Interim report 2023

For the six month period
Ended June 30, 2023

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Interim Management Board report

ASM Consolidated results for the six months ended June 30, 2023

The following table shows the operating performance for the six months ended June 30, 2023, compared to the same period of previous year:

(€ million)	Six months ended June 30, 2022	2023	Change
New orders	1,648.4	1,133.2	(31)%
Backlog	1,408.3	1,399.9	(1)%
Book-to-bill	1.5	0.8	
Revenue	1,076.4	1,379.2	28 %
Normalized gross profit [1]	513.1	690.7	35 %
Normalized gross profit margin [1]	47.7 %	50.1 %	
Other income	—	0.1	100 %
Normalized selling, general and administrative expenses [1]	(128.2)	(143.7)	12 %
Normalized research and development expenses [1]	(94.0)	(145.8)	55 %
Normalized operating result [1]	291.0	401.3	38 %
Normalized operating margin [1]	27.0 %	29.1 %	
Normalized net finance income (expense) [2]	(0.3)	4.2	4.4
Foreign currency exchange gain (loss)	35.5	0.9	(34.7)
Normalized income taxes [3]	(66.9)	(81.2)	(14.3)
Share in income of investments in associates			
ASM share in net earnings ASMPT	50.5	18.6	(31.9)
Amortization of fair value adjustments from PPA	(6.6)	(3.6)	3.0
Reversal of impairment of investments in associates	—	215.4	215.4
Normalized net earnings from operations, attributable to common shareholders [4]	309.8	343.7	33.9
Number of employees	3,805	4,423	618

[1] Excluding amortization of fair value adjustments from purchase price allocations (before tax)

[2] Excluding change in fair value of the contingent consideration (LPE earn-out)

[3] Excluding realization of temporary differences relating to the purchase price allocations

[4] Excluding amortization of fair value adjustments from purchase price allocations (net of tax), change in fair value of the contingent consideration (LPE earn-out) and impairment reversal of ASMPT

Amounts are rounded to the nearest tenth of million euro; therefore amounts may not equal (sub) totals due to rounding.

Backlog

Backlog includes orders for which purchase orders or letters of intent have been accepted, typically for up to one year. Orders are subjected to the risk of cancellation or rescheduling by customers. In addition, orders could be 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 revenue for any succeeding period.

The backlog decreased from €1,408 million at the end of June 30, 2022 to €1,400 million as per June 30, 2023. New orders for the first half year 2023 decreased to €1,133 million, down 33% at constant currencies. The book-to-bill ratio for the first half year was 0.8. In terms of customer segments, new orders in the first half year 2023 were led by foundry, followed by power/analog, logic and then memory.

Revenue

Revenue for the six months ended June 30, 2023 increased to €1,379 million, up 27% at constant currencies (28% as reported). Revenue in the first half year 2023 were led by foundry, followed by power/analog, logic and memory.

Equipment revenue in the first half year 2023 increased by 29% at constant currencies (31% as reported). Spares & services revenue in the first half year 2023 increased by 16% at constant currencies (16% as reported).

Normalized gross profit

The normalized gross profit margin for the six months ended June 30, 2023, increased to 50.1% compared to 47.7% in the same period last year. The change is largely explained by mix, including an exceptionally strong applications mix within our ALD sales, and an increased contribution from China. At constant currencies, the normalized gross profit for the first half year 2023 increased by 33% (35% as reported).

Normalized selling, general and administrative expenses

Normalized selling, general and administrative expenses (SG&A) increased by 12% compared to the level in the first half year-on-year. This is mainly driven by the company's growth and further strengthening of the organization. As a percentage of revenue, the normalized SG&A expenses decreased to 10.4% in the first half year from 11.9% in the same period last year. The impact of currency changes for the first half year was neutral year-on-year.

Normalized research and development (R&D) expenses

Normalized R&D expenses increased by 55% compared to the first half year-on-year. The increase was mainly due to increased headcount and number of R&D projects, partly offset by higher capitalization, which increased from €51 million to €67 million. The impact of currency changes for the first half year was a decrease of 1% year-on-year.

Normalized operating result

The normalized operating margin in the first half year 2023 was 29.1%, an increase of 2.1% points compared to the same period last year due to the strong gross margin. At constant currencies, the normalized operating result for the first half year 2023 increased by 34% (38% as reported)

Normalized net finance income (costs)

Normalized financing income mainly related to interest income of €5 million for the first half year 2023. The first half year 2023 results included a translation gain of €1 million compared to a gain of €36 million included in the first half year 2022 results. The translation results are mainly related to movements in the US dollar in the respective periods. A substantial part of ASM's cash position is denominated in US dollar.

Share in income of investments in associates

Result from investments, which reflects our approximate 25% shareholding in ASMPT, decreased by €32 million compared to the same period previous year. ASMPT's net earnings, on a 100% basis, decreased by €127 million to €75 million compared to the same period previous year. For further information on the half year results of ASMPT, please visit ASMPT's website www.asmpacific.com.

Amortization intangible assets, resulting from the sale of the 12% stake of ASMPT in 2013, amounted to €3.6 million in the first half year. For 2023, on a currency comparable basis, this amortization is expected to amount to €3.7 million.

Impairment of investment in associates

The impairment charge of €321 million on investments in associates, recognized in Q3 2022, has been completely reversed as a result of an increase in the recoverable amount.
The (remaining) impairment reversal in the first half 2023 relates to a non-cash adjustment of €215 million, reflecting an increase in the market valuation of our stake in ASMPT in the period.

Normalized income taxes

Normalized income taxes in the first half year increased to €81 million compared to €67 million in the first half of 2022.

Net earnings

	Six months ended June 30,	
(€ million)	**2022**	**2023**
Net earnings	302.9	531.6
Excluding:		
Amortization intangible assets (resulting from the acquisitions of Reno and LPE)	(0.4)	(26.4)
Income taxes (realization of temporary differences)	0.1	7.3
Finance expense (earn-out)	—	(4.8)
Amortization intangible assets (resulting from the sale of the 12% stake of ASMPT)	(6.6)	(3.6)
Reversal of impairment of investments in associates	—	215.4
Normalized net earnings	**309.8**	**343.7**

Normalized net earnings in the first half of 2023 increased by €34 million (11%) to €344 million compared to first half of 2022 mainly due to increased revenues at a better gross margin.

Cash flow, balance sheet, liquidity and capital resources

Cash flow summary

The following table shows the cash flow statements for the six months ended June 30, 2023, compared to the same period of previous year:

	Six months ended June 30,	
(€ million)	2022	2023
Net cash from operating activities	283.1	362.7
Net cash used in investing activities	(101.7)	(122.2)
Cash flows from operating activities after investing activities	**181.4**	**240.6**
Net cash used in financing activities	(126.9)	(178.9)
Total net cash provided (used)	**54.5**	**61.7**

The cash flow from operating activities was positively impacted by higher sales at a better gross margin, partly off-set by higher tax payments. Cash used in investing activities during the first half year 2023 increased compared to the first half of 2022 mainly due to increased capitalized development expenditures and higher Capex, while 2022 includes a one-off €39 million outflow for the acquisition of Reno. For Capex, we still target a level of €150-200 million for 2023. Cash used by financing activities in the first half year of 2023 was higher due to share repurchases of approximately €50 million out of the € 100 million share buyback program.

Working capital

Net working capital is composed as follows:

(€ million)	June 30, 2022	December 31, 2022 1)	June 30, 2023
Inventories	340.6	538.4	581.8
Accounts receivable	483.5	580.8	534.6
Other current assets	60.8	112.2	83.9
Accounts payable	(245.7)	(243.5)	(217.5)
Provision for warranty	(30.7)	(34.2)	(26.8)
Accrued expenses and other payables	(222.5)	(458.9)	(463.8)
Working capital	385.9	494.8	492.1

1) Comparatives have been restated for the effects of remeasurement adjustments to the acquisition of LPE in 2022, reference is made to note 1 of the consolidated condensed interim financial statements.

The year on year increase in accrued expenses and other payables mainly consists of increased deferred revenues €223 million (June 2022 €113 million) and advance payments from customers €90 million (June 2022 €10 million) and personnel and supplier related liabilities.

The number of outstanding days of working capital, measured against quarterly revenue, increased to 66 days on June 30, 2023 (June 30, 2022: 62 days).

Sources of liquidity

As per June 30, 2023, the company's principal sources of liquidity consisted of €490 million in cash and cash equivalents and €150 million in undrawn bank lines ("RCF facility"). The RCF facility has a tenor of five years (May 2027) with an option to extend two times one year. The facility amount is €150 million with an accordion option increase the facility amount by €100 million.

Share buyback program

The execution on the €100 million share buyback program, announced in February 2022, has started on April 27, 2023, and will end as soon as the aggregate purchase price of the common shares acquired by ASM has reached €100 million, but ultimately on November 15, 2023. On June 30, 2023, 50.1% of the program was completed at an average share price of €361.26.

Subsequent events

Subsequent events have been evaluated by the company until July 25, 2023, the issuance date of this interim report 2023.
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 ASM's 2022 Annual Report that could have a material effect on the financial position or performance of the company in the first six months of the 2023 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 2022 Annual Report. Those risk factors are deemed incorporated and repeated in this report by reference. ASM believes that these risks similarly apply for the second half of 2023.

We monitor our primary risks and emerging 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.

Responsibility statement

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

- the condensed consolidated interim financial statements of the first six months ended June 30, 2023, 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, the Netherlands
July 25, 2023

Management Board ASM International N.V.

G.L. Loh, Chairman of the Management Board, President and Chief Executive Officer
P.A.H. Verhagen, Member of the Management Board and Chief Financial Officer
H. M'Saad, Member of the Management Board and Chief Technology Officer

Condensed consolidated interim financial statements

For the six months ended June 30, 2023

Interim condensed consolidated statement of profit or loss

		Six months ended June 30,	
(€ thousand, except share data)	Notes	2022	2023
Revenue	5,6	1,076,401	1,379,172
Cost of sales		(563,295)	(705,557)
Gross profit		**513,106**	**673,615**
Other income		—	59
Operating expenses:			
Selling, general and administrative		(128,155)	(146,048)
Research and development		(94,383)	(152,735)
Total operating expenses		**(222,538)**	**(298,783)**
Operating result		**290,568**	**374,891**
Finance income		415	4,617
Finance expense		(703)	(5,292)
Foreign currency exchange gain (loss)		35,543	868
Net finance income (costs)		**35,255**	**193**
Share in income of investments in associates	3	43,959	15,003
Reversal of impairment of investments in associates	3	—	215,389
Result before income taxes		**369,782**	**605,476**
Income taxes		(66,842)	(73,915)
Net earnings from operations, attributable to common shareholders		**302,940**	**531,561**
Per share data	8		
Basic net earnings per share (€)		6.23	10.77
Diluted net earnings per share (€)		6.19	10.71
Weighted average number of shares (thousand)			
Basic		48,629	49,342
Diluted		48,915	49,654

Interim condensed consolidated statement of comprehensive income

	Six months ended June 30,	
(€ thousand)	2022	2023
Net earnings from operations, attributable to common shareholders	302,940	531,561
Other comprehensive income, net of income tax		
Items that will not be reclassified subsequently to profit or loss:		
Share in other comprehensive income (loss) of investments in associates	**2,989**	**705**
Items that may be subsequently reclassified to profit or loss:		
Remeasurement of defined benefit obligation	—	—
Foreign currency translation effect	97,903	(79,339)
Other comprehensive income, net of income tax	**100,892**	**(78,634)**
Total comprehensive income, attributable to common shareholders	**403,832**	**452,927**

Interim condensed consolidated statement of financial position

(€ thousand)	Notes	June 30, 2022	December 31, 2022 [1)]	June 30, 2023
Assets				
Right-of-use assets		26,839	31,663	34,215
Property, plant and equipment		283,864	312,053	338,062
Evaluation tools at customers	4	66,454	68,676	70,543
Goodwill		32,755	320,818	320,473
Other intangible assets	2	345,395	646,104	663,958
Investments in associates	3	917,916	686,341	873,062
Other investments		—	5,814	9,612
Deferred tax assets		84	181	224
Other non-current assets		7,117	7,071	7,104
Employee benefits		1,713	2,556	2,229
Total non-current assets		**1,682,137**	**2,081,277**	**2,319,482**
Inventories		340,587	538,425	581,770
Accounts receivable		483,492	580,823	534,610
Income taxes receivable		19,521	18,778	19,552
Other current assets		60,815	112,171	83,877
Cash and cash equivalents		552,052	419,315	490,347
Total current assets		**1,456,467**	**1,669,512**	**1,710,156**
Total assets		**3,138,604**	**3,750,789**	**4,029,638**
Equity		**2,536,194**	**2,749,319**	**3,045,829**
Lease liabilities		15,516	18,604	20,707
Contingent consideration payable		—	78,649	83,477
Deferred tax liabilities		55,635	123,803	121,611
Total non-current liabilities		**71,151**	**221,056**	**225,795**
Accounts payable		245,702	243,499	217,507
Provision for warranty		30,741	34,219	26,842
Income taxes payable		32,274	43,785	49,899
Accrued expenses and other payables		222,542	458,911	463,766
Total current liabilities		**531,259**	**780,414**	**758,014**
Total liabilities		**602,410**	**1,001,470**	**983,809**
Total equity and liabilities		**3,138,604**	**3,750,789**	**4,029,638**

1) Comparatives have been restated for the effects of remeasurement adjustments to the acquisition of LPE in 2022, reference is made to note 1.

Interim condensed consolidated statement of changes in equity

(€ thousand, except share data)	Number of common shares outstanding	Common shares	Capital in excess of par value	Treasury shares at cost	Retained earnings	Other reserves [1]	Total equity
Balance January 1, 2022	**48,568,677**	**1,972**	**25,281**	**(155,397)**	**2,240,426**	**129,472**	**2,241,754**
Net earnings	—	—	—	—	302,940	—	302,940
Other comprehensive income	—	—	—	—	—	100,892	100,892
Total comprehensive income	**—**	**—**	**—**	**—**	**302,940**	**100,892**	**403,832**
Dividend paid to common shareholders	—	—	—	—	(121,650)	—	(121,650)
Compensation expense share-based payments	—	—	12,258	—	—	—	12,258
Exercise stock options out of treasury shares	—	—	—	—	—	—	—
Vesting restricted shares out of treasury shares	112,854	—	(24,066)	24,066	—	—	—
Purchase of common shares	—	—	—	—	—	—	—
Other movements in investments and associates:							
Dilution	—	—	—	—	—	—	—
Balance June 30, 2022	**48,681,531**	**1,972**	**13,473**	**(131,331)**	**2,421,716**	**230,364**	**2,536,194**
Net earnings	—	—	—	—	86,173	—	86,173
Other comprehensive income	—	—	—	—	—	(35,482)	(35,482)
Total comprehensive income	**—**	**—**	**—**	**—**	**86,173**	**(35,482)**	**50,691**
Dividend paid to common shareholders	—	—	—	—	—	—	—
Issue of common shares related to business combinations	51,154	2	11,730	—	—	—	11,732
Treasury shares transferred related to business combinations	580,000	—	8,046	124,977	—	—	133,023
Compensation expense share-based payments	—	—	17,619	—	—	—	17,619
Exercise stock options out of treasury shares		—			—	—	—
Vesting restricted shares out of treasury shares	13,634	—	(2,908)	2,908	—	—	—
Purchase of common shares		—	—		—	—	—
Cancellation of common shares out of treasury shares	—	—	—	—	—	—	—
Other movements in investments and associates:							
Dilution	—	—	—	—	60	—	60
Balance December 31, 2022	**49,326,319**	**1,974**	**47,960**	**(3,446)**	**2,507,949**	**194,882**	**2,749,319**
Net earnings	—	—	—	—	531,561	—	531,561
Other comprehensive income	—	—	—	—	—	(78,634)	(78,634)
Total comprehensive income	**—**	**—**	**—**	**—**	**531,561**	**(78,634)**	**452,927**
Dividend paid to common shareholders	—	—	—	—	(123,383)	—	(123,383)
Compensation expense share-based payments	—	—	16,617	—	—	—	16,617
Exercise stock options out of treasury shares	—	—	—	—	—	—	—
Vesting restricted shares out of treasury shares	13,184	—	(2,044)	2,044	—	—	—
Purchase of common shares	(138,653)	—	—	(50,090)	—	—	(50,090)
Issue of common shares out of treasury shares	80,000	3		(3)			—
Other movements in investments and associates:							
Dilution	—	—	—	—	439	—	439
Balance June 30, 2023	**49,280,850**	**1,977**	**62,533**	**(51,495)**	**2,916,566**	**116,248**	**3,045,829**

[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.

Interim condensed consolidated statement of cash flows

	Six months ended June 30,	
(€ thousand)	2022	2023
Cash flows from operating activities		
Net earnings from operations	302,940	531,561
Adjustments to reconcile net earnings to net cash from operating activities		
Depreciation, amortization and impairments	52,595	85,613
Net loss (gain) on sale of property, plant and equipment	65	4
Share-based compensation	12,258	16,617
Net finance (income) costs	(4,114)	(11,415)
Share in income of investments in associates	(43,959)	(15,003)
Reversal of impairment of investments in associates	—	(215,389)
Income tax	66,842	73,915
Changes in evaluation tools at customers	(7,944)	(13,737)
Changes in employee benefits pension plans	121	63
Income tax paid	(41,768)	(67,743)
Operating cash flows before changes in working capital	**337,036**	**384,486**
Decrease (increase) in working capital:		
Accounts receivable	(33,166)	21,036
Other current assets	(9,599)	24,450
Inventories	(116,502)	(60,719)
Provision for warranty	2,258	(6,217)
Accounts payable, accrued expenses and other payables	103,104	(298)
Net cash from operating activities	**283,131**	**362,737**
Cash flows from investing activities		
Capital expenditures	(43,003)	(70,573)
Proceeds from sale of property, plant and equipment	279	1,409
Capitalized development expenditures	(50,901)	(66,721)
Purchase of intangible assets	(1,193)	(5,829)
Dividend received from associates	31,858	23,383
Acquisition of subsidiaries, net of cash acquired	(38,733)	—
Other investments	—	(3,831)
Net cash used in investing activities	**(101,693)**	**(122,162)**
Cash flows from operating activities after investing activities	**181,438**	**240,575**
Cash flows from financing activities		
Payment of lease liabilities	(4,669)	(5,399)
Purchase of treasury shares	—	(50,090)
Debt issuance fees paid	(617)	(4)
Dividends to common shareholders	(121,650)	(123,383)
Net cash used in financing activities	**(126,936)**	**(178,876)**
Foreign currency translation effect on cash and cash equivalents	**6,043**	**9,333**
Net increase (decrease) in cash and cash equivalents	**60,545**	**71,032**
Cash and cash equivalents at beginning of year	491,507	419,315
Cash and cash equivalents at balance sheet date	**552,052**	**490,347**

Notes to the interim condensed consolidated financial statements

Note 1. General information / summary of material accounting policies

General information

ASM International N.V. (ASM 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 condensed consolidated interim financial statements include the financial statements of ASM International N.V., headquartered in Almere, the Netherlands, and its consolidated subsidiaries (together referred to as ASM or the company).

The condensed consolidated interim financial statements for the six months ended June 30, 2023 were authorized for issue by the Management Board on July 25, 2023.

The condensed consolidated interim financial statements have not been audited or reviewed by an external auditor. In the condensed consolidated interim financial statements amounts are rounded to the nearest thousand euro; therefore amounts may not equal (sub) totals due to rounding.

Accounting policies

The interim condensed consolidated financial statements for the six month ended 30 June 2023 have been prepared in accordance with IAS 34, Interim Financial Reporting. The company has prepared the financial statements on the basis that it will continue to operate as a going concern. The condensed consolidated interim financial statements do not include all of the information and disclosures required for full annual financial statements and should be read in conjunction with ASM’s 2022 Annual Report. In addition, the notes to these condensed consolidated interim financial statements are presented in a condensed format. The applied accounting principles are in line with those as described in ASM’s 2022 Annual Report and are based on IFRS as endorsed by the European Union.

Changes in accounting policies

The accounting policies applied in these interim financial statements are the same as those applied in the last annual financial statements, except for the IFRS standards and interpretations effective on January 1, 2023. These include IFRS 17 and amendment to IAS 8, IAS 1 and IAS 12. The changes / amendments haven been assessed for their potential impact and do not have material impact on ASM's interim condensed consolidated financial statements, but are expected to affect the accounting policy disclosures in the company's annual consolidated financial statements.

Use of estimates and judgments

The preparation of the company's condensed consolidated 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.

Acquisition of Subsidiaries

Prior period restatement

On October 3rd 2022, the Group acquired 100% of the issued share capital of LPE S.p.A. ('LPE') Provisional details of this business combination were disclosed in note 1 of the ASM's Annual Report for the year ended 31 December 2022. On 15 May 2023, management, and the former shareholders of LPE S.p.A. concluded the final price for the acquisition of LPE. The updates to the consideration transferred have met the criteria for adjustments within the measurement period under IFRS 3 and resulted in a revised balance of goodwill and other receivables as of 31 December 2022. All other adjustments were considered immaterial.

The restatement as accounted for in the comparative numbers is as follows:

	Balance December 31, 2022		
(€ thousand)	As previously reported	Adjustments	As Restated
Goodwill	318,465	2,353	320,818
Remaining non-current assets	1,760,459	—	1,760,459
Total non-current assets	**2,078,924**	**2,353**	**2,081,277**
Other current assets	114,524	(2,353)	112,171
Remaining other current assets	1,557,341	—	1,557,341
Total current assets	**1,671,865**	**(2,353)**	**1,669,512**
Total assets	**3,750,789**	**—**	**3,750,789**

Note 2. Other intangible assets

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

(€ thousand)	Development costs	Software	Purchased technology	Other intangibles	Total
Balance January 1, 2022	**267,676**	**7,147**	**10**	**—**	**274,833**
Acquisitions through business combinations	—	—	22,516	—	22,516
Additions	50,901	1,113	80	—	52,094
Amortization for the period	(15,185)	(785)	(24)	—	(15,994)
Impairments	(6)	—	—	—	(6)
Foreign currency, translation effect	10,879	327	746	—	11,952
Balance June 30, 2022	**314,265**	**7,802**	**23,328**	**—**	**345,395**
Acquisitions through business combinations	—	—	189,301	89,400	278,701
Additions	51,726	3,419	50	—	55,195
Reclassification	—	(74)	—	—	(74)
Amortization for the period	(19,684)	(1,035)	(4,459)	(1,568)	(26,746)
Impairments	—	—	—	—	—
Foreign currency, translation effect	(5,877)	64	(554)	—	(6,367)
Balance December 31, 2022	**340,430**	**10,176**	**207,666**	**87,832**	**646,104**
Additions	66,721	5,721		260	72,702
Reclassification		76	1,374	(1,374)	76
Disposals		(152)		—	(152)
Amortization for the period	(21,671)	(1,147)	(10,164)	(8,073)	(41,055)
Impairments					—
Foreign currency, translation effect	(13,019)	(295)	33	(436)	(13,717)
Balance June 30, 2023	**372,461**	**14,379**	**198,909**	**78,209**	**663,958**

As a result of the 2022 acquisitions, ASM disaggregated the group 'Purchased technology and other intangibles' into two separate groups. Reference is made to note 1 of the 2022 Financial statements for further disclosure on these acquisitions.

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 customer demand has shifted out in time, new process technologies that were not successful, and purchased technology which became obsolete. The impairment charges in 2022 related to customer-specific projects.

Capitalized development costs are amortized over their estimated useful lives of five years.
Amortization starts when the developed asset is ready for its intended use. For the company, this occurs when the application is transferred to high-volume manufacturing.

The company estimated a useful life of purchased technology of 15 years. Other intangibles assets are amortized over their estimated useful lives of respectively one year (order backlog), four years (trade name) and 17 years (customer relationships). The amortization of development costs and purchased technology is included in R&D; the amortization of the order backlog in cost of sales upon realization of respective sales; the amortization of customer relationships is included in SG&A.

Note 3. Investments in associates

The changes in the investments in associates are as follows:

(€ thousand)	ASMPT	Other	Total
Balance January 1, 2022	**848,812**	**—**	**848,812**
Share in net earnings of investments in associates	50,531	—	50,531
Other comprehensive income of investments in associates	2,989	—	2,989
Amortization recognized intangible assets	(6,572)	—	(6,572)
Dividends	(31,858)	—	(31,858)
Foreign currency translation effect	54,014	—	54,014
Balance June 30, 2022	**917,916**	**—**	**917,916**
Additions through business combinations	—	500	500
Impairments of investments in associates, net	(215,389)	—	(215,389)
Share in net earnings of investments in associates	27,882	—	27,882
Other comprehensive income of investments in associates	(39)	—	(39)
Amortization recognized intangible assets	(7,070)	—	(7,070)
Dividends	(17,061)	—	(17,061)
Dilution ASMPT share to 24.95%	60	—	60
Foreign currency translation effect	(20,458)	—	(20,458)
Balance December 31, 2022	**685,841**	**500**	**686,341**
Reversal impairment of investments in associates	215,389	—	215,389
Share in net earnings of investments in associates	18,619	—	18,619
Other comprehensive income of investments of associates	705	—	705
Amortization recognized intangible assets	(3,616)	—	(3,616)
Dividends	(23,383)	—	(23,383)
Dilution ASMPT share to 24.97%	439	—	439
Foreign currency translation effect	(21,432)	—	(21,432)
Balance June 30, 2023	**872,562**	**500**	**873,062**

On March 15, 2013, the company divested a controlling stake in its subsidiary ASMPT 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.

If the fair value of an investment is less than its carrying value at the balance sheet date, the company determines whether the lower fair value is temporary or prolonged. The amount per share recognized as per June 30, 2023 under equity accounting amounts to HK$72.14 (December 31, 2022 after impairment: HK$55.37) whereas the level 1 fair value per share (being the market price of a share on the Hong Kong Stock Exchange) was HK$77.15 as per June 30, 2023 (December 31, 2022: HK$55.65). Management performed an impairment trigger analysis and concluded that no impairment of the carrying value of ASMPT was required as per June 30, 2023.

In December 2022 2,633,700 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 2022 have diluted ASM's ownership in ASMPT to 24.95% as of December 31, 2022. As a result of the share buy back program running in first half of 2023, 367,300 shares were repurchased resulting in a positive dilution of ASM's ownership in ASMPT to 24.97% as of June 30, 2023.

At June 30, 2023, the book value of our equity method investment in ASMPT was €872.6 million. The historical cost basis of our 24.97% share of net assets on the books of ASMPT was €460.6 million as of June 30, 2023 resulting in a basis difference of €412.0 million. €3.5 million of this basis difference has been allocated to intangibles assets. The remaining amount was allocated to 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 ASM for the six months period ending June 30, 2023 was after-tax expense of €3.6 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 2023: 1 HK$: €0.11830 and for 2022: 1 HK$: €0.11715):

	Six months ended June 30,	
(HK$ million)	**2022**	**2023**
Revenue	10,471.1	7,818.4
Earnings before income tax	2,214.0	879.1
Net earnings	1,734.7	623.1

Summarized 100% statement of financial position information for ASMPT equity method investment excluding basis adjustments (foreign currency exchange rate as per June 30, 2023: 1 HK$: €0.11743, December 31, 2022: 1 HK$: €0.12025 and as per June 30, 2022: 1 HK$: €0.12271):

(HK$ million)	June 30, 2022	December 31, 2022	June 30, 2023
Current assets	17,899	16,515	15,402
Non-current assets	8,425	8,261	8,168
Current liabilities	6,864	5,246	6,202
Non-current liabilities	3,892	3,672	1,661
Equity	15,568	15,858	15,707

Note 4. Evaluation tools at customers

The changes in the amount of evaluation tools are as follows:

(€ thousand)	June 30, 2022	June 30, 2023
At cost		
Balance at beginning of year	**98,352**	**101,073**
Evaluation tools shipped	13,054	24,394
Evaluation tools sold and returns	(13,140)	(17,437)
Foreign currency translation effect	3,923	(3,866)
Balance at end of period	**102,189**	**104,164**
Accumulated depreciation		
Balance at beginning of year	**34,635**	**32,397**
Depreciation for the year	8,280	9,247
Evaluation tools sold and returns	(8,030)	(6,780)
Foreign currency translation effect	850	(1,243)
Balance at end of period	**35,735**	**33,621**
Carrying amount at beginning of year	**63,717**	**68,676**
Carrying amount at end of period	**66,454**	**70,543**
Useful lives in years:		5

Note 5. Segment disclosure

Operating segments are reported in a manner consistent with the internal reporting provided to the Chief Executive Officer (CEO), who is the Chief Operating Decision Maker (CODM).

The company has one reportable segment that 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 and Asia.

Geographical information is summarized as follows:

	Six months ended June 30,			
	2022		2023	
(€ thousand)	Revenue	Non-current assets [1)]	Revenue	Non-current assets [1)]
United States	267,731	378,496	265,481	422,811
Europe	142,233	81,533	187,186	649,561
Asia	666,437	301,246	926,505	361,466
Total	**1,076,401**	**761,275**	**1,379,172**	**1,433,838**

[1] Other than financial instruments, deferred tax assets and post-employment benefit assets

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

Note 6. Revenue

Contract balances

(€ thousand)	June 30, 2022	June 30, 2023
Accrued revenue	35,425	34,084
Deferred revenue	112,853	222,661
Advanced payments from customers	10,400	89,676

The increase in the total contract balances is the result of the higher activity level of the company and the acquisition of LPE in the fourth quarter 2022.

The accrued revenue relates to the company's right to consideration for work completed and revenue recognized but not billed at the reporting date. The accrued revenue is transferred to accounts receivables when the company issues an invoice to the customer.

Deferred revenue consists of the revenue relating to undelivered elements of the arrangement with customers. This part of the revenue is deferred at the transaction price allocated to the performance obligations until fulfillment.

Revenue Streams

The company generates revenue primarily from the sales of equipment and sales of spares & services.

	Six months ended June 30,	
(€ thousand)	2022	2023
Equipment revenue	894,792	1,169,400
Spares & services revenue	181,609	209,772
Total	**1,076,401**	**1,379,172**

Total revenue increased by 28% as reported is driven by solid increases in our ALD business.

Note 7. Litigation matters

ASM is and may become a party to various legal proceedings incidental to its business. As is the case with other companies in our industry and similar industries, the company faces exposure from actual or potential claims and legal proceedings. Although the ultimate result of legal proceedings cannot be predicted with certainty and in many events cannot be reasonably estimated, it is the opinion of the company's management that the outcome of any claim which is currently pending, either individually or on a combined basis, will not have a material effect on the financial position of the company, its cash flows and result of operations.

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,	
(€ thousand, except share data)	**2022**	**2023**
Net earnings used for purposes of calculating net income per common share		
Net earnings from operations	302,940	531,561
Basic weighted average number of shares outstanding during the year (thousands)	48,629	49,342
Effect of dilutive potential common shares from stock options and restricted shares	286	312
Dilutive weighted average number of shares outstanding	48,915	49,654
Basic net earnings per share:		
from operations	6.23	10.77
Diluted net earnings per share:		
from operations	6.19	10.71

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 ASM's Annual Report 2022 that could have a material effect on the financial position or performance of the company in the first six months of the 2023 financial year.

Safe harbor statement

In addition to historical information, some of the information posted or referenced herein or on the 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 ASMPT 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’, ‘aim’, ‘strive’ 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 geopolitical tensions or political instability, changes in import/export regulations, 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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