來豐碩的成果。這項策略令 ASM 相較其他產品種類較少的競爭對手更能減少行業波動的影響，因而更能經得起行業起伏的考驗。這種拓闊市場的策略不單協助集團渡過市場低潮，維持一貫的盈利能力，亦給予集團更大的自由度，在市況好轉時更有效把握湧現的商機，並透過推出新產品令集團日益壯大。

有賴集團一直以來對推出創新及低成本產品的堅持，方令 ASM 製造出功能價值為競爭對手不可媲美的世界級優秀產品。集團在管芯焊機及焊線機市場的領導地位，及近年於覆晶焊機、塑封工序設備、整合式測試處理器及晶積體封裝設備領域上所取得的佳績，均為集團奠定了穩固的基礎，令 ASM 可更充分把握市場上新的商機，推動未來增長。

我們廣闊的產品組合，同時為集團持續帶來多元化的客戶基礎，充份顯示我們所付出的努力能有效鞏固集團的優勢，達致持續增長。客戶的多元化亦清楚反映集團產品獲越來越多客戶採用。為此，集團需要建立優秀的銷售及支援網絡和基礎建設，務求為客戶提供更優質的服務。以客為尊一向是 ASM 的強項之一，未來將繼續有助集團發展。

Overview continued

Apart from our inherent strengths, our strong growth has been facilitated by favourable industry trends. Demand has been strong for semiconductors used in portable electronic products such as cell phones, MP3 players, digital televisions and personal computers. Coupled with a positive macroeconomic outlook, growth of 9 - 11% has been predicted for the semiconductor industry in 2007 and 2008. For the assembly and packaging equipment market, views vary and the growth numbers suggested for 2007 are somewhat divergent, ranging from about -6 - +5% (VLSI Research -6.3%, SEMI +4.4%, Dataquest -5.7%). However, analysts appear unanimous in predicting excellent growth in 2008 of 14 - 26% (SEMI 14.7%, Dataquest 25.8%).

Market and Product Development

EQUIPMENT DIVISION

In 2006, ASM once again outperformed its peers in revenue increase. Reinforcing our position as the top equipment supplier in the industry, our equipment revenue increased by 25.1% to US\$461 million, representing 78.6% of the Group's turnover and the highest in our corporate history. We maintained the number one position in the assembly and packaging equipment industry that we have held since 2002, with an increased revenue gap of US\$179 million, a lead of 63.4% over our closest rival.

Consumer electronic products have become the driver of growth in the semiconductor industry. ASM is well-positioned to take advantage of such consumer products-led growth as IC packaging is seen as a technology enabler for consumer applications. As emphasised earlier, ASM's decision to simultaneously pursue multiple application markets with diversified products continues to serve the company well.

概覽 續

配合集團所具備的優勢，利好的行業趨勢亦推動集團業務強勁增長。可攜式電子產品如手提電話、MP3機、數碼電視及個人電腦等對半導體的需求日益增加，加上宏觀經濟展望樂觀，預期二零零七至二零零八年半導體行業將會增長9 - 11%。至於裝嵌及包裝設備市場方面，行業分析員各持不同意見，預測二零零七年增長幅度由-6至+5%不等 (VLSI Research -6.3%、SEMI +4.4%、Dataquest -5.7%)。然而，分析員一致預期二零零八年市場將大幅增長14 - 26% (SEMI 14.7%、Dataquest 25.8%)。

市場及產品發展

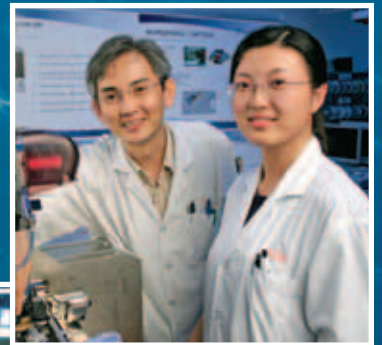
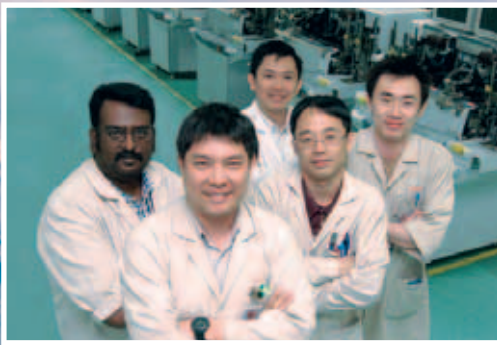
設備系列

於二零零六年，ASM的收益增長再度超越同儕。集團設備業務的營業額上升25.1%至4.61億美元，佔集團營業額的78.6%，創歷來新高，進一步鞏固集團作為設備供應商的領先地位。ASM自二零零二年以來一直在裝嵌及包裝設備行業獨佔鰲頭，與最接近競爭對手的收益差距進一步擴闊至1.79億美元，高出63.4%。

消費電子產品已成為半導體行業的增長動力。由於集成電路包裝是作為消費應用產品的必要技術，ASM已準備就緒，全面掌握由消費產品主導的行業增長。如上所述，ASM以多元化產品開拓不同應用市場的策略，有效推動集團持續增長。

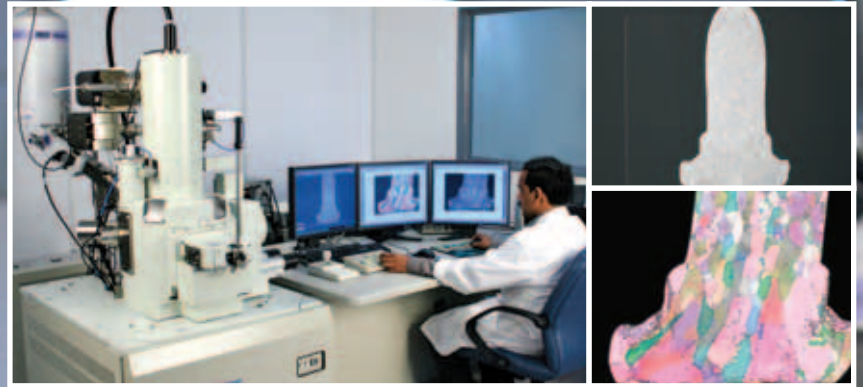
Paralleling the broad spread of our product range, our customer base continues to be highly diversified, ASM's excellent global marketing sales and services network offers customers timely and effective solutions to their manufacturing and packaging requirements.

我們廣闊的產品組合，為集團持續帶來多元化的客戶基礎。ASM優越的全球市場銷售及服務網絡為客戶生產及包裝需求提供即時及有效的解決方案。



Ceaselessly pushing the technology envelope, ASM's R&D team is committed to fulfilling unrelenting customer demands for new package types, higher performance and lower package costs.

不斷的技術突破，ASM的研發團隊承諾滿足客戶對新包裝模式、高性能及低包裝成本的要求。



Market and Product Development continued

EQUIPMENT DIVISION CONTINUED

Equipped with high performance linear motors, our aluminium wire bonders have not only solidified ASM's two-decade leadership in the chip-on-board (COB) application market, but offered customers multiple solutions for their fine pitch, multi-die and high throughput requirements.

Our wide range of die bonders and die handling equipment addresses the need of our customers in many different applications such as IC, discrete, power and LED. In particular, one of our decisive strengths in this area is our capability in handling die sizes varying from very small to very big. The direction of development for our die bonders is to continue to address both the need for higher productivity and more versatile applications. We will also be introducing a Multi-Chip Module (MCM) bonder to address applications such as System in Package (SiP). Our flip chip bonder product portfolio will be further expanded this year with the introduction of a specialized Chip-on-Glass (COG) bonder, mainly serving applications in the growing flat-panel display market.

We are seeing increased interest in copper wire bonding in the market, mainly driven by the need for cost reduction and enhanced electrical performance for dies with very small line widths. With ASM's leadership position in copper wire bonding technology, we are well positioned to take advantage of this development. The good acceptance of our dual head gold wire bonder proves that ASM has the right product to address this market's need for cost reduction.

Last year, we formed the Back End Product (BEP) business unit by merging our existing encapsulation and post-encapsulation product operations, including our molding, ball placement, package singulation and test handler groups. With more resources allocated, we expect this new integrated unit to make a good contribution to the ASM's turnover in years to come. More importantly, with a combined product group we will be more efficient in undertaking packaging development programs with customers. Solution-selling has proven to be effective in providing customers with innovative, total packaging solutions based on ASM's equipment and leadframes to meet their ever-expanding new package challenges. Not only has it gained us valuable market share, it has also helped in promoting our other related products to customers.

市場及產品發展 續

設備系列 續

集團的鋁線焊機配備高性能的線性馬達，不僅鞏固了集團於過去二十載在晶片直接封裝 (COB) 應用市場所建立的領導地位，亦為客戶提供了多元化方案，滿足他們對精密間距、多晶元及高產量的要求。

集團多元化的管芯焊機及管芯處理設備可滿足客戶不同的應用需求，如集成電路、離散器件、電源及 LED 等，而集團在處理極微細以至極大管芯的能力方面更有絕對的優勢。集團的管芯焊機未來將朝著滿足市場對高生產力及更多樣化應用需求的方向繼續發展。此外，我們亦將會推出多片組件 (MCM) 焊接機，以滿足組裝系統 (SiP) 的應用需求。二零零七年，集團將引入專門的晶片直接玻璃封裝 (COG) 焊接機，藉以擴充我們所提供覆晶焊機的產品組合，滿足增長迅速的平面顯示器應用市場。

主要受市場對成本更低而電子性能更優秀、管線闊度更細的管芯的需求所帶動，集團預期市場對銅線焊線機的需求將會增加。ASM 具備最先進的銅線焊線技術，有利集團掌握此等龐大商機。集團所推出的雙頭金線焊線機廣受市場歡迎，足證 ASM 可提供合適的產品，以滿足市場對更低成本產品的需求。

去年，集團合併現有的塑封及塑封後產品 (包括製模、焊球放置、包裝切割及測試處理器部門) 運作，成立後工序產品 (BEP) 業務單位。在更多的資源投入下，集團預期在未來數年此新成立的綜合單位將會為集團營業額帶來不俗的貢獻。更重要的是，合併各產品部門後，我們將可更有效地與客戶攜手開發包裝項目。透過應用 ASM 的設備及引線框架，綜合解決方案已充分證明能有效地為客戶提供創新及全面的包裝解決方案，滿足客戶對新產品包裝不斷擴展的需求。此策略不單成功提高 ASM 的市場佔有率，更有助我們向客戶推廣其他相關產品。

The strength of ASM's equipment development capability plays a pivotal role in the success of our leadframe business.

ASM強勁的設備開發能力為引線框架業務的成功扮演關鍵的角色。



Market and Product Development continued

LEADFRAME DIVISION

Last year our leadframe business saw the anticipated benefits of increased resources allocated into the segment successfully coming to fruition. Record billings were achieved for successive quarters in 2006. In fact, revenue in the 2nd half of the year even exceeded that of the 1st half. Leadframe revenue achieved a strong 44.8% growth and contributed to 21.4% of the Group's total turnover in 2006. This is clear evidence of our good progress in strengthening the competitive position of our leadframe business through strategic realignment.

With our factory in Fu Yong, Shenzhen, China getting more mature and a further expansion of production capacity, our stamped leadframe operations delivered excellent results last year. As cost-reduction becomes one of the most important drivers in the industry, ASM's high-density open-tool leadframe solutions are getting more popular. Furthermore, this strategy has also created business opportunities for our equipment sales, leading to customers looking favourably on our equipment such as molding systems and trim-and-form systems that have been configured to process such high-density leadframes.

Amongst other well-regarded capabilities, our strong position in the fields of QFN and Nickel-Palladium etched leadframes has helped to raise our profile and gain market-acceptance from customers. Our plating operations for etched leadframe have been successfully transferred to our plant in Pasir Gudang, Johor Bahru, Malaysia from Singapore in order to further increase our etched leadframe production capacity in Singapore. Although it has taken a longer time than we had foreseen, with the transition completed in time to come we expect to see similar performance gains to those experienced by our stamped leadframe business.

市場及產品發展 續

引線框架系列

隨著我們投入更多資源大力發展，集團的引線框架業務於去年成果豐碩。二零零六年，集團連續數季的付運量均創新高。事實上，集團下半年的收益猶勝上半年。引線框架業務的營業額大幅增長 44.8%，佔集團二零零六年度總營業額 21.4%。清楚反映集團引線框架業務的重組策略得到顯著成效，競爭優勢大大加強。

隨著中國深圳福永廠房運作日趨成熟及產能進一步擴大，集團的沖壓引線框架業務於去年錄得卓越表現。由於節省成本已成為行業其中一項重要動力，ASM 高密度開放式模具引線框架解決方案的受歡迎程度正與日俱增。此外，該等策略亦為集團的設備銷售業務締造大量商機，集團為裝配此等高密度引線框架而推出的設備，如塑封工序設備系統及切筋成型系統等均獲客戶正面評價。

集團實力有目共睹，而在 QFN 及鎳鈀金蝕片引線框架範疇的領導地位更有助提高集團的知名度及市場客戶的認同及接受。集團已成功將其蝕片引線框架電鍍工序由新加坡遷至馬來西亞 Pasir Gudang, Johor Bahru，從而進一步提升新加坡廠房的蝕片引線框架產能。儘管工序遷移需時較預期長，隨著遷移現已完成，集團預期蝕片引線框架業務將可達致與沖壓引線框架業務一般的增長。

Leveraging our in-house enabling technologies, we focus on injecting higher performance and lower cost of manufacturing into our new generation of products.

憑藉我們自行研發的先進技術，集團將專注研發高性能及低生產成本的新產品。



MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

管理層討論及分析(續)

Market and Product Development continued

LEADFRAME DIVISION CONTINUED

In further developments, to address the growing demand for MSL 1 (moisture sensitivity level 1) leadframes, we have installed a high capacity fully automated brown oxide treatment line in our leadframe factory in China. In addition, an automatic selective silver plating line is under qualification in our plant in Malaysia. Selective silver plating is a useful technology in producing QFN leadframes that meet the MSL 1 requirement. We have also developed the micro-etching technology to roughen the surfaces of the leadframes to help to attain MSL 1; this is particularly useful for pre-plated leadframes (PPF).

With the momentum that we have already achieved, we expect to see further growth in our leadframe business as time progresses.

Financial

Riding on our market-share gains in the assembly equipment and leadframe markets, we achieved earnings in excess of HK\$1,149 million in 2006, and turnover also increased significantly by 28.8% to US\$587 million. Receivables have been tightly monitored, resulting in 71.1 days sales outstanding. Bad debt exposure, if any, is immaterial and well-covered by provisions made in conformity with ASM's policy.

In another year where we have had to deal with a much wider range of products than in the past, and production run rates that were much higher than in previous periods, we continued to streamline our working capital management with positive results. Last year, we achieved an inventory turnover of 6.75 times (2005: 6.08 times), with an ending inventory of HK\$740 million to deal with the much higher revenue. Although capital investments amounting to HK\$208.7 million were made in 2006, our sound working capital management resulted in a free cash flow of HK\$1,049 million (2005: HK\$619.7 million) and a return on invested capital of 64.6% (2005: 55.1%) for the year. There was a cash conversion cycle of 110 days.

市場及產品發展 續

引線框架系列 續

為促進未來發展，配合市場對 MSL 1 (濕度敏感性水平 1) 引線框架日益增加的需求，集團已於中國的引線框架廠房添置一條高產能及全自動的棕色氧化處理生產線。此外，馬來西亞廠房的一條自動化選擇性鍍銀生產線亦正進行生產審核程序。選擇性鍍銀是一項重要技術用以生產符合 MSL 1 規定的 QFN 引線框架。集團亦已開發一項微浸蝕技術，令引線框架表面變得粗糙，從而達致 MSL 1 標準。此技術對預鍍引線框架 (PPF) 尤其有用。

承接集團已建立的強勁勢頭，我們預期引線框架業務將會進一步增長。

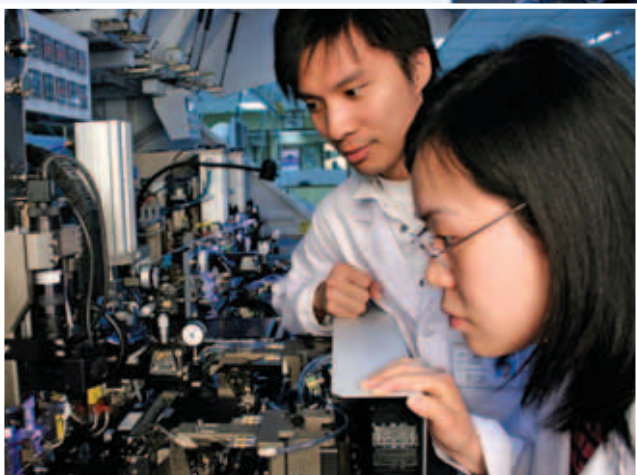
財務

隨著集團於裝嵌設備及引線框架市場的佔有率不斷提升，我們於二零零六年的溢利超逾港幣 11.49 億元，營業額大幅上升 28.8% 至 5.87 億美元。在嚴格的監控下，應收賬款週轉率達至 71.1 天。縱使存在壞賬風險，亦屬微不足道，且有關賬款已依據 ASM 政策作出撥備。

集團的產品種類愈來愈多元化，運作率亦較以往為高，我們持續有效管理營運資金，並取得良好成果。由於去年集團的營業額增加，存貨週轉率達 6.75 週次(二零零五年：6.08 週次)，而年終總存貨量為港幣 7.40 億元。儘管資本性投資於二零零六年達港幣 2.087 億元，良好的營運資金管理使集團錄得自由現金流量 (Free Cash Flow) 達港幣 10.49 億元(二零零五年：港幣 6.197 億元)，而投入資本回報率為 64.6% (二零零五年：55.1%)，資金週轉期則為 110 天。

ASM's decision to simultaneously pursue multiple application markets with diversified products continues to serve the company well. A specialized chip on glass (COG) bonder will be launched in 2007.

ASM以多元化產品開拓不同應用市場的策略，有效推動集團持續增長，專門的晶片直接玻璃封裝(COG)焊接機將於二零零七年推出。



Financial continued

Notwithstanding that HK\$1,064 million was paid as dividends and HK\$208.7 million spent in capital investments during the twelve-month period, cash on hand as of 31 December 2006 was a record HK\$914,681,000 (2005: HK\$728,927,000) with the majority of the capital investments being funded by the current year's depreciation of HK\$168.4 million.

With no bank borrowing either for the 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 seven years. With rigorous control over our current assets and liabilities, the current ratio stood comfortably at 2.84. The Group's shareholders' funds increased 7.0% to HK\$2,562,074,000 as of 31 December 2006 (2005: HK\$2,393,534,000). Order backlog amounted to US\$103.9 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, a substantial portion of the capital expenditure in 2006 was for equipping our new Malaysian factory with parts fabrication and leadframe processing capabilities, as well as expanding our capacity in the two plants in China to support our growing equipment and leadframe businesses. HK\$208.7 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 10.64 億元股息，並斥資港幣 2.087 億元作為資本性投資，於二零零六年十二月三十一日的現金結存創新高達港幣 914,681,000 元(二零零五年：港幣 728,927,000 元)，而主要的資本性投資乃由是年度港幣 1.684 億元的折舊所支付。

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，資本負債比率與過去七年一樣均為零。集團嚴格監控流動資產及流動負債，令流動比率處於 2.84 的充裕水平。於二零零六年十二月三十一日，集團的股東資金增加 7.0% 至港幣 2,562,074,000 元(二零零五年：港幣 2,393,534,000 元)，同日的未完成訂單總值為 1.039 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，集團於二零零六年亦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生產能力，以及擴充集團在中國兩間廠房的生產力，以支援不斷增長的設備及引線框架業務。去年集團共投資港幣 2.087 億元，與十二個月前公佈之預算相符。

Capacity and Plant Development continued

In 2007, we have further added 120,000 square feet of space at our factory in Fu Yong, Shenzhen, China to provide production space for dedicated module assembly, parts fabrication and system integration for our Back End Product (BEP) activities, as well as expanding our tooling and mold shops. The operations were previously housed together with our other products in an existing Shenzhen factory. The aim is to support our BEP business operations and provide room for expanding output of back end products at the new location. In particular, we see molding systems and test handlers as promising growth-drivers in the near future. We believe that this move will help the BEP business to continue to grow and to enhance its contribution to our top and bottom lines.

We will be adding additional floors at our factory in Hong Kong to cater for further capacity expansion of our equipment R&D and other operations, especially for our die bonders and CSP equipment. In our Singapore factory, we will be installing additional etching lines this year to upgrade our etching capability and to increase our etching capacity. Additional stamping presses will be delivered to our Fu Yong plant in the first quarter of 2007 to further expand our stamped leadframe capacity.

Our capital investment strategy for 2007 will follow the traditional path of enhancing our R&D analytical equipment, IT infrastructure, parts fabrication and leadframe production capacity and capability. Altogether HK\$234 million has been budgeted for capacity and plant development in 2007.

生產力及廠房發展 續

二零零七年，集團的中國深圳福永廠房進一步擴充 120,000 平方呎，為後工序產品(BEP)的組件組裝、部件製造及系統整合工序提供更大生產空間，以及擴展模具工場。該等工序原本與其他產品一樣，由現有深圳廠房負責。而搬往新地點的目的是支援 BEP 業務的發展及提升其於新地點的產能。集團預期塑封工序設備系統及測試處理器將成為未來主要增長動力。集團相信，此舉將有助支援 BEP 業務的持續增長，以及增加其營業額及盈利貢獻。

集團亦將增加香港廠房的樓層數目，以配合其設備研發及其他業務(尤其是管芯焊機及晶積體封裝設備)的生產力擴充計劃。新加坡廠房方面，集團將於本年度增添浸蝕生產線，以提升及加強浸蝕產能。福永廠房於二零零七年第一季將添置沖壓機以加強沖壓引線框架業務的生產力。

一如既往，集團二零零七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。整體而言，集團預期將投入港幣 2.34 億元，作為於二零零七年提升生產力及發展廠房之用。

Our persistent, simultaneous pursuit of differentiation and low cost strategies has resulted in outstanding products with unmatched value propositions.

有賴集團持續對推出創新及低成本產品的堅持，方令我們締造出不可媲美的優秀產品。



Research and Development

The ever-increasing demands of end-users mean that technology companies are continually driven to deliver solutions in response. Our customers' unrelenting needs for ever lower assembly and packaging costs, new package types like QFN, stacked die, stacked package, flip chip and system-in-package, and the ceaseless push of the technology envelope on fine pitch wire bonding, thin die attachment and ultra thin molded packages necessitate innovative solutions and strong R&D commitments from equipment suppliers.

ASM's strategy over the years has been to deliver the best value propositions to our customers, and we believe in investing substantially in R&D to implement this strategy. While all our major competitors have consistently reduced their R&D spending in recent times due to profit squeeze, our R&D expenditures and our talent pool have risen year after year. We have maintained our long-standing policy of spending 10% of equipment turnover on research and development (R&D) and ignored short-term sales fluctuation. This has been especially important in enabling us to widen our product portfolio to support diversified market segments.

In 2006, we have enlarged our research and development teams based in Hong Kong and Singapore to over 600 people and embarked on further product development. Our R&D expenditure increased by 7.2% to HK\$286.9 million (2005: HK\$267.6 million), representing 8.0% of our equipment sales and in line with our R&D funding guidelines.

研究及發展

終端客戶的需求不斷增加，促使科技業界相應不斷提供適當的解決方案。客戶對降低裝嵌及包裝成本、新包裝模式如 QFN、大量管芯、多層包裝、覆晶及組裝系統、與及微距焊線、微細管芯焊接及超微細鑄模包裝的技術突破等要求，促使設備供應商投放大量資源於研發創新解決方案上。

多年來，集團的策略乃致力為客戶提供最佳方案，並透過投放大量研發資源以達成目標。當集團的主要競爭對手近年因為利潤收窄而不斷削減研發開支時，ASM 卻仍不斷擴大投放於研發及人才的資源。即使面對短期的銷售波動，集團仍一直堅持將設備營業額的 10% 投放於研發上。此舉對擴闊產品組合以迎合多元化市場的需求尤其重要。

集團於二零零六年擴充駐於香港及新加坡的研究發展隊伍至逾 600 人，並進一步開發新產品。集團的研究及發展支出增加 7.2% 至港幣 2.869 億元 (二零零五年: 2.676 億元)，佔銷售設備收入 8.0%，與集團的預算指引相符。