DRIVE INNOVATION · DELIVER EXCELLENCE

ASM INTERNATIONAL

INTERIM REPORT

FOR THE SIX MONTH PERIOD ENDED JUNE 30, 2019

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GENERAL

ASM International NV was incorporated on March 4, 1968 as a Dutch public limited liability company ("naamloze vennootschap") and was previously known as Advanced Semiconductor Materials International NV.

Our principal executive office is located at Versterkerstraat 8, 1322 AP, Almere, the Netherlands. Our telephone number at that location is +31 88 100 8810, website http://www.asm.com.

The Company's first half of the financial year runs from January 1 to June 30.

SUPERVISORY BOARD

J.C. Lobbezoo, Chairman
M.J.C. de Jong
S. Kahle-Galonske
M.C.J. van Pernis
U.H.R. Schumacher

MANAGEMENT BOARD

C.D. del Prado, Chairman of the Management Board, President and Chief Executive Officer
P.A.M. van Bommel, Member of the Management Board and Chief Financial Officer

PROFILE

ASM International NV (ASMI) is a leading supplier of semiconductor wafer processing equipment and process solutions. Our customers include the world's top semiconductor device manufacturers. We help them create faster, cheaper and more powerful semiconductors that bring greater opportunities for people to understand, create and share more.

OUR ROLE

We design, manufacture and sell equipment and services to our customers for the production of semiconductor devices, or integrated circuits (ICs). Semiconductor ICs, often called chips, are a key technology that enable the advanced electronic products used by consumers and businesses everywhere. Our innovative technologies are used by the most advanced semiconductor manufacturers, primarily for the deposition of thin films.

Our customers' goal is to build faster, cheaper, and more powerful semiconductors. We work closely with them to make this a reality, forging mutually beneficial partnerships that enable us to help them develop their technology roadmap. At the same time, our customers become expert users of our equipment, and their insights help us to continuously improve our systems, resulting in greater productivity and lower operating costs per wafer, benefiting us, them and the end consumer. The result is value creation not only for our customers, but for all our stakeholders.

Collaboration is a vital part of our success, which is why we developed close ties with many of our stakeholders. For example, we maintain partnerships with technical institutions and universities to carry out leading-edge research and development. At the same time, working closely with our suppliers helps us manufacture, service, and sustain our products efficiently.

COMPLEX PROCESSES

The process of making semiconductor ICs is highly complex and very costly. Semiconductor fabrication plants, called fabs, house a large set of wafer processing equipment which performs a series of process steps on round silicon wafers, which are typically 300mm in diameter. The equipment is operated in cleanrooms, which filter the air to avoid contamination from small particles that could negatively affect the circuitry on the chips. The dimensions of the features within each chip continue to get smaller, as the demand for performance continues to expand.

Our systems are designed for deposition processes when thin films, or layers, of various materials are grown or deposited onto the wafer. Many different thin-film layers are deposited to complete the full sequence of process steps necessary to manufacture a chip. After testing the individual circuits for correct performance, the chips on the wafer are separated and then packaged in a protective housing before ultimately becoming part of a set of semiconductor chips on circuit boards within an electronic product.

LONG-TERM VALUE CREATION

We create value through our technologies by enabling leading semiconductor and technology industry partners to deliver the world of tomorrow through our innovative processing solutions and equipment. We partner with our customers and stakeholders to develop new materials, processes, and technologies that support their technology roadmaps. Advancements that benefit society are increasingly dependent on capabilities derived from new semiconductor technologies. The process solutions delivered on our equipment enable more powerful microprocessors, higher density memory devices, all operating at lower power.

GREATER PERFORMANCE, REDUCED ENERGY CONSUMPTION

Our advanced deposition technologies support cost-effective products enabling the electronic devices of the future. This leads to electronic devices that deliver ever-greater performance while reducing their energy consumption. Higher performance translates into more processing power, while a lower energy requirement means smaller, longer-lasting, more efficient products. This enables electronics manufacturers to further integrate smart technology into a wider range of their products.

The result is value creation not only for our customers, but for all of our stakeholders. For example, our employees enjoy the challenge of developing cutting-edge technology solutions, and achieving successful results offers the opportunity for career advancement. Our suppliers, in addition to a higher activity level, also benefit from improved quality resulting from our supplier process control program.

SMALLER DEVICES

The industry's relentless push to follow Moore's Law leads to the continuous demand for smaller, faster, and cheaper semiconductor components.

Today, our customers manufacture semiconductor devices as small as 7 nanometers (one nanometer, or nm, is one billionth of a meter), sometimes in a vertical 3D transistor or FinFET architecture. Our customers are already qualifying and testing new critical processes to generate devices with line widths at 5nm. Simultaneously, in our customers' laboratories and several collaborative research environments, advanced 3nm design rule devices and related materials are being developed. These next-generation technology nodes are increasing the demand for new materials and more complex process integration methods.

In developing faster and smaller devices, our customers' major technology requirements are:
- introduction of new thin-film materials and device designs needed for continued scaling;
- reliable manufacturing of taller and narrower 3D structures in devices;
- lithography of ever-smaller feature sizes, now much smaller than the wavelength of visible light; and
- new manufacturing processes that reduce device variability and increase yield.

DEVELOPING NEW MATERIALS

In order to meet our customers' needs, we are developing many new materials, along with the deposition equipment capable of achieving performance specifications in volume manufacturing. For example, ALD technology is used to create ultra-thin films of exceptional quality and flatness. ALD of high-k dielectrics and novel metal gate electrodes can improve the performance and reduce the power consumption of a device, thereby enhancing battery life. This same class of materials can also lead to larger charge storage in a smaller capacitor, critical for memories and RF circuits.

In addition to the development of the high-k dielectric, there is also a great deal of focus on new technologies and materials for the metal gate electrode, the gate sidewall passivation, and many other applications. Plasma enhanced ALD (PEALD) is an important technology that enables precise deposition at very low temperatures. One application of PEALD is spacer defined multi-patterning, whereby the deposition of a highly conformal oxide spacer enables the extension of existing optical lithography technology beyond its basic resolution limits.

EPITAXY

Another example of new materials is from epitaxy deposition. Epitaxy is a process for depositing highly controlled silicon-based crystalline films. Many epitaxy steps are used to create the transistor channel and for channel engineering to improve transistor performance. Our silicon-germanium (SiGe) and silicon-carbon-phosphorous (SiCP) epitaxial materials can increase the switching speed of the transistors and the circuit in which they are embedded by so-called strain engineering. Strained silicon is a layer in which the atoms are stretched beyond their normal interatomic distance, allowing higher electron mobility. This results in faster transistor switching at lower power. In 2017, we introduced the Intrepid ES, for advanced-node CMOS logic and memory applications, which offers an innovative closed-loop reactor temperature control system enabling precise process control, high productivity, and low cost per wafer. Many Intrepid ES tools are now running in volume production for Si and SiGe transistor channel formation.

LOW-K MATERIAL SUITE

For interconnect processes, a continued demand to improve the speed at which signals travel through thin copper wires has led to the development of a full suite of low-k materials. These low-k materials can decrease the amount of delay in signal propagation, resulting in, for example, faster microprocessors. Simultaneously, these low-k materials can reduce the amount of power loss in the interconnections. We have been one of the leaders in successfully introducing these low-k materials in the market, and we are continuing to develop improvements to this low-k technology to enable faster interconnect circuits.

HIGH PRODUCTIVITY

In addition to addressing the technology needs of our customers, the relentless drive of the industry to reduce cost corresponds to significant spending on development programs that further increase throughput, equipment reliability, and yield in our customers' manufacturing line, and further lower the cost per wafer of the wafer processing systems.

An excellent example of high productivity is our XP8 platform, on which we offer ALD, PEALD and PECVD processes. The XP8 incorporates eight process chambers in a compact configuration around one central handling platform. Two wafers are moved simultaneously into dual chamber modules (DCM), which generally doubles the throughput compared to single wafer movements. Eagle XP8 PEALD tools and Dragon XP8 PECVD tools are in volume manufacturing at logic and memory fabs worldwide, and demonstrate reliable advanced performance with high productivity. In 2018 ASMI introduced the Synergis ALD tool, which also uses the proven XP8 platform, and leverages the core technologies from our Pulsar and EmerALD ALD products for high productivity thermal ALD applications. The new Synergis tool allows us to address more ALD applications and therefore increases our served market.

ALD AT ASMI

ALD is a leading edge technology capable of depositing ultra-thin films of exceptional flatness and uniformity. This technology was brought into ASMI in 1999 with the acquisition of Microchemistry, who first developed thermal ALD technology. Plasma Enhanced ALD (PEALD) is an extension of this original ALD technology that uses plasma, and which was brought into ASMI in 2001 through a partnership with Genitech, and a subsequent acquisition in 2004 and formation of ASM Korea.

The use of plasma enables us to deposit high-quality films at very low temperatures. ALD is a very versatile technology that can be used to deposit high-k insulating materials, conductors, silicon oxide, silicon nitride, and other materials. We expect the trends of continued scaling, and evolution towards 3D device structures for both logic and memory devices, to play into the strength of our ALD position. We offer ALD/PEALD processes on several of our product platforms, including single-wafer and batch systems, and for multiple wafer sizes. A key focus for our ALD product platforms is productivity, which includes designing our reactors to integrate with our XP8 platform architecture.

OUR BUSINESS MODEL

Our business model is to create value for the company and all of our stakeholders. Our technology enables precision deposition of thin films in various steps in the fabrication of semiconductor chips, helping our customers build the most advanced chips used in the electronics systems throughout society. For this we are working with our customers to develop innovative solutions, while constantly looking at what is best for our investors, our employees, society, and other stakeholders. Fundamental to our model is R&D investment, including basic chemical, materials, and feasibility research, followed by process and product developments. We aim to continuously recruit world class technologists in the semiconductor process and equipment technology fields. We cooperate with research institutes and our customers to understand the technology roadmap challenges and to develop the appropriate process and equipment solutions required. Our manufacturing facilities allow us to deliver high-quality systems on schedule so that our customers can ramp their fabrication plants. We support our customers globally with process and equipment services and spare parts.

MISSION, STRATEGY AND FOCUS AREAS

We are an experienced innovation leader. This is the result of our focus on key issues and challenges within the semiconductor industry, enabling us to make a difference to our customers, employees, and company stakeholders. While challenges and opportunities may change over time, we will continue to bring our breakthrough technologies into volume manufacturing, benefiting our customers.

We are part of a fast-paced industry that continues to reshape the world. Our technology enables the semiconductor industry to drive innovation in communications, energy, transport, medicine and beyond. For example, our wafer process systems are used to manufacture smartphone microprocessors, memory chips used for cloud computing, and sensors for commercial building controls and in automated vehicles. We are committed to making positive contributions to society and striving to prevent harm to people and reduce our impact on the environment. This is the foundation of our commitment to improve the industry and communities we operate in.

We are committed to the Responsible Business Alliance (RBA) Code of Conduct and will strive to meet its goals as best we can on a global basis. We are engaging our supply chain to do the same. We have a certified global environmental management system to drive continuous improvement in environmental performance across all of our operations. We continue to focus on, and enable the achievement of, smaller device geometries, which will lead to even greater advances and opportunities in communications, energy, medicine and the positive advances of humanity. For example, our ALD technology for depositing high-k gate dielectrics enables advanced transistors to operate at lower power, reducing electricity use and extending battery life in mobile products.

At ASMI we know that meeting the needs of today cannot mean compromising the future. This is why we encourage our employees to make positive contributions to our customers and suppliers, our industry, environment, communities in which we operate, and society, reflecting our ambition to drive innovation and deliver excellence.

MISSION
Our mission is to provide our customers with the most advanced, cost-effective, and reliable products, service, and global support network in the semiconductor industry and beyond. We advance the adoption of our deposition technology platforms by developing new materials and process applications that support our customers' long-term technology roadmaps.

VISION
We aim to delight our customers, employees, shareholders, and society by driving innovation with new technologies, and delivering excellence with dependable products. By doing this, we will create new possibilities for everyone to learn, create, and share more of what they are passionate about.

STRATEGY
Our strategic objective is to realize profitable, sustainable growth by capitalizing on our innovative strength in deposition technologies and our strong relationships with key customers. We act thereby as a responsible citizen.

The key elements of our strategy are:

› INNOVATIVE STRENGTH

We provide leading thin-film deposition technologies that support our customers in staying on the curve of Moore's Law. Our innovative strength is what differentiates us in the marketplace, creates growth opportunities for our stakeholders, and continues to be the cornerstone of our strategy. Apart from our internal R&D efforts, we are continuously expanding and deepening our strategic cooperation with key customers, suppliers, chemical manufacturers, and research institutes. Our suppliers manufacture advanced components and assemblies to the tightest of tolerances and are required to adhere to our stringent design specifications, quality systems, and corporate responsibility requirements. This approach enables us to remain innovative and swiftly meet the changing demands of our customers.

› LEADERSHIP IN DEPOSITION

We create value through our advanced thin-film deposition technologies, which help leading semiconductor manufacturers to deliver the world of tomorrow through advanced chips. We are a key player in the deposition equipment segments for ALD and epitaxy, and a focused niche player for PECVD and vertical furnaces.

As a leader in the segment, ALD has turned into a key growth driver for our business, from which we support virtually all of the leading customers in the semiconductor industry. We expect that the trends of continued scaling and evolution towards 3D device structures will further expand the number of applications for ALD. Our newest ALD tool, Synergis, is designed to address a wide range of existing and new ALD applications, effectively increasing the market we serve. We aim to maintain our leading position in ALD by leveraging our strong expertise and established customer relationships to address an increasing number of ALD applications, and by developing new applications in deposition technologies to support our customers with increasingly complex device node transitions.

We are also expanding the applications that we address in epitaxy, by focusing on advanced-node applications in logic/foundry and memory. For example, our Intrepid ES epitaxy tool has an innovative closed-loop reactor temperature control system enabling precise process control, high productivity, and low cost per wafer.

› OPERATIONAL EXCELLENCE

While technology leadership remains crucial, we have a responsibility to our stakeholders to continue to focus on further improving the effectiveness and efficiency of our organization. We aim to provide our customers with dependable, leading-edge products and services at a consistent performance level, while providing the best total cost of ownership. To help achieve this, we continue to optimize our manufacturing and global sourcing processes, including the migration to common product platforms. We are working with our suppliers to improve fundamental quality through statistical methods and process controls. Our employees are engaged in an improved product life cycle process and our Product Safety Council is focused on further improving product safety through fundamental design.

In addition to addressing the technology needs of our customers, we also focus on further increasing equipment throughput and equipment reliability, thereby lowering the cost per wafer of our wafer processing systems. Combined with our commitment to quality, we continuously strive to achieve industry-leading productivity. In addition, to enable further efficiencies in our manufacturing process and the maintenance process of our customers, we put significant efforts into improving the level of standardization in our equipment portfolio by migrating to common platforms, subassemblies and components. One example is our XP8 platform, which is used as a common platform architecture on our newest products for ALD, PEALD, epitaxy and PECVD.

FOCUS AREAS

Within wafer processing, we focus primarily on equipment and process solutions for the deposition of thin films. We are a key player in the deposition equipment segments for ALD and epitaxy, and a focused niche player for PECVD and vertical furnaces. With our broad portfolio of technologies, we are addressing many of the key deposition applications on the semiconductor industry roadmap.

We focus on serving the top companies that produce logic chips and memory devices, which includes addressing the needs of leading foundries. By serving the leading chipmakers, we maintain an understanding of the important requirements of the next generation of device roadmaps, enabling us to develop value-added solutions to the industry's critical issues. In many cases, new films developed for one device type can be utilized for other device types with relatively little additional development.

KEY FIGURES

	SIX MONTHS ENDED JUNE 30,	
(EUR million, except per share data and employees)	2018	2019
New orders	382.4	**608.1**
Backlog	189.1	**299.6**
Book-to-bill	1.0	**1.0**
Net sales	367.7	**612.1**
Gross profit	148.0	**317.2**
Gross profit margin %	40.3%	**51.8%**
Result from operations	50.0	**197.2**
Operating margin %	13.6%	**32.2%**
Share in income of investments in associates	31.1	**(1.7)**
Net earnings from operations, attributable to common shareholders	74.4	**171.0**
Non-current assets	1,115.3	**1,197.0**
Current assets	1,013.0	**861.1**
Total assets	2,128.3	**2,058.2**
Non-current liabilities	14.5	**30.2**
Current liabilities	154.7	**250.6**
Total equity	1,959.2	**1,777.4**
Net working capital [1)]	214.1	**245.3**
Net debt [2)]	(651.2)	**(381.5)**
Cash flows from operating activities	28.3	**181.9**
Cash flows from investing activities	(36.1)	**(39.3)**
Cash flows from financing activities	(177.5)	**(49.6)**
Number of employees	2,025	**2,220**
Per share data		
Basic net earnings per share	1.36	**3.46**
Diluted net earnings per share	1.34	**3.41**
Weighted average number of shares (thousand)		
Basic	54,554	**49,430**
Diluted	55,304	**50,128**

[1] See Notes to the Consolidated Condensed Interim Financial Statements, Note 4.
[2] Net debt is defined as debt minus cash and cash equivalents.

INTERIM MANAGEMENT BOARD REPORT

ASMI CONSOLIDATED RESULTS FOR THE SIX MONTHS ENDED JUNE 30, 2019

The following table shows the operating performance for the six months ended June 30, 2019, compared to the same period of previous year:

	SIX MONTHS ENDED JUNE 30,		
(EUR million)	2018	2019	CHANGE
New orders	382.4	**608.1**	59%
Backlog	189.1	**299.6**	58%
Book-to-bill	1.0	**1.0**	
Net sales	367.7	**612.1**	66%
Gross profit	148.0	**317.2**	114%
Gross profit margin %	40.3%	**51.8%**	
Selling, general and administrative expenses	(56.9)	**(74.2)**	30%
Research and development expenses	(40.9)	**(45.7)**	12%
Restructuring expenses	(0.1)	**(0.1)**	
Result from operations	50.0	**197.2**	294%
Operating margin %	13.6%	**32.2%**	
Financing income/(expenses)	(0.7)	**(0.3)**	0.4
Income tax	(6.1)	**(24.2)**	(18.1)
Share in income of investments in associates			
ASMI share in net earnings ASMPT	37.9	**5.1**	(32.8)
Amortization of fair value adjustments from PPA	(6.8)	**(6.8)**	–
Net earnings from operations, attributable to common shareholders	74.4	**171.0**	96.6

Backlog includes orders for which purchase orders or letters of intent have been accepted, typically for up to one year. Historically, orders have been subject to cancellation or rescheduling by customers. In addition, orders have been subject to price negotiations and changes in specifications as a result of changes in customers' requirements. Due to possible customer changes in delivery schedules and requirements and to cancellation of orders, our backlog at any particular date is not necessarily indicative of actual sales for any succeeding period.

The following table shows the level of new orders for the six months ended June 30, 2019 and the backlog as per June 30, 2019 compared to the comparable period of 2018:

	SIX MONTHS ENDED JUNE 30,		
(EUR million)	2018	2019	% CHANGE
BACKLOG AT THE BEGINNING OF THE YEAR	**171.2**	**301.5**	**76%**
New orders	382.4	**608.1**	59%
Net sales	(367.7)	**(612.1)**	66%
FX-effect	3.2	**2.1**	
BACKLOG AS PER REPORTING DATE	**189.1**	**299.6**	**58%**
BOOK-TO-BILL RATIO (NEW ORDERS DIVIDED BY NET SALES)	**1.0**	**1.0**	

The backlog at the end of June 2019 increased with 58% to a level of €299.6 million, compared to the end of June last year. The bookings and the net sales include €103 million related to the patent litigation settlement announced on July 1, 2019. The book-to-bill ratio was 1.0.

NET SALES

(EUR million)	SIX MONTHS ENDED JUNE 30, 2018	2019	% CHANGE
Equipment sales	281.1	**404.5**	44%
Spares & service sales	86.6	**104.5**	21%
Patent litigation settlement	—	**103.1**	n/a
TOTAL	**367.7**	**612.1**	**66%**

Total net sales for the six months ended June 30, 2019 amounted to €612.1 million, an increase of 66% compared to the same period last year. Excluding the patent litigation settlement, net sales increased 38% compared to the same period last year. Our ALD business continued to be the key revenue driver. The impact of currency changes on net sales was an increase of 4% year on year.

GROSS PROFIT

(EUR million)	SIX MONTHS ENDED JUNE 30, 2018	2019
Gross profit	148.0	**317.2**
Gross profit margin	40.3%	**51.8%**
Gross profit excluding patent litigation settlement	148.0	**214.1**
Gross profit margin excluding patent litigation settlement	40.3%	**42.1%**

Excluding the patent litigation settlement the gross profit margin for the six months ended June 30, 2019 increased to 42.1% compared to 40.3% in the same period last year. The gross profit margin was last year impacted by new product introductions and related initial costs, and costs associated with preparation for anticipated higher activity levels. The impact of currency changes on gross profit was an increase of 3% year on year.

Selling, general and administrative expenses increased with 30% compared to the previous year. This increase was due to several reasons: legal costs related to patent disputes, the higher activity level, and investments to strengthen the ASMI processes and organization. As a percentage of sales SG&A expenses were 12% compared to 15% for the same period previous year. The impact of currency changes on SG&A expenses was an increase of 2% year on year.

RESEARCH AND DEVELOPMENT EXPENSES

(EUR million)	SIX MONTHS ENDED JUNE 30, 2018	2019	% CHANGE
Research and development expenditure	(58.2)	**(70.9)**	22%
Capitalized development expenditure	22.8	**32.4**	42%
Amortization capitalized development expenditure	(5.6)	**(6.4)**	15%
Impairment capitalized development expenditure	—	**(0.8)**	n/a
TOTAL	**(40.9)**	**(45.7)**	**12%**

Total research and development expenses for the six months ended June 30, 2019 increased with 12% compared to the comparable period previous year, mainly due to a higher activity level. As a percentage of sales R&D expenses were 7%, compared to 11% for the previous year. The impact of currency changes on R&D expenses was an increase of 4%.

RESULT FROM OPERATIONS

(EUR million)	SIX MONTHS ENDED JUNE 30, 2018	2019
Operating result	50.0	**197.2**
Operating result margin	13.6%	**32.2%**
Operating result excluding patent litigation settlement	50.0	**94.1**
Operating result margin excluding patent litigation settlement	13.6%	**18.5%**

Excluding the patent litigation settlement result from operations increased to €94.1 million in the first six months of 2019 from €50.0 million for the same period previous year. Operating margin increased to 18.5% from 13.6%. The impact of currency changes on result from operations was an increase of 3%.

FINANCING INCOME/(EXPENSES)

(EUR million)	SIX MONTHS ENDED JUNE 30, 2018	2019	CHANGE
Interest income	0.8	**0.9**	0.1
Interest expenses	(1.7)	**(0.9)**	0.8
Foreign currency exchange results	0.2	**(0.3)**	(0.5)
TOTAL	**(0.7)**	**(0.3)**	**0.4**

Foreign currency exchange results reflect the revaluation of cash positions denominated in foreign currencies, mainly US$.

Share in income of investments in associates

Result from investments, which primarily reflects our approximate 25% shareholding in ASMPT, decreased to €5 million from €38 million in the previous year. ASMPT's net earnings, on a 100% basis, decreased with 86% to €20 million compared to €147 million in the previous year. For further information on the half year results of ASMPT, please visit ASMPT's website http://www.asmpacific.com.

For the six months ended June 30, 2019 the amortization of the recognized intangible assets and the depreciation of the fair value adjustment for property, plant & equipment negatively impacted net earnings with €6.8 million. For 2019, on a currency comparable basis, the annualized amount of this amortization is expected to amount to €13.6 million.

Reporting ASMI share in net earnings of ASMPT in the consolidated statement of profit or loss:

(EUR million)	SIX MONTHS ENDED JUNE 30, 2018	2019
ASMI share in net earnings ASMPT	37.9	**5.1**
Amortization of fair value adjustments from PPA	(6.8)	**(6.8)**
TOTAL	**31.1**	**(1.7)**

Income tax

Income tax in the first half amounted to an expense of €24.2 million. Income tax in the previous year amounted to an expense of €6.1 million. The increase in tax expense is due to the complete utilization of the net operating losses in the Netherlands as a consequence of the patent litigation settlement.

CASH FLOW, BALANCE SHEET, LIQUIDITY AND CAPITAL RESOURCES

CASH FLOW

The following table shows the cash flow statements for the six months ended June 30, 2019 compared to the same period of previous year:

	SIX MONTHS ENDED JUNE 30,	
(EUR million)	2018	2019
NET EARNINGS FROM OPERATIONS, ATTRIBUTABLE TO COMMON SHAREHOLDERS	**74.4**	**171.0**
Adjustments required to reconcile net earnings to net cash from operating activities:		
Depreciation, amortization and impairments	24.6	**34.6**
Share-based compensation	3.7	**4.5**
Income tax	6.1	**24.2**
Non-cash financing costs	(0.7)	**3.0**
Share in income of investments in associates	(31.1)	**1.7**
Changes in assets and liabilities:		
Accounts receivable	(5.1)	**(84.6)**
Inventories	(20.9)	**2.9**
Evaluation tools	(19.8)	**—**
Other assets	(6.4)	**0.3**
Accounts payable and accrued expenses	8.0	**27.5**
Income tax paid	(4.4)	**(3.2)**
NET CASH PROVIDED BY OPERATING ACTIVITIES	**28.3**	**181.9**
Capital expenditures	(27.3)	**(21.7)**
Capitalized development expenditure	(22.8)	**(32.4)**
Purchase of intangible assets	(0.5)	**(1.7)**
Dividend received from associates	14.6	**16.5**
NET CASH USED IN INVESTING ACTIVITIES	**(36.1)**	**(39.3)**
Purchase of treasury shares ASMI	(141.8)	**—**
Proceeds from issuance of treasury shares	1.4	**1.0**
Dividend paid to common shareholders ASMI	(37.1)	**(49.4)**
Capital repayment to common shareholders ASMI	—	**(1.1)**
NET CASH USED IN FINANCING ACTIVITIES	**(177.5)**	**(49.6)**

BALANCE SHEET

Net working capital, consisting of inventories, accounts receivable, other current assets, accounts payable, provision for warranty and accrued expenses and other payables, increased from €203 million as per December 31, 2018 to €245 million at June 30, 2019 mainly as a result of the receivable from the patent litigation settlement. The number of outstanding days of working capital, measured against quarterly sales, decreased from 72 days at December 31, 2018 to 61 days at June 30, 2019.

SOURCES OF LIQUIDITY

On June 30, 2019, the Company's principal sources of liquidity consisted of €382 million in cash and cash equivalents and €150 million in undrawn bank lines.

SHARE BUYBACK PROGRAM

On July 23, 2019, ASMI announced a share buyback program of ASMI's common shares up to €100 million. This program has not yet started.

The 2019 AGM also approved the proposed withdrawal of 5 million treasury shares which became effective on July 23, 2019.

SUBSEQUENT EVENTS

Subsequent events have been evaluated by the Company until August 30, 2019, the issuance date of this interim report 2019. There are no subsequent events to report.

REPORTING RESPONSIBILITIES AND RISKS

RELATED PARTY TRANSACTIONS

There have been no significant related party transactions or changes in related party transactions described in ASMI's 2018 Annual Report that could have a material effect on the financial position or performance of the Company in the first six months of the 2019 financial year.

AUDITORS' INVOLVEMENT

The contents of this Interim Financial Report have not been audited or reviewed by an external auditor.

RISKS AND UNCERTAINTIES

In conducting our business, we face a number of principal risks and uncertainties that each could materially affect our business, revenues, income, assets and liquidity and capital resources. For a detailed description of our assessment of the major risk factors, see Risk management in our 2018 Annual Report. Those risk factors are deemed incorporated and repeated in this report by reference. ASMI believes that these risks similarly apply for the second half of 2019.

We monitor our primary risks on a continuous basis and implement appropriate measures as promptly as practicable to address known and new risks as they emerge and change. Additional risks not known to us or now believed to be not material could later turn out to have material impact on us.

OUTLOOK

For Q3, on a currency comparable level, we expect sales of €250-270 million while bookings, on a currency comparable level, are expected to also be in the range of €250-270 million.

For 2019, general expectations are now that the wafer fab equipment (WFE) market will decline with a high teens percentage. While expectations for the memory-segment have further weakened, the healthy demand in the logic and foundry segments in the first half is expected to continue in the second half of 2019. Based upon this current market view, we maintain our expectation to meaningfully outperform the WFE market in 2019.

RESPONSIBILITY STATEMENT

The Management Board of the Company hereby declares that, to the best of its knowledge:

- the consolidated condensed interim financial statements of the first six months ended June 30, 2019 prepared in accordance with IAS 34, Interim Financial Reporting give a true and fair view of the assets, liabilities, financial position and results of the Company and the undertakings included in the consolidation taken as a whole; and
- the Interim report of the Management Board gives a fair review of the information required pursuant to section 5:25d(8)/(9) of the Dutch Financial Markets Supervision Act ("Wet op het Financieel Toezicht").

Almere, August 30, 2019

Management Board ASM International NV

C.D. del Prado, Chairman of the Management Board, President and Chief Executive Officer
P.A.M. van Bommel, Member of the Management Board and Chief Financial Officer

CONSOLIDATED CONDENSED INTERIM FINANCIAL STATEMENTS

FOR THE SIX MONTHS ENDED JUNE 30, 2019

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS

(EUR thousand, except share data)	NOTES	SIX MONTHS ENDED JUNE 30, 2018 (UNAUDITED)	SIX MONTHS ENDED JUNE 30, 2019 (UNAUDITED)
Net sales	5,6	367,651	612,091
Cost of sales		(219,645)	(294,877)
GROSS PROFIT	5	148,006	317,214
Operating expenses:			
Selling, general and administrative		(56,905)	(74,223)
Research and development		(40,911)	(45,718)
Restructuring expenses		(149)	(80)
TOTAL OPERATING EXPENSES		(97,965)	(120,021)
RESULT FROM OPERATIONS	5	50,041	197,193
Finance income		802	875
Finance expenses		(1,683)	(881)
Foreign currency exchange gain (loss), net		198	(256)
Result from investments	3	31,071	(1,683)
RESULT BEFORE INCOME TAXES		80,429	195,248
Income taxes		(6,067)	(24,217)
NET EARNINGS FROM OPERATIONS, ATTRIBUTABLE TO COMMON SHAREHOLDERS		74,362	171,031
Per share data	8		
Basic net earnings per share		1.36	3.46
Diluted net earnings per share		1.34	3.41
Weighted average number of shares (thousand)			
Basic		54,554	49,430
Diluted		55,304	50,128

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(EUR thousand)	SIX MONTHS ENDED JUNE 30, 2018 (UNAUDITED)	SIX MONTHS ENDED JUNE 30, 2019 (UNAUDITED)
NET EARNINGS FROM OPERATIONS, ATTRIBUTABLE TO COMMON SHAREHOLDERS	**74,362**	**171,031**
Other comprehensive income, net of income tax		
Items that will not be reclassified subsequently to profit or loss:		
Share of other comprehensive income (loss) investments in associates	784	(280)
Items that may be subsequently reclassified to profit or loss:		
Foreign currency translation effect	25,214	9,959
OTHER COMPREHENSIVE INCOME, NET OF INCOME TAX	**25,998**	**9,679**
TOTAL COMPREHENSIVE INCOME, ATTRIBUTABLE TO COMMON SHAREHOLDERS	**100,360**	**180,710**

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

(EUR thousand)	NOTES	JUNE 30, 2018 (UNAUDITED)	DECEMBER 31, 2018 (AUDITED)	JUNE 30, 2019 (UNAUDITED)
Assets				
Right-of-use assets	1	—	—	**29,607**
Property, plant and equipment		123,652	148,749	**148,884**
Goodwill		11,270	11,270	**11,270**
Other intangible assets	2	131,629	149,927	**174,783**
Investments in associates	3	778,136	789,588	**777,177**
Deferred tax assets		18,526	11,316	**4,359**
Other non-current assets		5,736	11,641	**9,972**
Evaluation tools at customers		46,355	44,634	**40,432**
Employee benefits (pension assets)		—	224	**550**
TOTAL NON-CURRENT ASSETS		**1,115,303**	**1,167,349**	**1,197,034**
Inventories	4	166,622	171,826	**170,386**
Accounts receivable	4	169,566	173,450	**260,437**
Income taxes receivable		1,223	4,439	**2,339**
Other current assets	4	24,455	45,001	**46,419**
Cash and cash equivalents		651,173	285,907	**381,535**
TOTAL CURRENT ASSETS		**1,013,039**	**680,623**	**861,116**
TOTAL ASSETS		**2,128,342**	**1,847,972**	**2,058,150**
EQUITY		**1,959,209**	**1,641,551**	**1,777,375**
Employee benefits (pension liabilities)		231	—	**—**
Accrued expenses and other payables		—	—	**17,937**
Deferred tax liabilities		14,239	12,170	**12,220**
TOTAL NON-CURRENT LIABILITIES		**14,470**	**12,170**	**30,157**
Accounts payable	4	99,402	80,640	**93,488**
Provision for warranty	4	6,785	7,955	**12,999**
Income taxes payable		8,147	6,663	**18,672**
Accrued expenses and other payables	4	40,329	98,993	**125,459**
TOTAL CURRENT LIABILITIES		**154,663**	**194,251**	**250,618**
TOTAL LIABILITIES		**169,133**	**206,421**	**280,775**
TOTAL EQUITY AND LIABILITIES		**2,128,342**	**1,847,972**	**2,058,150**

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(EUR thousand, except share data)	NUMBER OF COMMON SHARES	COMMON SHARES	CAPITAL IN EXCESS OF PAR VALUE	TREASURY SHARES AT COST	RETAINED EARNINGS	OTHER RESERVES [1]	TOTAL EQUITY
BALANCE JANUARY 1, 2018	**56,140,153**	**2,492**	**218,525**	**(304,654)**	**2,057,387**	**53,754**	**2,027,504**
Net earnings	—	—	—	—	74,362	—	**74,362**
Other comprehensive income	—	—	—	—	—	25,998	**25,998**
TOTAL COMPREHENSIVE INCOME	**—**	**—**	**—**	**—**	**74,362**	**25,998**	**100,360**
Dividend paid to common shareholders	—	—	—	—	(37,108)	—	**(37,108)**
Compensation expense share based payments	—	—	3,673	—	—	—	**3,673**
Exercise stock options out of treasury shares	64,013	—	(1,767)	3,202	—	—	**1,435**
Vesting restricted shares out of treasury shares	152,861	—	(7,564)	7,564	—	—	**—**
Purchase of common shares	(2,511,144)	—	—	(136,924)	—	—	**(136,924)**
Other movements in investments and associates:							
Dilution	—	—	—	—	269	—	**269**
BALANCE JUNE 30, 2018 (UNAUDITED)	**53,845,883**	**2,492**	**212,867**	**(430,812)**	**2,094,910**	**79,752**	**1,959,209**
Net earnings	—	—	—	—	82,771	—	**82,771**
Other comprehensive income	—	—	—	—	—	19,855	**19,855**
TOTAL COMPREHENSIVE INCOME	**—**	**—**	**—**	**—**	**82,771**	**19,855**	**102,626**
Dividend paid to common shareholders	—	—	—	—	(6,536)	—	**(6,536)**
Capital repayment	—	—	(159,817)	—	(48,957)	—	**(208,774)**
Compensation expense share based payments	—	—	4,542	—	—	—	**4,542**
Exercise stock options out of treasury shares	194,675	—	(6,199)	9,581	—	—	**3,382**
Vesting restricted shares out of treasury shares	9,930	—	(491)	491	—	—	**—**
Purchase of common shares	(4,731,590)	—	—	(213,118)	—	—	**(213,118)**
Cancellation of common shares out of treasury shares	—	(240)	—	305,848	(305,608)	—	**—**
Other movements in investments and associates:							
Dilution	—	—	—	—	220	—	**220**
BALANCE DECEMBER 31, 2018	**49,318,898**	**2,252**	**50,902**	**(328,010)**	**1,816,800**	**99,607**	**1,641,551**
Adjustment on initial application IFRS 16, net of tax	—	—	—	—	141	—	**141**
BALANCE JANUARY 1, 2019	**49,318,898**	**2,252**	**50,902**	**(328,010)**	**1,816,941**	**99,607**	**1,641,692**
Net earnings	—	—	—	—	171,031	—	**171,031**
Other comprehensive income	—	—	—	—	—	9,679	**9,679**
TOTAL COMPREHENSIVE INCOME	**—**	**—**	**—**	**—**	**171,031**	**9,679**	**180,710**
Dividend paid to common shareholders	—	—	—	—	(49,390)	—	**(49,390)**
Capital repayment	—	—	(1,144)	—	—	—	**(1,144)**
Compensation expense share based payments	—	—	4,541	—	—	—	**4,541**
Exercise stock options out of treasury shares	44,516	—	(1,083)	2,049	—	—	**966**
Vesting restricted shares out of treasury shares	168,763	—	(7,932)	7,932	—	—	**—**
Purchase of common shares	—	—	—	—	—	—	**—**
Other movements in investments and associates:							
Dilution	—	—	—	—	—	—	**—**
BALANCE JUNE 30, 2019 (UNAUDITED)	**49,532,177**	**2,252**	**45,284**	**(318,029)**	**1,938,582**	**109,286**	**1,777,375**

1 Other reserves consist of the currency translation reserve, remeasurement on net defined benefit and the reserve for proportionate share in other comprehensive income investments in associates.

CONSOLIDATED STATEMENT OF CASH FLOWS

(EUR thousand)	SIX MONTHS ENDED JUNE 30, 2018 (UNAUDITED)	SIX MONTHS ENDED JUNE 30, 2019 (UNAUDITED)
Cash flows from operating activities		
NET EARNINGS FROM OPERATIONS, ATTRIBUTABLE TO COMMON SHAREHOLDERS	**74,362**	**171,031**
Adjustments required to reconcile net earnings to net cash from operating activities:		
Depreciation, amortization and impairments	24,574	**34,612**
Share-based compensation	3,673	**4,541**
Non-cash financing costs	(716)	**2,982**
Share in income of investments in associates	(31,071)	**1,683**
Income tax	6,067	**24,217**
Changes in assets and liabilities:		
Accounts receivable	(5,127)	**(84,636)**
Inventories	(20,917)	**2,898**
Evaluation tools	(19,804)	**(42)**
Other assets	(6,398)	**301**
Accounts payable and accrued expenses	8,048	**27,480**
Income tax paid	(4,428)	**(3,169)**
NET CASH PROVIDED BY OPERATING ACTIVITIES	**28,262**	**181,898**
Cash flows from investing activities:		
Capital expenditures	(27,303)	**(21,742)**
Capitalized development expenditure	(22,845)	**(32,405)**
Purchase of intangible assets	(532)	**(1,681)**
Dividend received from associates	14,583	**16,488**
NET CASH USED IN INVESTING ACTIVITIES	**(36,097)**	**(39,340)**
Cash flows from financing activities:		
Purchase of treasury shares ASMI	(141,845)	**—**
Proceeds from issuance of treasury shares	1,435	**966**
Dividends paid to common shareholders ASMI	(37,108)	**(49,390)**
Capital repayment to common shareholders ASMI	—	**(1,144)**
NET CASH USED IN FINANCING ACTIVITIES	**(177,517)**	**(49,568)**
Foreign currency translation effect on cash and cash equivalents	**64**	**2,638**
NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS	**(185,288)**	**95,628**
Cash and cash equivalents at beginning of year	836,461	**285,907**
CASH AND CASH EQUIVALENTS AT BALANCE SHEET DATE	**651,173**	**381,535**

NOTES TO CONSOLIDATED CONDENSED INTERIM FINANCIAL STATEMENTS

NOTE 1. GENERAL INFORMATION / SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

GENERAL INFORMATION

ASM International NV (ASMI or the Company) is a Dutch public liability company domiciled in the Netherlands with its principal operations in Europe, the United States and Asia. The Company dedicates its resources to the research, development, manufacturing, marketing and servicing of equipment and materials used to produce mainly semiconductor devices. The Company is registered at Versterkerstraat 8, 1322 AP Almere, the Netherlands.

The Company's shares are listed for trading on the Euronext Amsterdam Stock Exchange (symbol ASM). The accompanying consolidated condensed interim financial statements include the financial statements of ASM International NV, headquartered in Almere, the Netherlands, and its consolidated subsidiaries (together referred to as ASMI or the Company).

The consolidated condensed interim financial statements for the six months ended June 30, 2019 were authorized for issue by the Management Board on August 30, 2019.

The consolidated condensed interim financial statements have not been audited or reviewed by an external auditor.

ACCOUNTING POLICIES

These consolidated condensed interim financial statements have been prepared in accordance with IAS 34, Interim Financial Reporting. The consolidated condensed interim financial statements do not include all of the information required for full annual financial statements and should be read in conjunction with ASMI's 2018 Annual Report. In addition, the notes to these consolidated condensed interim financial statements are presented in a condensed format. The applied accounting principles are in line with those as described in ASMI's 2018 Annual Report and are based on IFRS as endorsed by the European Union.

Changes in accounting policies

Except as described below, the accounting policies applied in these interim financial statements are the same as those applied in the last annual financial statements.

The changes in accounting policies are also expected to be reflected in the Company's consolidated financial statements as at and for the year ending December 31, 2019.

New and amended standards adopted by the Company

The Company has initially applied IFRS 16 Leases from January 1, 2019. A number of other new standards are effective from January 1, 2019 but they do not have a material effect on the Company's consolidated condensed interim financial statements.

General impact of application of IFRS 16 Leases

IFRS 16 introduces a single, on-balance sheet lease accounting model for lessees. A lessee recognizes a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. Lessor accounting remains similar to the current accounting but is not applicable to the Company.

The Company has applied IFRS 16 using the modified retrospective approach, under which the cumulative effect of initial application is recognized in retained earnings at January 1, 2019. Accordingly, comparative information presented for 2018 has not been restated, therefore has been presented as previously reported, under IAS 17 and related interpretations. The details of the changes in accounting policies are disclosed below.

Definition of a lease

The Company assesses whether a contract is or contains a lease based on the new definition of a lease. Under IFRS 16, a contract is, or contains, a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration.

On transition to IFRS 16, the Company elected to apply the practical expedient to grandfather the assessment of which transactions are leases. It applies IFRS 16 only to contracts that were previously identified as lease. Contracts that were not identified as lease under IAS 17 and IFRIC 4 were not reassessed. Therefore, the definition of a lease under IFRS 16 has been applied only to contracts entered into or changed on or after January 1, 2019.

At inception or on reassessment of a contract that contains a lease component, the Company allocated the consideration in the contract to each lease and non-lease component on basis of their relative stand-alone prices. However, for car leases in which it is a lessee, the Company has elected not to separate non-lease components and will instead account for the lease and non-lease components as a single lease component.

Impact on lessee accounting

The Company leases many assets, including land, buildings, houses, cars, machinery and furniture.

As a lessee, the Company previously classified leases as operating or finance leases based on its assessment of whether the lease transferred substantially all of the risks and rewards of ownership. Under IFRS 16, the Company recognizes right-of-use assets and lease liabilities for most leases, which are on-balance sheet.

The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases (lease term of 12 months or less) and leases of low-value assets (up to the amount of €5 thousand asset value, such as water purifiers and air cleaners). The Company recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

The Company presents right-of-use assets separately from other assets. The carrying amount of the right-of-use assets are set out below:

(EUR thousand)	LAND AND BUILDINGS	MOTOR VEHICLES	OTHER EQUIPMENT	TOTAL
Balance as at January 1, 2019	23,428	1,647	612	**25,687**
Balance as at June 30, 2019	27,100	2,060	447	**29,607**

The Company presents the short term part of the lease liabilities as part of the accrued expenses and the long term part as other non-current liabilities.

Significant accounting policies

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, and subsequently at cost less any accumulated depreciation and impairment losses, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the Company's incremental borrowing rate. The lease liability is subsequently increased by the interest cost on the lease liability and decreased by the lease payment made. It is remeasured when there is a change in future lease payments arising from a change in a rate or changes in the assessment of whether a purchase or extension option is reasonably certain to be exercised or a termination option is reasonably certain not to be exercised.

The Company has applied judgment to determine the lease term for some of the lease contracts in which it is a lessee that includes renewal options. The assessment of whether the Company is reasonably certain to exercise such options impacts the lease term, which significantly affects the amount of lease liabilities and right-of-use assets recognized.

Transition

Previously, the Company classified property leases as operating leases under IAS 17. These include land, building, motor vehicles, company houses and other equipment. Leases typically run up to a period of 5 years, some with an option to renew the lease after the end of the non-cancelable period.

At transition, for leases classified as operating leases under IAS 17, lease liabilities were measured at the present value of the remaining lease payments, discounted for the Company's incremental borrowing rate as at January 1, 2019. Right-of use assets are measured at an amount equal to the lease liability.

When measuring the lease liabilities for leases that were classified as operating leases, the Company discounted the lease payments using its incremental borrowing rate at January 1, 2019. To determine the incremental borrowing rate, management used a risk free rate for all major areas and adjusted this rate using the Company's credit rating, the term of the lease components has also been taken into account.

The Company used the following practical expedients when applying IFRS 16 to leases previously classified as operating leases under IAS 17:

- Applied the exemption for leases for which the lease term ends within 12 months of the date of initial application in the same way as short term leases;
- Excluded initial direct costs from measuring the right-of-use asset at the date of initial application; and
- Used hindsight when determining the lease term if the contract contains options to extend or terminate the lease.

Impact on transition

(EUR thousand)	JANUARY 1, 2019
Right-of-use assets presented in property, plant and equipment	25,687
Lease liabilities	25,687
Retained earnings	141

(EUR thousand)	JANUARY 1, 2019
Operating lease commitments at December 31, 2018 as disclosed in the 2018 Annual Report	32,115
Discounted using the incremental borrowing rate	(1,854)
Reclassification invoices to be paid	(4,275)
Less small lease tickets	(63)
Less short term leases	(236)
LEASE LIABILITIES RECOGNIZED AT JANUARY 1, 2019	**25,687**

Impact for the period

As a result of initially applying IFRS 16, in relation to the leases that were previously classified as operating leases, the Company recognized €29,607 thousand of right-of-use assets and €24,992 thousand of lease liabilities as at June 30, 2019.

Also in relation to those leases under IFRS 16, the Company has recognized depreciation and interest costs, instead of operating lease expenses. During the six months ended June 30, 2019, the Company recognized €3,669 thousand of depreciation charges and €299 thousand of interest costs from these leases.

USE OF ESTIMATES AND JUDGMENTS

The preparation of the Company's consolidated condensed interim financial statements requires management to make judgments, estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ materially from those estimates. We evaluate our estimates and underlying assumptions on an ongoing basis. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

NOTE 2. OTHER INTANGIBLE ASSETS

Other intangible assets include capitalized development expenditure, software developed or purchased (including licenses) for internal use and purchased technology from third parties. The changes in the amount of other intangible assets are as follows:

(EUR thousand)	DEVELOPMENT COSTS	SOFTWARE	PURCHASED TECHNOLOGY AND OTHER INTANGIBLE ASSETS	TOTAL
BALANCE JANUARY 1, 2018	**98,921**	**12,729**	**1,645**	**113,295**
Additions	22,845	532	—	**23,377**
Amortization for the period	(5,577)	(1,834)	(335)	**(7,746)**
Impairments	—	—	—	**—**
Foreign currency, translation effect	2,700	3	—	**2,703**
BALANCE JUNE 30, 2018 (UNAUDITED)	**118,889**	**11,430**	**1,310**	**131,629**
Additions	26,843	526	—	**27,369**
Amortization for the period	(6,462)	(3,406)	(335)	**(10,203)**
Impairments	(1,278)	—	—	**(1,278)**
Foreign currency, translation effect	2,390	20	—	**2,410**
BALANCE DECEMBER 31, 2018	**140,382**	**8,570**	**975**	**149,927**
Additions	32,405	1,681	—	**34,086**
Amortization for the period	(6,438)	(2,252)	(335)	**(9,025)**
Impairments	(826)	—	—	**(826)**
Foreign currency, translation effect	613	8	—	**621**
BALANCE JUNE 30, 2019 (UNAUDITED)	**166,136**	**8,007**	**640**	**174,783**

Impairment charges on capitalized development costs are included in operating expenses under research and development. Impairment of capitalized development expenses primarily related to development of new hardware for which the customers demand has shifted out in time, and technology which became obsolete. The impairment charges for 2018 and 2019 related to customer specific projects.

Capitalized development costs are amortized over their estimated useful lives of five years, other intangible assets are amortized over their estimated useful lives of three to seven years.

NOTE 3. INVESTMENTS IN ASSOCIATES

The changes in the investments in associates are as follows:

	ASMPT			
(EUR thousand)	NET EQUITY SHARE	OTHER (IN) TANGIBLE ASSETS	GOODWILL	TOTAL ASMPT
BALANCE JANUARY 1, 2018	**305,671**	**53,740**	**371,141**	**730,552**
Share in net earnings of investments in associates	37,913	—	—	**37,913**
Other comprehensive income of investments in associates	784	—	—	**784**
Reclassification	—	14,587	—	**14,587**
Amortization recognized (in)tangible assets	—	(6,842)	—	**(6,842)**
Dividends	(14,583)	—	—	**(14,583)**
Dilution ASMPT share to 25.47%	(4,549)	558	4,260	**269**
Foreign currency translation effect	5,031	1,158	9,267	**15,456**
BALANCE JUNE 30, 2018 (UNAUDITED)	**330,267**	**63,201**	**384,668**	**778,136**
Share in net earnings of investments in associates	22,856	—	—	**22,856**
Other comprehensive income of investments in associates	(1,945)	—	—	**(1,945)**
Amortization recognized (in)tangible assets	—	(5,491)	—	**(5,491)**
Dividends	(14,537)	—	—	**(14,537)**
Dilution ASMPT share to 25.33%	5,038	(558)	(4,260)	**220**
Foreign currency translation effect	1,976	909	7,464	**10,349**
BALANCE DECEMBER 31, 2018	**343,655**	**58,061**	**387,872**	**789,588**
Share in net earnings of investments in associates	5,121	—	—	**5,121**
Other comprehensive income of investments of associates	(280)	—	—	**(280)**
Amortization recognized (in)tangible assets	—	(6,804)	—	**(6,804)**
Dividends	(16,488)	—	—	**(16,488)**
Foreign currency translation effect	1,936	556	3,548	**6,040**
BALANCE JUNE 30, 2019 (UNAUDITED)	**333,944**	**51,813**	**391,420**	**777,177**

On March 15, 2013, the Company divested a controlling stake in its subsidiary ASM Pacific Technology Ltd (ASMPT). After the initial accounting of the sale transaction and related gains future income from ASMPT was adjusted for the fair value adjustments arising from the basis differences as if a business combination had occurred under IFRS 3R, Business Combinations, i.e. a purchase price allocation (PPA).

The purchase of the associate has been recognized at fair value, being the value of the ASMPT shares on the day of closing of the purchase transaction. The composition of this fair value was determined through a PPA. The PPA resulted in the recognition of intangible assets for customer relationship, technology, trade name, product names and goodwill. For inventories and property, plant & equipment a fair value adjustment was recognized.

The ASMPT investment is accounted for under the equity method on a go forward basis. Equity method investments are tested for prolonged impairment. An investment is considered impaired if the fair value of the investment is less than its carrying value.

If the fair value of an investment is less than its carrying value at the balance sheet date, the Company determines whether the impairment is temporary or prolonged. The amount per share recognized as per December 31, 2018 under equity accounting amounts to HK$68.74 whereas the level 1 fair value per share (being the market price of a share on the Hong Kong Stock Exchange) was HK$75.45 as per December 31, 2018. Management concluded that based on quantitative analysis no impairment of its share in ASMPT existed as per December 31, 2018.

During the first half year of 2018, 4,657,500 common shares of ASMPT were canceled and our ownership increased to 25,47%. In December 2018, 2,245,900 common shares of ASMPT were issued, for cash at par value of HK$0.10 per share, pursuant to the Employee Share Incentive Scheme of ASMPT. The shares under the plan in 2018 have diluted ASMI's ownership in ASMPT to 25.33% as of December 31, 2018.

At June 30, 2019, the book value of our equity method investment in ASMPT was €777 million. The historical cost basis of our 25.33% share of net assets on the books of ASMPT was €334 million as of June 30, 2019 resulting in a basis difference of €443 million. €52 million of this basis difference has been allocated to property, plant and equipment and intangibles assets. The remaining amount was allocated to equity method goodwill. Each individual, identifiable asset will periodically be reviewed for any indicators of potential impairment which, if required, would result in acceleration of basis difference amortization. We amortize the basis differences allocated to the assets on a straight-line basis, and include the impact within the results of our equity method investments. Amortization and depreciation are adjusted for related deferred tax impacts. Included in net income attributable to ASMI for the six months period ending June 30, 2019 was after-tax expense of €7 million, representing the depreciation and amortization of the basis differences.

Summarized 100% earnings information for ASMPT equity method investment excluding basis adjustments (foreign currency exchange rate average for 2019: 1 HK$: €0.11256 and for 2018: 1 HK$: €0.10587):

	SIX MONTHS ENDED JUNE 30,	
(HK$ million)	2018	2019
Net sales	9,616.4	**7,274.8**
Earnings before income tax	1,834.8	**368.6**
Net earnings	1,397.4	**178.3**

Summarized 100% statement of financial position information for ASMPT equity method investment excluding basis adjustments (foreign currency exchange rate as per June 30, 2019: 1 HK$: €0.11253, December 31, 2018: 1 HK$: €0.11151 and as per June 30, 2018: 1 HK$: €0.10933):

(HK$ million)	JUNE 30, 2018	DECEMBER 31, 2018	JUNE 30, 2019
Current assets	16,759	15,168	**14,190**
Non-current assets	4,759	5,907	**7,500**
Current liabilities	9,201	7,792	**5,079**
Non-current liabilities	461	1,122	**4,894**
Equity	11,861	12,161	**11,717**

NOTE 4. WORKING CAPITAL

Net working capital is composed as follows:

(EUR thousand)	JUNE 30, 2018	DECEMBER 31, 2018	JUNE 30, 2019
Inventories	166,622	171,826	**170,386**
Accounts receivable	169,566	173,450	**260,437**
Other current assets	24,455	45,001	**46,419**
Accounts payable	(99,402)	(80,640)	**(93,488)**
Provision for warranty	(6,785)	(7,955)	**(12,999)**
Accrued expenses and other payables	(40,329)	(98,993)	**(125,459)**
NET WORKING CAPITAL	**214,127**	**202,689**	**245,296**

NOTE 5. SEGMENT DISCLOSURE

The Company organizes its activities in two operating segments, Front-end and Back-end. Operating segments are reported in a manner consistent with the internal reporting provided to the Chief Executive Officer (CEO), which is the Chief Operating Decision Maker (CODM).

The Front-end segment manufactures and sells equipment used in wafer processing, encompassing the fabrication steps in which silicon wafers are layered with semiconductor devices. The segment is a product driven organizational unit comprised of manufacturing, service, and sales operations in Europe, the United States of America, Japan, South Korea and Southeast Asia.

The Back-end segment manufactures and sells equipment and materials used in assembly and packaging, encompassing the processes in which silicon wafers are separated into individual circuits and subsequently assembled, packaged and tested. The segment is organized in ASM Pacific Technology Ltd, in which the Company holds a substantial share of 25.33% interest, whilst the remaining shares are listed on the Stock Exchange of Hong Kong. The segment's main operations are located in Hong Kong, the People's Republic of China, Singapore, Malaysia and Germany.

The Back-end segment remains reported as a separate segment since the cease of control per March 15, 2013. Since that date the segment is reported as an equity method investment as the CEO reviews this information as part of his CODM package.

Accordingly, the asset and result information regarding the operations that comprise the segment are disclosed. The full financial results are reviewed by the CODM, the external reporting of the segment are on an equity method investment basis. The total of all segments' financial amounts are reconciled to the corresponding amounts reported in the consolidated financial statements, eliminations are reflected in the reconciling column for amounts reported in excess of those amounts reflected in the consolidated financial statements.

(EUR thousand)	FRONT-END	BACK-END 100%	DECONSOLIDATED	TOTAL
	SIX MONTHS ENDED JUNE 30, 2018			
Net sales	367,651	1,018,086	(1,018,086)	**367,651**
Gross profit	148,006	414,176	(414,176)	**148,006**
Result from operations	50,041	202,824	(202,824)	**50,041**
Interest income (expenses)	(881)	(8,576)	8,576	**(881)**
Foreign currency exchange results	198	—	—	**198**
Result from investments in associates	—	—	31,071	**31,071**
Income taxes	(6,067)	(46,301)	46,301	**(6,067)**
Net earnings	43,291	147,947	(116,876)	**74,362**
Cash flows from operating activities	28,262	96,479	(96,479)	**28,262**
Cash flows from investing activities	(50,680)	(49,896)	64,479	**(36,097)**
Cash flows from financing activities	(177,517)	(14,740)	14,740	**(177,517)**
Cash and cash equivalents	651,173	270,069	(270,069)	**651,173**
Goodwill	11,270	69,567	(69,567)	**11,270**
Other intangible assets	131,629	84,616	(84,616)	**131,629**
Investments in associates	—	—	778,136	**778,136**
Other identifiable assets	556,134	1,928,345	(1,928,345)	**556,134**
Total assets	1,350,206	2,352,597	(1,574,461)	**2,128,342**
Total debt	—	357,078	(357,078)	**—**
Headcount [1]	2,025	14,724	(14,724)	**2,025**

[1] Headcount includes employees with a fixed contract, and excludes temporary workers.

(EUR thousand)	FRONT-END	BACK-END 100%	DECONSOLIDATED	TOTAL
	SIX MONTHS ENDED JUNE 30, 2019			
Net sales	612,091	818,850	(818,850)	**612,091**
Gross profit	317,214	285,013	(285,013)	**317,214**
Result from operations	197,193	60,471	(60,471)	**197,193**
Interest income (expenses)	(6)	(14,388)	14,388	**(6)**
Foreign currency exchange results	(256)	(4,592)	4,592	**(256)**
Result from investments in associates	—	—	(1,683)	**(1,683)**
Income taxes	(24,217)	(21,425)	21,425	**(24,217)**
Net earnings	172,714	20,066	(21,749)	**171,031**
Cash flows from operating activities	181,898	173,156	(173,156)	**181,898**
Cash flows from investing activities	(55,828)	(23,376)	39,864	**(39,340)**
Cash flows from financing activities	(49,568)	(103,140)	103,140	**(49,568)**
Cash and cash equivalents	381,535	281,282	(281,282)	**381,535**
Goodwill	11,270	118,547	(118,547)	**11,270**
Other intangible assets	174,783	139,964	(139,964)	**174,783**
Investments in associates	—	—	777,177	**777,177**
Other identifiable assets	713,385	1,900,941	(1,900,941)	**713,385**
Total assets	1,280,973	2,440,734	(1,663,557)	**2,058,150**
Total debt	—	399,495	(399,495)	**—**
Headcount [1]	2,220	13,700	(13,700)	**2,220**

[1] Headcount includes employees with a fixed contract, and excludes temporary workers.

There are no inter-segment transactions, other than charges for management services, which are based on actual cost. The accounting policies used to measure the net earnings and total assets in each segment are consistent to those used in the Consolidated financial statements. The measurement methods used to determine reported segment earnings are consistently applied for all periods presented. There were no asymmetrical allocations to segments.

Geographical information is summarized as follows:

	SIX MONTHS ENDED JUNE 30,			
	2018		2019	
(EUR thousand)	NET SALES	PROPERTY, PLANT AND EQUIPMENT	NET SALES	PROPERTY, PLANT AND EQUIPMENT
United States	€71,409	€49,058	**€166,498**	**€47,678**
Europe	74,182	6,632	**69,126**	**9,619**
Asia	222,060	67,962	**376,467**	**91,587**
TOTAL	**€367,651**	**€123,652**	**€612,091**	**€148,884**

For geographical reporting, net sales are attributed to the geographic location in which the customer's facilities are located.

NOTE 6. REVENUE

Contract balances

(EUR thousand)	JUNE 30, 2018	JUNE 30, 2019
Accrued revenue	1,969	**21,501**
Deferred revenue	11,927	**26,081**

Revenue Streams

	SIX MONTHS ENDED JUNE 30,	
(EUR thousand)	2018	2019
Equipment revenue	281,061	**404,506**
Spares & service revenue	86,590	**104,455**
Patent litigation settlement	—	**103,130**
TOTAL	**367,651**	**612,091**

NOTE 7. LITIGATION MATTERS

In 2012, ASMI licensed Hitachi Kokusai Electric Inc (now called Kokusai Electric Company and hereafter referred to (including its affiliates) as Kokusai) under certain of its patents in the field of Atomic Layer Deposition. On August 30, 2017, ASMI initiated an arbitration with the American Arbitration Association against Kokusai for breach of the license agreement between the parties. At this point of time the expectation is that the arbitration will be completed in the second half of 2019.

On July 1, 2019, ASMI announced the settlement with Kokusai to resolve all lawsuits and proceedings (excluding the arbitration referred to above) relating to the use and infringement of patents. The settlement resolved and ended all lawsuits and invalidation proceedings initiated by ASM and Kokusai (and its predecessor) in the US and Japan. These lawsuits concerned the use of intellectual property, as first announced on February 23, 2018, following the expiration of a license agreement. Under the terms of the settlement agreement Kokusai will pay ASM an amount of US$115 million, parties will provide each other a portfolio wide cross-license until July 1, 2021, and a license for any litigated patents (or counterparts thereof).

NOTE 8. EARNINGS PER SHARE

Basic net earnings per common share is calculated by dividing net earnings attributable to common shareholders by the weighted average number of common shares outstanding for that period. The dilutive effect is calculated using the treasury stock method. The calculation of diluted net earnings per share assumes the exercise of options issued under our stock option plans (and the issuance of shares under our share plans) for periods in which exercised (or issuances) would have a dilutive effect.The calculation of diluted net earnings per share does not assume exercise of options (or issuance of shares) when such exercises (or issuances) would be anti-dilutive.

The calculation of basic and diluted net earnings per share attributable to common shareholders is based on the following data:

	SIX MONTHS ENDED JUNE 30,	
	2018	2019
Net earnings used for purposes of calculating net income per common share		
NET EARNINGS FROM OPERATIONS	**74,362**	**171,031**
Basic weighted average number of shares outstanding during the year (thousands)	54,554	**49,430**
Effect of dilutive potential common shares from stock options and restricted shares	750	**698**
DILUTIVE WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING	**55,304**	**50,128**
Basic net earnings per share:		
from operations	1.36	**3.46**
Diluted net earnings per share:		
from operations	1.34	**3.41**

NOTE 9. RELATED PARTY TRANSACTIONS

The Company has a related party relationship with its subsidiaries, equity accounted investees and members of the Supervisory Board and the Management Board. Related party transactions are conducted on an at arm's length basis with terms comparable to transactions with third parties.

The Company has no other significant transactions or outstanding balances with its equity-accounted investees other than its equity-interest holdings.

There have been no significant related party transactions or changes in related party transactions described in ASMI's Annual Report 2018 that could have a material effect on the financial position or performance of the Company in the first six months of the 2019 financial year.

SAFE HARBOR STATEMENT

In addition to historical information, some of the information posted or referenced on this website contains statements relating to our future business and/or results, including, among others, statements regarding future revenue, sales, income, expenditures, sufficiency of cash generated from operations, maintenance of interest in ASM Pacific Technology Ltd, business strategy, product development, product acceptance, market penetration, market demand, return on investment in new products, facility completion dates and product shipment dates, corporate transactions, restructurings, liquidity and financing matters, outlooks, and any other non-historical information. These statements include certain projections and business trends, which are 'forward-looking'. We caution readers that no forward-looking statement is a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking statements.

You can identify forward looking statements by the use of words like 'may', 'could', 'should', 'project', 'believe', 'anticipate', 'expect', 'plan', 'estimate', 'forecast', 'potential', 'intend', 'continue', and variations of these words or comparable words.

Forward-looking statements do not guarantee future performance and involve risks and uncertainties. You should be aware that our actual results may differ materially from those contained in the forward-looking statements as a result of certain risks and uncertainties. These risks and uncertainties include, but are not limited to, economic conditions and trends in the semiconductor industry and the duration of industry downturns, currency fluctuations, the timing of significant orders, market acceptance of new products, competitive factors, litigation involving intellectual property, shareholder or other issues, commercial and economic disruption due to natural disasters, terrorist activity, armed conflict or political instability, epidemics and other risks indicated in our most recently filed Annual Report and other filings from time to time. The risks described are not the only ones. Some risks are not yet known and some that we do not currently believe to be material could later become material. Each of these risks could materially affect our business, revenues, income, assets, liquidity, and capital resources. All statements are made as of the date of posting unless otherwise noted, and we assume no obligation to update or revise any forward-looking statements to reflect future developments or circumstances.

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