OVERVIEW

Recovery during the first nine months of 2003 was gradual and most industry participants only experienced an easier ride in the 4th quarter. Our consistent gain in market share during the past five years, especially in respect of our IC wire bonders, translated into outstanding growth for ASM in both turnover and profit in 2003 as the semiconductor industry re-equipped. This result was only possible by virtue of our ability to rapidly ramp up production when demand eventuated, quickly responding to customer requirements for short delivery lead times. Our sales revenue and bottom line were the second highest in ASM's corporate history, only exceeded by the exceptional year of 2000.

With our 2nd half turnover exceeding the first six months by 41.8% and our order backlog as of 31 December 2003 increased to US$119 million, order inflows clearly have been much stronger in recent months and substantiate the prevailing view of a solid industry recovery. In fact, most industry analysts have predicted strong double-digit growth for the semiconductor (20+ %) and the assembly and packaging equipment (38 - 40%) industries in 2004. In dealing with the output challenges of the current year we have already been busy adding staff, floor space and production machines to contain our equipment lead time within customer-acceptable parameters, and it is clear that these processes will need to continue as market demands increase.

Fortunately, we have more abundant financial and human resources than our competitors, and can leverage this advantage to enhance our customer focus, reinforcing our strategic partnership with major clients in this upcoming period of technology driven growth. Providing packaging solutions using ASM equipment and leadframes has repeatedly proved effective in unlocking the doors of customers not accessible by a standalone product field evaluation. By combining our process knowledge in die attachment, flip chip, wire bonding, encapsulation, unit singulation and leadframe design, ASM's innovative, integrated solutions to customers' production needs will continue be our most powerful weapon in the fight for increased market share.

MARKET AND PRODUCT DEVELOPMENT

Equipment Division

In a year when the assembly equipment industry resumed its growth after a prolonged downturn and pundits estimated a growth rate of 25-32%, ASM once again outperformed all its industry peers in turnover and revenue change. Building on our industry-largest market share, our equipment business grew 48.4% to US$278 million, representing 83.1% of the Group's turnover in 2003 and the second highest in our corporate history. We maintained the number one position in the assembly and packaging equipment industry we have held since 2002, widening the revenue gap between us and our closest competitor to 18.5%. The rapid increase in this figure over the last twelve months from a 4.7% margin in 2002 clearly reflects ASM's growing market share.

總覽

二零零三年首三季經濟復甦步伐緩慢，大多數同業的經營狀況於第四季才出現好轉。隨著半導體業重新裝備，ASM過去五年市場佔有率不斷攀升，尤其是集成電路焊線機，集團二零零三年的營業額及盈利均取得驕人增長。取得此佳績，全憑我們能在需求出現時加速提升產量，以及迅速回應客戶短時間交貨的要求。銷售收入及業績是ASM有史以來的第二高，只有二零零零年方超越此水平。

集團下半年的營業額較上半年超出百分之四十一點八，於二零零三年十二月三十一日的手頭訂單總值增加至一億一千九百萬美元，近數月接獲的訂單顯著增多，令行業出現強勁復甦的普遍看法獲得支持。事實上，大部份行業分析員均預測半導體業和裝嵌及包裝設備業於二零零四年取得雙位數字的強勁增長，分別上升百分之二十強及百分之三十八至四十。為應付現年度產量方面的挑戰，集團一直忙於增加員工、廠房面積及生產機器，並致力控制我們的設備付貨期於客戶可接受的範圍內。顯而易見，隨著市場需求增加，此情況將繼續維持下去。

幸而，我們擁有比其他競爭對手遠為雄厚的財務及人力資源，並能發揮此優勢鞏固客戶關係，以及在這個即將到來的技術帶動增長時期強化我們與重要客戶之間的策略性夥伴關係。應用ASM 設備及引線框架提供包裝解決方案，已多次證明對開啟那些不接受單一產品測試客戶的大門十分奏效。結合我們於晶片焊接、覆晶、焊線、塑封工序及引線框架設計的豐富知識，ASM 針對客戶生產需要的創新綜合解決方案將繼續成為我們提升市場佔有率的最有力工具。

市場及產品發展

設備系列

過去一年當裝崁設備業經過一段長時間不景氣後回復增長，專家估計增長率為百分之二十五至三十二，ASM在營業額及收入增長方面再次超越同儕。在保持業內最大市場佔有率的基礎上，集團的設備業務增長百分之四十八點四，達二億七千八百萬美元，佔集團二零零三年營業額百分之八十三點一，是ASM有史以來的第二高。集團自二零零二年以來在裝崁及包裝設備業一直獨佔鰲頭，並進一步拉遠與最接近的競爭對手之收入差距至百分之十八點五。此數字（二零零二年為百分之四點七）在過去一年急劇上升，清楚反映ASM的市場佔有率不斷增長。

MARKET AND PRODUCT DEVELOPMENT (CONTINUED)

***Equipment Division** (continued)*

Both our wire and die bonders achieved wonderful results. With a 35µm fine pitch bond capability that is one generation ahead of our competitors, ASM's Eagle 60 gold wire bonder outperformed its competition in many field evaluations, enabling us to capture several major new IC accounts, all well-known in the semiconductor industry. These include three top-five American semiconductor companies, three leading subcons and two U.S. integrated device manufacturers (IDMs). At the same time we managed to rapidly ramp up output when demands grew strongly in the 4th quarter, taking just three months to achieve a peak level output similar to the year 2000, giving a major boost to annual revenue. Likewise, our innovative, high speed IC and discrete bonders have been steadily gaining ground with their abilities to handle very small and thin die, stacked die and particle-controlled image sensor applications.

In another innovative response to customers' advanced packaging needs and cost-down pressure, ASM has developed and mapped out a portfolio of die, wire and flip chip bonder products geared for different die sizes, attachment processes, pad pitch requirements and cost objectives. New series of IC die and wire bonders with significant productivity enhancement are scheduled to be launched this year, further solidifying our leadership position in the industry.

Leadframe Division

With SEMI estimating the leadframe market as a whole to have grown 8.2% in 2003, ASM raced away from the field to increase its turnover by 13.6%, achieving US$56.5 million leadframe revenue representing 16.9% of the Group's total sales.

ASM management has made several strategic decisions in the last two years to address long-term competitiveness in the leadframe business. The consolidation of all stamped frame production activities into an integrated factory in Fu Yong, China, creates a cost-efficient structure - reduced personnel and rental costs, shortened manufacturing lead time and minimal work-in-progress - as well as providing room to easily double output. Similarly, our new Malaysian plant, when ready, will sharpen our edge in the etched frame business. In due course we expect the stamped frames produced locally in the Malaysian plant to carve out new markets in Malaysia and Singapore. Concurrently we are broadening our product offerings with fine pitch, high leadcount TQFP and power leadframes, making investments in a selective nickel plating line and precision tooling fabrication.

With improved thermal dissipation, smaller form factor and the potential to be a lower cost package than those in the market today, QFN show major potential and have been designed into the latest generation of wireless products. Demand is rising rapidly and ASM aims to maintain our strong foothold in this area by continuing to leverage on ASM equipment expertise to offer our customers total packaging solutions. In addition, as industry migrates to lead-free electronics products, we will further our development efforts and production capacity of palladium-plated leadframes.

市場及產品發展(續)

***設備系列**(續)*

我們的焊線機及管芯焊接機均取得理想成績。ASM的Eagle 60金線焊機擁有較我們競爭對手超前一代的35微米微距焊線技術，成功在多項基準測試中脫穎而出，令集團贏得數個重要及業內聞名的集成電路新客戶。當中包括三間全美國五大半導體公司、三間著名包裝公司及兩間美國集成裝置製造商。與此同時，當第四季需求大幅增長，集團成功迅速提升產量，只用了三個月時間就達到與二零零零年相若的最高產量水平，從而大幅增加年度收入。同樣，我們創新的高速集成電路及獨立焊接機善於處理極細薄管芯、層疊式管芯和粒子操控影像感應的應用，因此銷量穩步上升。

ASM亦研發及設計出一系列管芯、焊線及覆晶焊接機以配合大小不同的管芯、裝配程序、墊距要求及成本考慮，以創新形式回應客戶先進包裝方案的需求及降低成本的壓力。集團將於年內推出新的集成電路管芯及焊線機系列，這將進一步鞏固ASM於業內的主導地位。

引線框架系列

SEMI估計二零零三年引線框架市場整體增長百分之八點二，結果ASM營業額增加百分之十三點六，來自引線框架業務的收入達五千六百五十萬美元，佔集團總銷售額百分之十六點九。

ASM管理層最近兩年曾作出多項策略性決定，以應對引線框架業務長期存在的競爭情況。透過將所有沖壓框架生產工序集中於中國福永的綜合式廠房，可建立具成本效益的架構 — 員工薪酬及租金支出減少、生產週期縮短及半成品數量減至最少 — 產量亦可輕易增加一倍。同樣，集團於馬來西亞的新廠房落成後，將提升我們在蝕片框架業務方面的優勢。我們預期在馬來西亞廠房生產的沖壓框架將有助集團開拓馬來西亞及新加坡的新市場。集團現正通過微距焊點、高針數TQFP及電源引線框架擴大其產品系列，同時投資於一條選擇性鎳電鍍生產線及精密工具組裝。

由於QFN的散熱經過改良、尺寸輕巧，而且很可能較今天市場上其他包裝方法更便宜，所以大有發展機會，並專為配合新一代無線產品而設計。鑑於需求正在急速上升，ASM的目標是透過發揮其設備專長，為客戶提供全方位的包裝解決方案，從而維持其在此業務範疇的穩固根基。此外，由於業內轉用無鉛電子產品，我們將進一步努力開發及提高鍍鈀引線框架的產量。

CAPACITY AND PLANT DEVELOPMENT

With the consolidation of our stamped leadframe manufacturing in one plant at Fu Yong, China, more than 45,000 sq.ft. of space became available in our Sha Tou Jiao, Shenzhen plant. Since then we have redeployed the area for equipment manufacturing, and added another 20,000 sq.ft. facility to house newly acquired parts-fabrication machinery. To support the abrupt ramp-up of output since the 4th quarter, we have rapidly increased our production manpower and made further investments in CNC machines. As a result, capital investments in 2003 amounted to HK$160.5 million, in line with our original budget.

Even though the space for expansion has become limited on our Singapore plant leadframe manufacturing floor and the business is competitive, we deem it prudent to install additional production capacity for QFN (etched) leadframes. In addition to providing expansion space for our etched frame plating and post-plating operations, we also intend to leverage on the proximity advantage to cultivate the stamped frame business in the Malaysia and Singapore markets. For this reason we have decided to build a 280,000 sq.ft. factory in Pasir Gudang, Johor Bahru, Malaysia to be ready for production in early 2005. The initial project cost of US$12 million for the building and a few plating lines have been included in our 2004 capital budget.

To cope with current increased business levels and adopting a more aggressive stance than in recent years, we have budgeted HK$250 million for capacity and plant development in 2004. This will provide new analytical equipment, hardware and software to support R&D, logistics and information systems, stamping presses and dies, CNC machinery for producing parts for our hot equipment products, and in addition fund the much enlarged Malaysian plant under construction at the present time.

RESEARCH AND DEVELOPMENT

In the equipment industry, companies compete not only on current product offerings but also in innovation rate and time-to-market of new and better products. Supported by over 550 Research and Development staff in our R&D centers based in Hong Kong and Singapore, ASM has an outstanding track record of delivering new generations of products every 2-3 years. In addition, we have significantly widened our product portfolio in recent times making market inroads in the flip chip bonding, soft solder attachment and test handler areas. To ensure the long term success of the Company, we have long been committed to spending 10% of our equipment sales on research and development. In 2003, our gross R&D expenditure increased by 16.8% to HK$218.4 million, representing 10.1% of our equipment sales and in line with our R&D funding guidelines.

生產力及廠房發展

由於集團將其沖壓引線框架生產工序集中於中國福永的廠房，位於深圳沙頭角的廠房騰出逾四萬五千平方呎的空間並重新調配在該處的生產設備，並另外增設二萬平方呎的廠房安放新購置的部件組裝機械。為應付第四季以來突然大幅飆升的訂單，我們迅速增加生產人手，並進一步投資於電腦數控機床。結果二零零三年資本性投資達港幣一億六千零五十萬元，與我們原先的預算相符。

儘管新加坡廠房的引線框架生產樓層可供擴展的空間已十分有限，但我們仍認為裝設額外的QFN（蝕片）引線框架生產線是審慎的做法。除擴充蝕片框架電鍍及電鍍後工序外，我們亦計劃借助近鄰優勢，發展馬來西亞及新加坡市場的沖壓框架業務。為此，集團決定於馬來西亞Pasir Gudang，Johor Bahru興建一個面積達二十八萬平方呎的廠房，預期將於二零零五年年初落成。有關廠房及若干電鍍生產線的初期投資額為一千二百萬美元，已包括在我們二零零四年的資本性投資計劃內。

為應付目前增加的業務量及採取較近年更積極進取的態度，集團已在預算中撥出港幣二億五千萬元，作為二零零四年生產力及廠房發展方面的用途。此筆款項將用於購置新的分析設備、支援研究發展的軟硬件、物流及資訊系統、沖壓機及模具、生產暢銷設備產品部件的電腦數控機床，並為目前興建中、經大幅擴充的馬來西亞廠房提供資金。

研究及發展

於設備業內，同業間不單止以現有產品競爭，亦以創新速率和新產品及改良產品的產銷週期一較高下。在香港及新加坡研發中心逾五百五十名研究及發展員工的支援下，ASM每二至三年便推出新一代的產品，成績有目共睹。此外，我們最近更大幅擴闊產品系列，進軍覆晶焊接、軟焊料焊接及測試處理器等市場。為確保公司業務取得長遠成功，我們一直將銷售設備收入的百分之十投入研究及發展。於二零零三年，集團的總研究發展開支增加百分之十六點八至港幣二億一千八百四十萬元，佔銷售設備收入百分之十點一，與集團的預算指引相符。