

ASM Q4 2022 RESULTS

FEBRUARY 28, 2023



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INVESTMENT HIGHLIGHTS



STRONG LONG-TERM PROSPECTS

- > ASM is focused on enabling deposition technologies, with key strengths in innovation
- > Leader in the ALD market, which is expected to grow by a CAGR of 16%-20% from 2020 to 2025
- > Expanding our position in the silicon Epi market (CAGR of 13%-18% from 2020 to 2025)
- > Selective growth in PECVD and vertical furnaces, and healthy growth in spares & services
- > With the acquisition of LPE (closed on October 3), ASM has entered the high-growth silicon carbide Epi market

AND A HEALTHY PROFITABILITY

> Normalized⁽¹⁾ Q4 2022 gross margin of 46.9% and normalized⁽¹⁾ operating margin of 26.2%

WITH A STRONG BALANCE SHEET

- Solid cash position of €419m at the end of Q4 2022, no debt
- > A dividend of €2.50 per share will be proposed at the next AGM

STEPPING UP OUR FOCUS ON SUSTAINABILITY

- > Submitted Net Zero measurements and targets for scope 1, 2, and 3 to the SBTi
- > We target an increase in the female participation rate to 20% of the total workforce by 2025, up from 15% in 2021. In 2022, we made a first step by increasing it to 17%



Q4 AND FY 2022 RESULTS



- > Q4 new **orders** of €829m increased 28% YoY (26% at constant currencies), led by continued strong logic/foundry demand, followed by power/analog (including exceptionally strong orders for LPE in the quarter), and then memory
- **Backlog** of €1,669m at the end of 2022 compared to €811m at the end of 2021
- > Q4 **revenue** increased by 42% at constant currencies to a new quarterly record-high of €725m
- > FY equipment revenue up 38% at constant currencies, outperforming WFE which increased by high-single digit percentage in 2022
- > Q4 normalized gross margin amounted to 46.9%, approximately flat YoY and down from 48.1% in Q3, which was explained by mix
- > FY operating result up 29% even as we continued to step up R&D, and also invested in the strengthening of the organization, with headcount +29% YoY and higher fixed and variable compensation
- > Excluding €314m spent on acquisitions (Reno and LPE), FCF in FY 2022 increased by 43% to €381m
- LPE acquisition was closed in Q4. LPE continued to experience strong demand. We now expect 2023 revenue to be in excess of €130m, up from the previous projection of more than €100m

€ million, year-on-year comparisons

+28%

Orders: €829m (+26% at constant currencies) +39%

Revenue: €2,411m (+33% at constant currencies)

€419m **Cash position**

47.5%

Normalized gross margin⁽¹⁾

(47.9% in FY 2021)

-9%

Share in income of

investments in

associates⁽²⁾: €78m

26.6%

Normalized operating margin⁽¹⁾ (28.4% in FY 2021)

+24%

€2.50 **Proposed DPS** to be paid over 2022

Normalized net earnings⁽³⁾: €627m

€381m **Free cash flow** ex. acquisitions

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

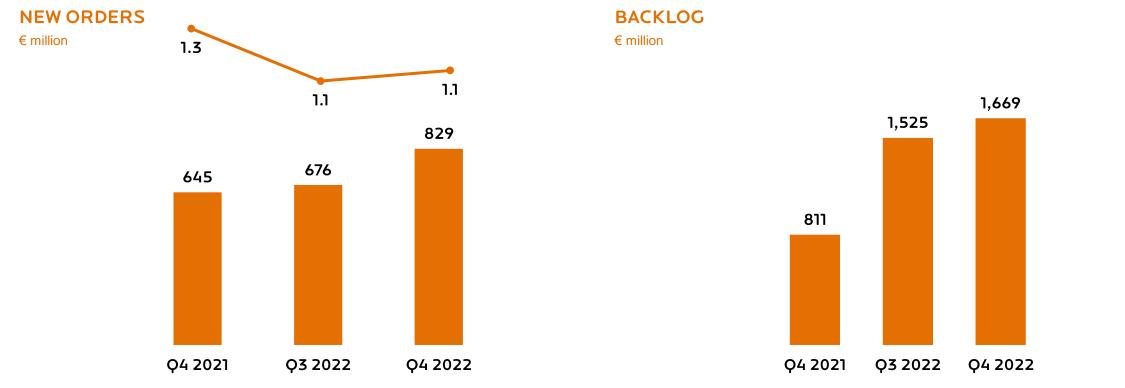
(2) Excluding amortization of intangible assets resulting from the sale of ASMPT stake in 2013

(3) 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 of ASMPT



SOLID NEW ORDERS AND RECORD-HIGH YEAR-END BACKLOG



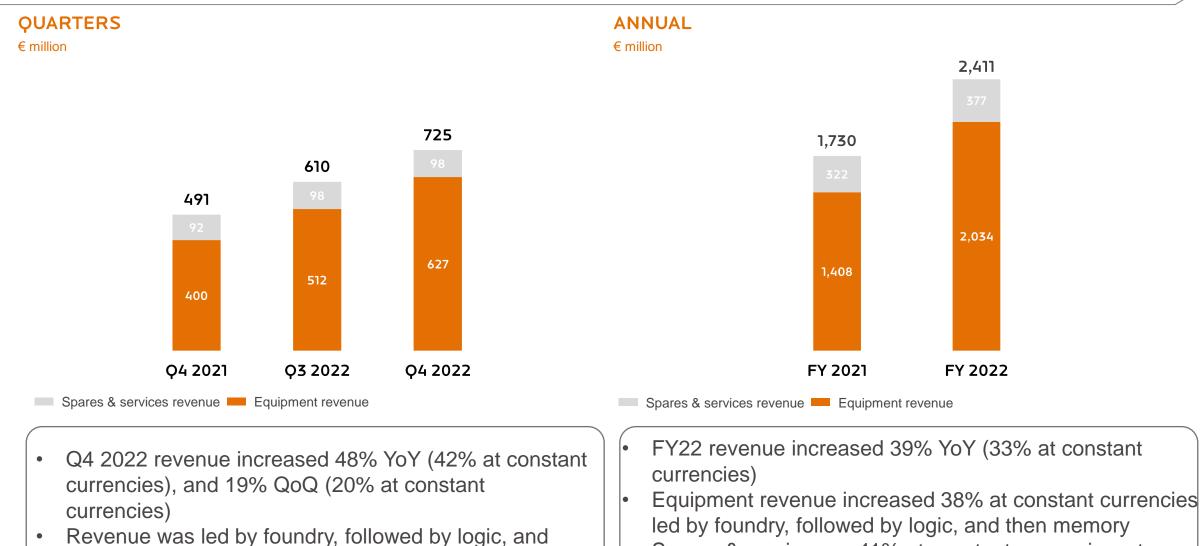


Book-to-bill ratio

- New orders for the Q4 2022 increased to €829m million, +26% at constant currencies and were led by foundry, followed by power/analog (including exceptionally strong orders from LPE) and then logic and memory
- Q4 new orders included rebooking of part of previous China bookings that were excluded in Q3 due to US export restrictions
- Backlog increased to €1.7b at the end of 2022. As a result of the acquisition of LPE, the backlog increased by €107m on acquisition date (October 3)

FY22 REVENUE GREW DOUBLE DIGITS FOR THE SIXTH YEAR IN A ROW



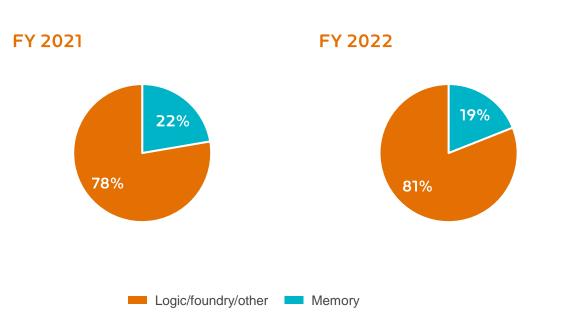


then memory

 Spares & services up 11% at constant currencies, strong momentum in outcome-based services



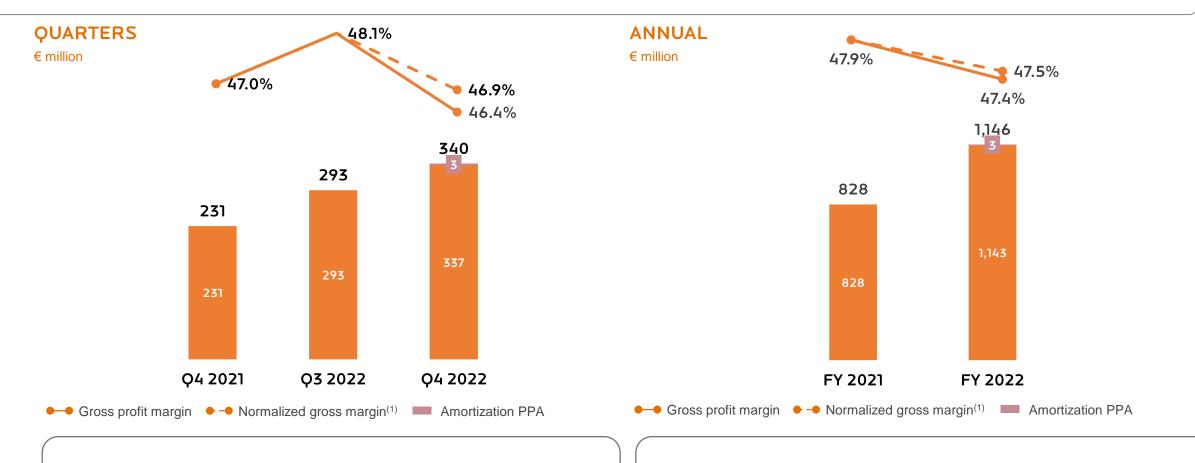
REVENUE BREAKDOWN BY CUSTOMER SEGMENTS AS A % OF EQUIPMENT REVENUE



- In 2022, our equipment revenue was led by foundry, followed by logic and then memory
- The combination of logic/foundry accounted for more than half of our equipment sales and was driven in 2022 by solid spending in the most advanced nodes
- Memory sales grew by a double-digit percentage in 2022, driven by new application wins, in particular ALD gapfill in 3D-NAND. Total memory accounted for 19% of equipment revenue in 2022 (2021: 22%)
- We also booked strong growth in the power/analog/wafer manufacturer segments in 2022, also on the back of strong new product momentum in Epi and vertical furnaces

FY22 GROSS PROFIT SLIGHTLY LOWER IMPACTED BY MIX

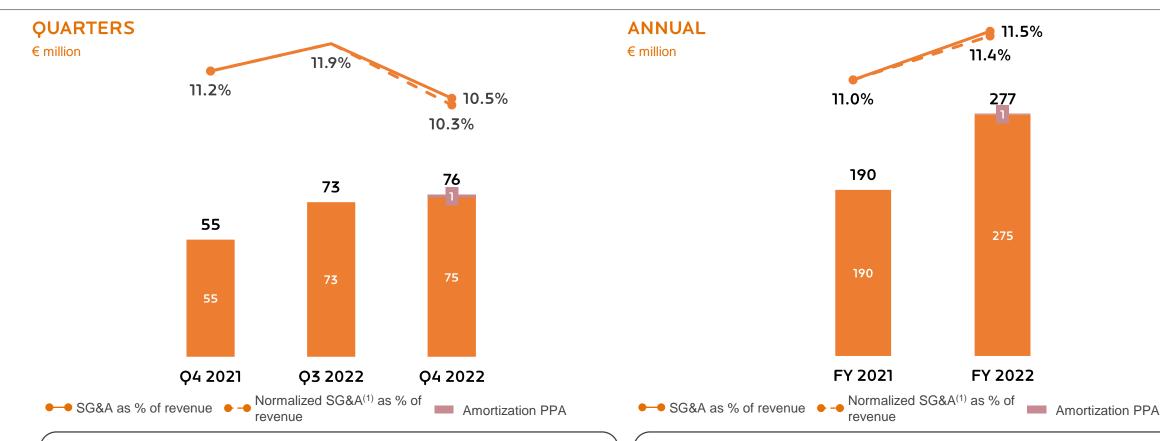




- Gross profit increased 46% YoY and 15% QoQ.
- Excluding amortization of the purchase price allocation related to the acquisitions of Reno and LPE, Q4 2022 gross profit margin is 46.9%
- Gross margin decreased by 0.5% ppt, mainly driven by mix
- Currency changes led to an increase of 4% in gross
 profit compared to 2021

SG&A UP AS WE CONTINUED TO STRENGTHEN THE ORGANIZATION





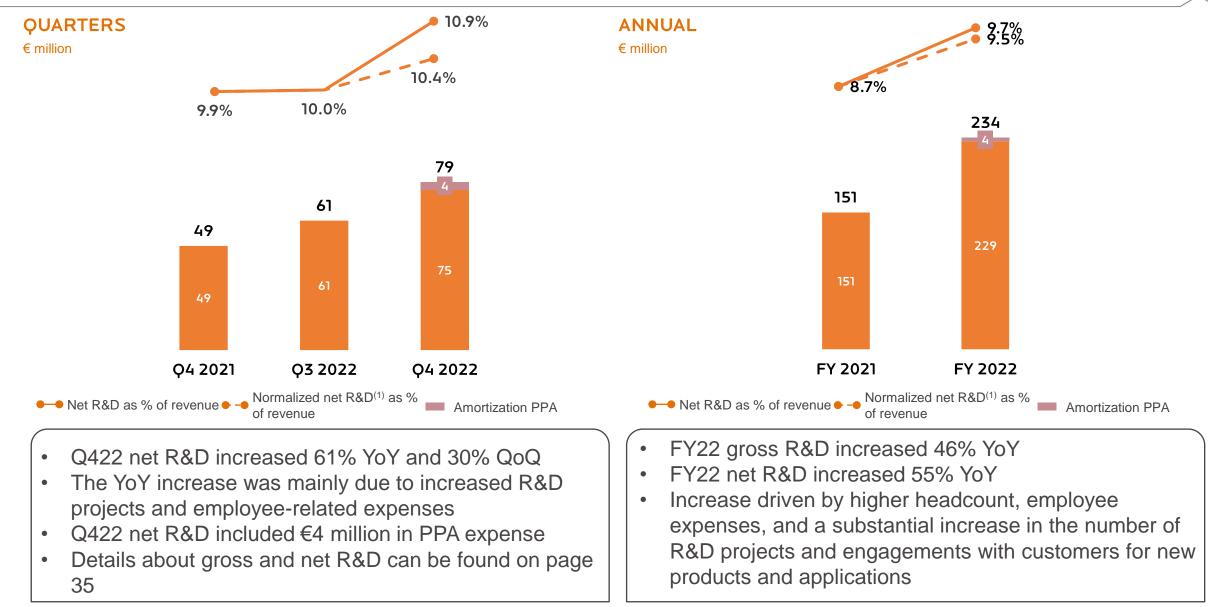
- SG&A expenses increased 38% YoY and 5% QoQ
- The YoY increase is mainly due to headcount growth (+29% YoY at the end of December), higher, partially variable, employee-related compensations, and consolidation of LPE
- SG&A included €1 million in PPA expense in Q4 2022

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

- SG&A increased 46% YoY driven by continued investment in the strengthening of the organization, headcount increase and employee-related expenses
- The impact of currency changes on SG&A expenses resulted in an increase of 6% YoY

CONTINUED FOCUS ON R&D INVESTMENTS

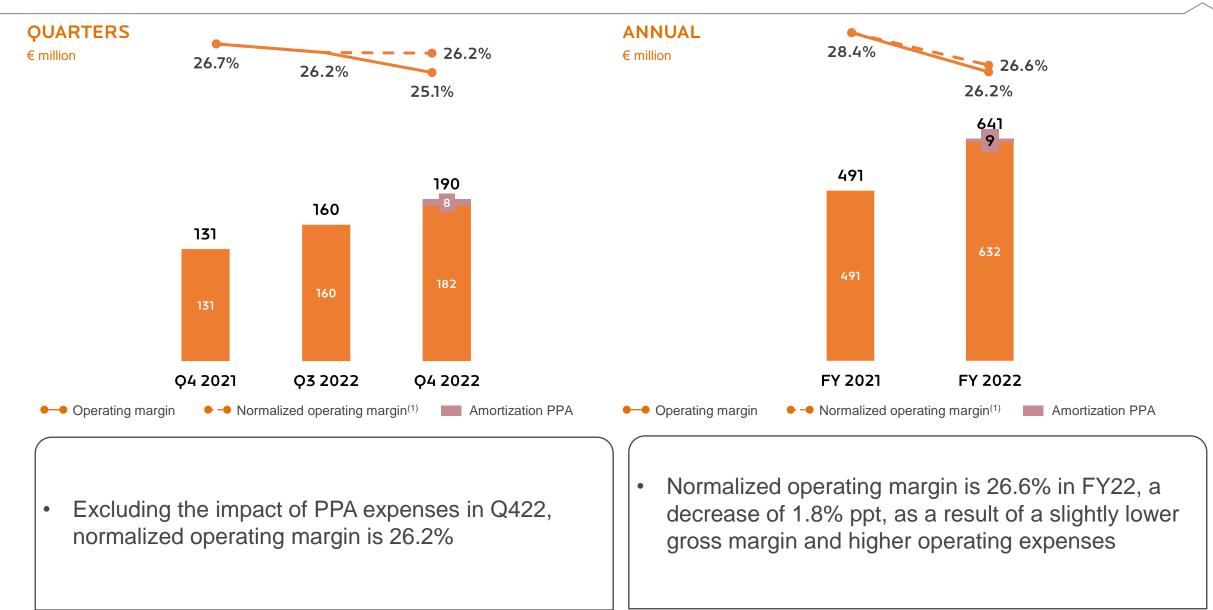




(1) Excluding amortization of fair value adjustments from respective purchase price allocations (before tax)

OPERATING MARGIN DECREASED DUE TO LOWER GM & HIGHER OPEX





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

Q3 IMPAIRMENT OF ASMPT PARTIALLY REVERSED IN Q4

321

321

-

(106)

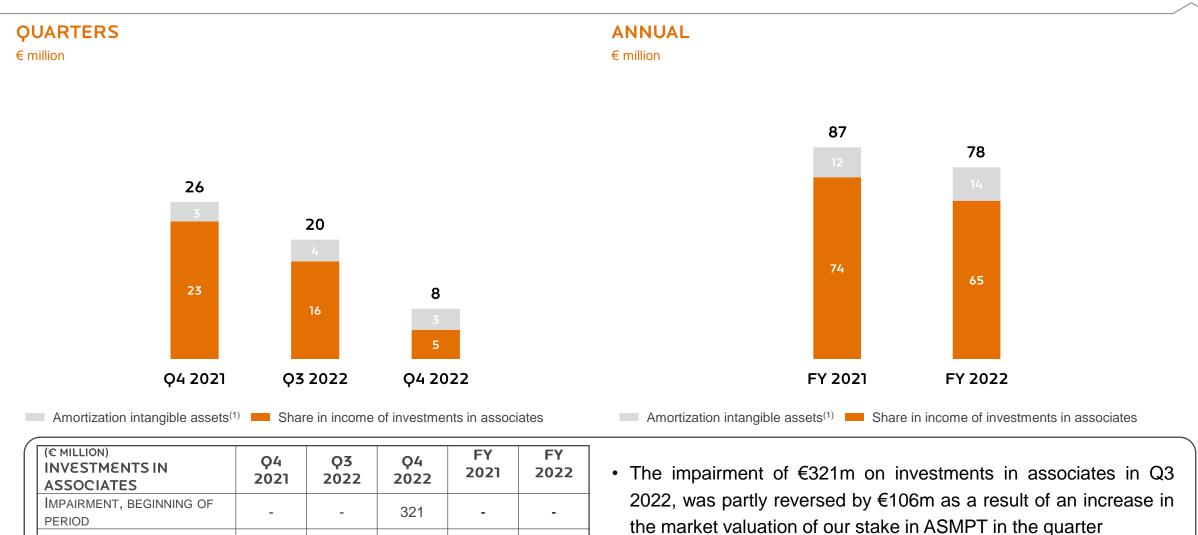
215

-

-

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321

(106)

215

-

-

-

 This led to a net impairment on investments in associates of €215m in FY22

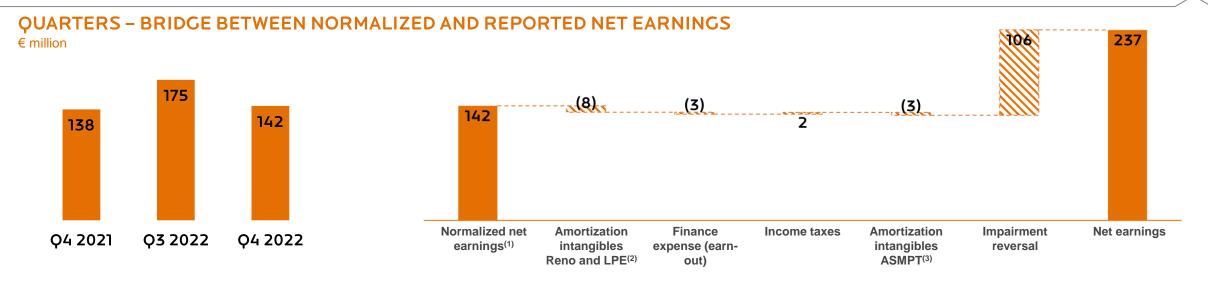
IMPAIRMENT

IMPAIRMENT REVERSAL

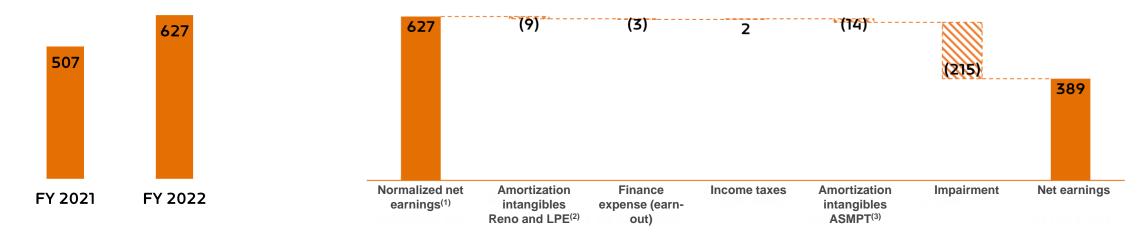
IMPAIRMENT, END OF PERIOD

NORMALIZED NET EARNINGS INCREASED 24% YOY





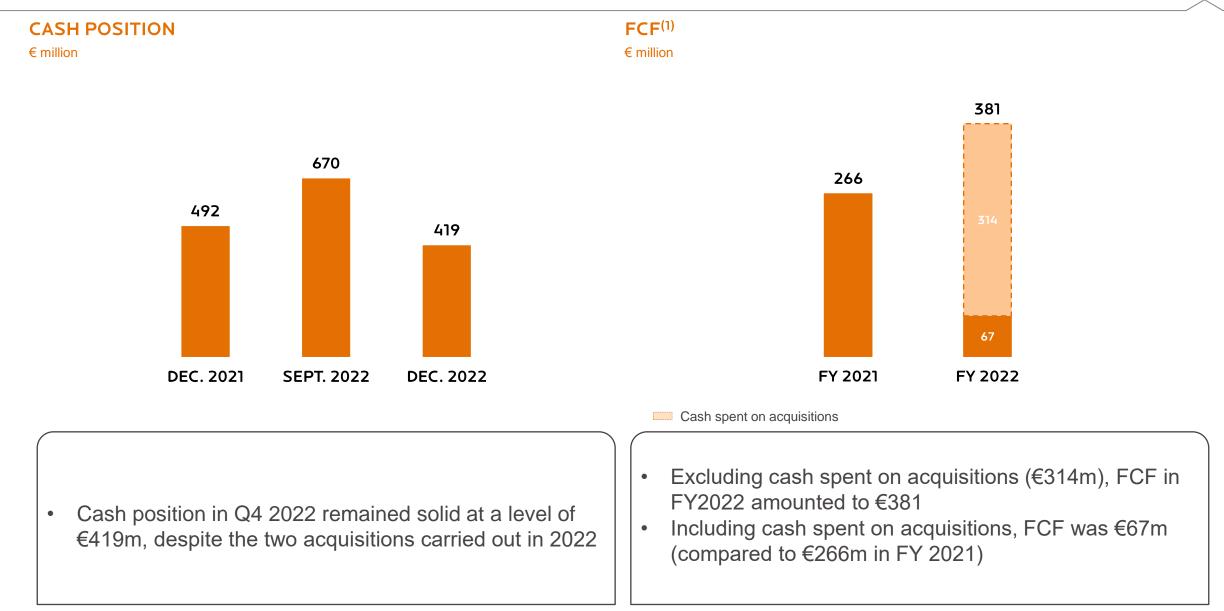
ANNUAL – BRIDGE BETWEEN NORMALIZED AND REPORTED NET EARNINGS € million



(1) Ex. amortization fair value adjustments from PPA (net of tax), change in fair value of the contingent consideration (LPE earn-out) and impairment ASMPT February 28, 2023 | ASM proprietary information | 17 (2) Resulting from the acquisitions of Reno and LPE; (3) Resulting from the sale of the 12% stake of ASMPT in 2013

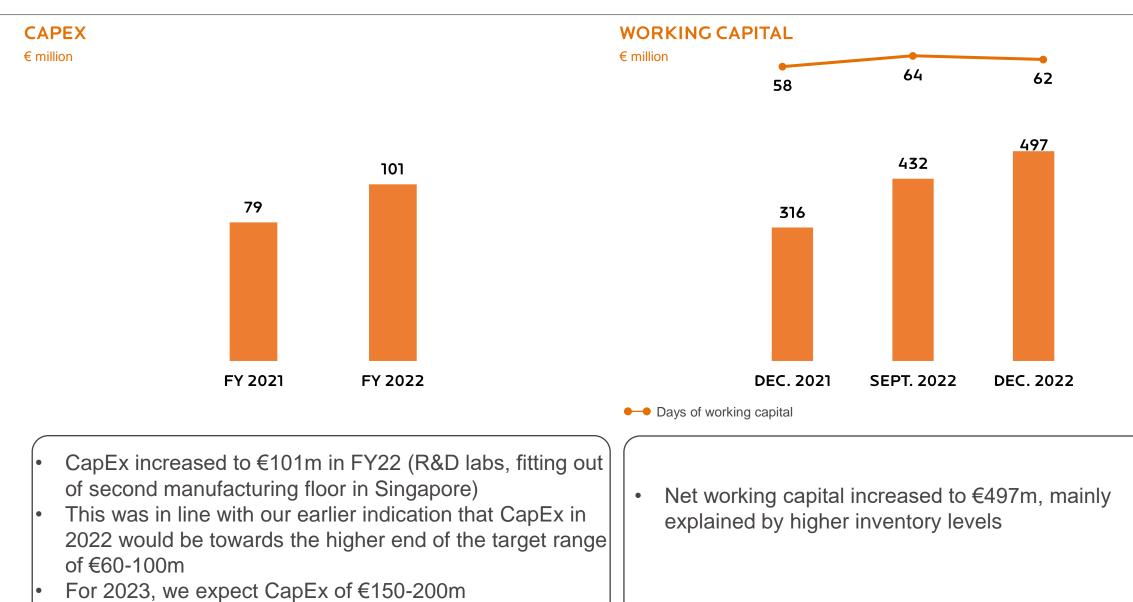
A SOLID CASH POSITION AND A HEALTHY FREE CASH FLOW





CAPEX AND WORKING CAPITAL







As included in the Q4 2022 earnings press release published on February 28, 2023:

ASM started the year with a record-high order backlog of €1.7 billion. On a currency comparable level, we expect revenue for Q1 of €660 - 700 million, with a slight increase in Q2 revenue compared to this level. Based on the current visibility, we expect revenue in the second half of 2023 to remain at a healthy level, albeit somewhat lower than in the first half of 2023. Looking at the wafer fab equipment (WFE) market in 2023, logic/foundry spending on the most advanced nodes and automotive-related power/analog demand is expected to remain resilient. The reduction in memory spending is expected to continue in 2023, while demand for trailing-edge nodes in logic/foundry, especially consumer related is expected to soften. In total, the WFE market is forecasted to drop by a mid to high teens percentage in 2023, a level that we expect to outperform, supported by our strong positions in the leading-edge logic/foundry market, and also by the momentum of newly introduced product and applications.



BUSINESS ENVIRONMENT, STRATEGY, AND TARGETS

WFE SPENDING



≤7nm

10nm

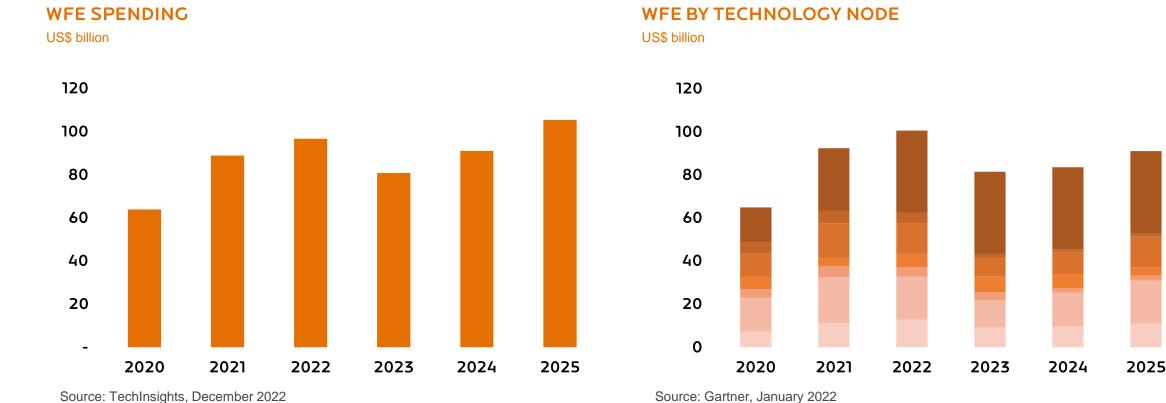
14nm

22nm

32nm

45nm

>65nm



Source: TechInsights, December 2022

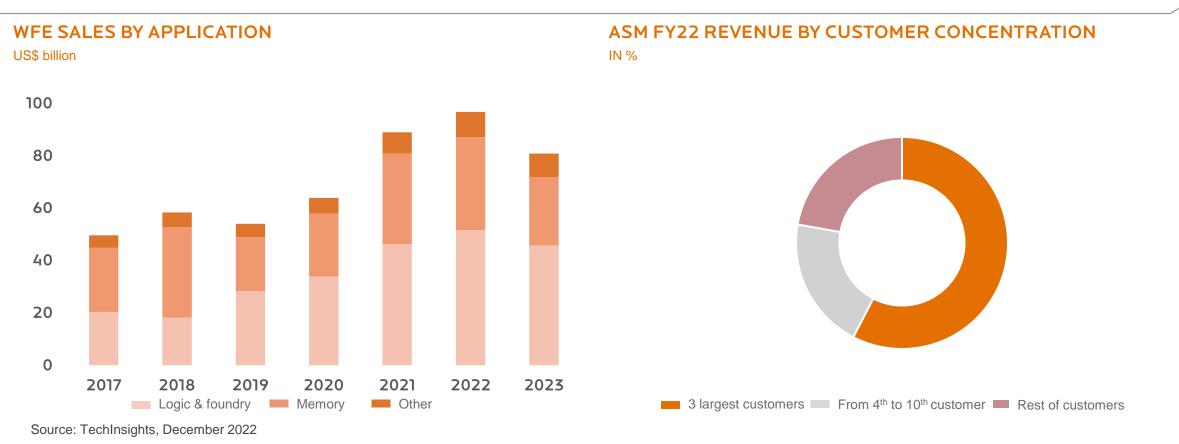
TechInsights expects WFE to decrease by 16% in 2023 • following an increase of 9% in 2022 (December 2022)

Strongest growth in leading-edge nodes, spending on • 7nm and below expected to grow from ~25% of WFE in 2020 to ~42% of WFE in 2025

Gartner expects WFE to decrease by 19% in 2023 ٠ following an increase of 9% in 2022 (January 2023)

WFE SPENDING BY APPLICATION AND ASM CUSTOMER CONCENTRATION





 Logic & foundry is estimated to account for more than half of total WFE sales in 2023

- The 10 largest customers accounted for about 78% of revenue in FY 2022
- The 3 largest customers accounted for approximately 58% of revenue in FY 2022

SINGLE-WAFER ALD AND EPITAXY MARKET OUTLOOK





- ALD and Epi expected to be the fastest growing segments in the deposition market driven by increasing device complexity, 3D structures, and new materials
- Mid-term targets: maintain ALD market share (2025: >55% vs 2020:~55%); increase Epi market share (2025: >30% vs 2020: ~15%)
- Node progression and move to gate-all-around (GAA) are expected to drive US\$1.2 billion increase in the combined ALD/Epi markets in advanced logic/foundry by 2025



6 STRATEGIC OBJECTIVES

- Grow ALD business by maintaining leadership in logic/foundry and expanding in memory
- > Increase Epi market share
- > Selective growth in VF and PECVD niches
- > Grow spares & services business
- > Accelerate sustainability
- > Drive continued strong financial performance



Strong financial position

OUR PURPOSE IS TO IMPROVE PEOPLE'S LIVES THROUGH ADVANCING TECHNOLOGIES THAT UNLOCK NEW POTENTIAL

OUR MISSION IS TO ENABLE OUR CUSTOMERS' SUCCESS BY CREATING LEADING-EDGE SEMICONDUCTOR PROCESS PRODUCTS, SERVICES, AND NEW MATERIALS

OUR CORE VALUES ARE 'WE CARE, WE INNOVATE, WE DELIVER'



Our Net Zero target:

Reduce environmental footprint of our operations

100% renewable electricity by 2024

Aim to be net zero by 2035 (scope 1, 2 and 3 emissions)



2022 achievements include:

Submitted Net Zero measurements and targets to the SBTi

+109% in packaging material reuse

ASM was a founding member of the Semiconductor Climate Consortium (SCC) and was elected to chair its Governing Council

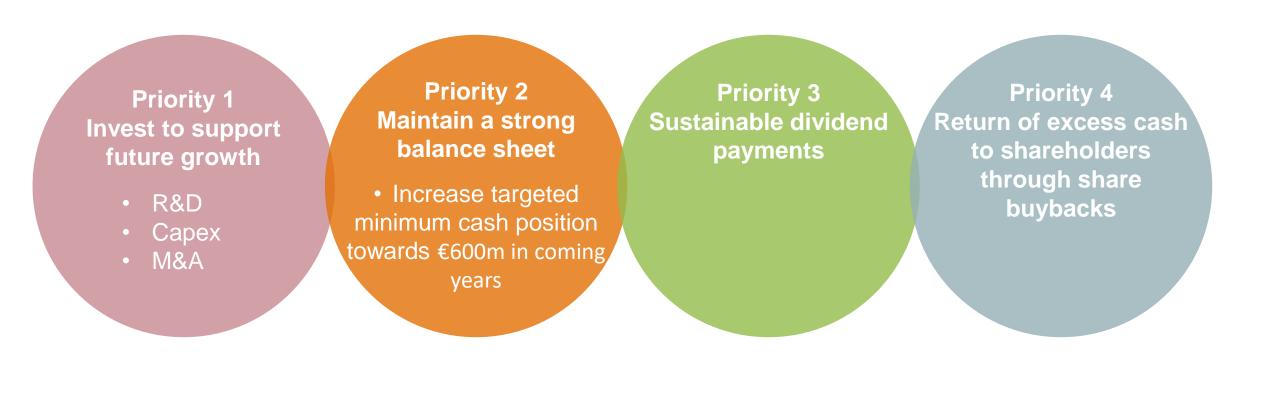
FINANCIAL TARGETS TOWARDS FY 2025



	FY 2020	FY 2022 ⁽¹⁾	FY 2025
Revenue	€1.3 billion	€2.4 billion	€2.8 to €3.4 billion ⁽²⁾
Revenue growth	22% CAGR (FY16-FY20)	33% YoY ⁽²⁾	16-21% CAGR (FY20-FY25)
Gross margin %	47.0%	47.5%	46-50% (FY21-FY25)
SG&A % revenue	11.9%	11.4%	High single digit (FY25)
R&D (net) % revenue	10.5%	9.5%	High single digit to low teens (FY25)
Operating margin %	24.6%	26.6%	26-31% (FY21-25)

- ETR (effective tax rate %): gradually increasing to low twenties
- We expect working capital days to range from 55-75 days (2021-2025)
- Expected capital expenditure ranging from €60-€100 million annually (2021-2025). For 2023, expected capital expenditure of €150-200 million





ANNEX: DETAILED FINANCIALS



AMORTIZATION AND EARN-OUT EXPENSES RELATED TO THE	Q4 2022	2022	2023	2024	2025
ACQUISITIONS OF RENO AND LPE	(ACTUAL)	(ACTUAL)	(ESTIMATE)	(ESTIMATE)	(ESTIMATE)
Cost of sales	(3.1)	(3.1)	(26.9)		
Net research and development expenses	(3.6)	(4.4)	(14.2)	(14.2)	(14.2)
Selling, general and administrative expenses	(1.2)	(1.2)	(4.8)	(4.8)	(4.8)
Total impact on operating results	(7.9)	(8.7)	(45.8)	(19.0)	(19.0)
Finance expenses ⁽¹⁾	(2.6)	(2.6)	(9.7)	(8.7)	(2.8)
Income taxes (realization temporary differences)	2.2	2.3	12.7	5.2	5.2
Total impact on net earnings	(8.3)	(9.0)	(42.8)	(22.5)	(16.6)

NORMALIZED AND REPORTED OPERATING PROFIT



		Q4 2022	FY 2022			
	NORMALIZED	PPA	REPORTED	NORMALIZED	PPA	REPORTED
Revenue	725		725	2,411		2,411
Gross profit	340	3	337	1,146	3	1,143
Gross margin	46.9%		46.4%	47.5%		47.4%
SG&A	75	(1)	76	275	(1)	277
SG&A as a % of revenue	10.3%		10.5%	11.4%		11.5%
Net R&D	75	(4)	79	229	(4)	234
Net R&D as a % of revenue	10.4%		10.9%	9.5%		9.7%
Operating profit	190	8	182	641	9	632
Operating margin	26.2%		25.1%	26.6%		26.2%



€ million

	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	FY 2021	FY 2022
New orders	645	706	943	676	829	2,196	3,153
Backlog	811	1,000	1,408	1,525	1,669	811	1,669
Book-to-bill ratio	1.3	1.4	1.7	1.1	1.1	1.3	1.3
Revenue	491	517	559	610	725	1,730	2,411
Cost of sales	(260)	(270)	(294)	(316)	(388)	(902)	(1,268)
Gross profit	231	247	266	293	337	828	1,143
Other income	4	(0)	0	(0)	0	4	0
Selling, general and administrative	(55)	(61)	(68)	(73)	(76)	(190)	(277)
Research and development	(49)	(44)	(51)	(61)	(79)	(151)	(234)
Total operating expenses	(104)	(104)	(118)	(133)	(155)	(341)	(510)
Operating result	131	143	148	160	182	491	632
Net interest income (expense)	(0)	(0)	0	1	(2)	(2)	(2)
Foreign currency exchange gains (losses)	7	9	26	25	(36)	33	25
Share in income of investments in associates	26	24	27	20	8	87	78
Impairment of investments in associates	-	-	-	(321)	106	-	(215)
Earnings before income taxes	160	172	198	(120)	255	597	505
Income taxes	(25)	(30)	(37)	(31)	(18)	(103)	(116)
Net earnings	135	142	160	(150)	237	495	389
Normalized net earnings ⁽¹⁾	138	146	164	175	142	507	627

(1) Excluding amortization of fair value adjustments from purchase price allocations (net of tax), change in fair value of the contingent February 28, consideration (LPE earn-out) and impairment of ASMPT

BALANCE SHEET (CONDENSED)



	DEC-21	MAR-22	JUN-22	SEP-22	DEC-22
Cash and cash equivalents	492	550	552	670	419
Accounts receivable	447	502	483	520	581
Inventories	212	256	341	464	538
Other current assets	70	76	80	98	133
Right-of-use assets - net	27	28	27	30	32
Investments in associates incl. other					
investments	849	884	918	637	692
Property, plant and equipment	257	274	284	297	312
Goodwill and other intangible assets	286	346	378	415	965
Evaluation tools at customers	64	67	66	79	69
Other non-current assets	9	9	9	9	10
Total assets	2,711	2,991	3,139	3,220	3,751
Accounts payable	175	211	246	249	243
Short-term debt	-	-	-	-	-
Other current liabilities Long-term debt and contigent consideration	232	302	286	415	537
payable	-	-	-	-	79
Other non-current liabilities	62	66	71	85	142
Equity	2,242	2,412	2,536	2,471	2,749
Total liabilities and equity	2,711	2,991	3,139	3,220	3,751



	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	FY 2021	FY 2022
Net earnings	135	142	160	(150)	237	495	389
Depreciation, amortisation and impairments	27	25	27	32	38	96	122
Net loss (gain) from sale of PP&E	(4)	0	-	0	(0)	(4)	(0)
Share in income of investments in associates	(23)	(20)	(24)	305	(111)	(74)	151
Evaluation tools	12	(7)	(1)	(15)	2	(8)	(21)
Other adjustments	(30)	21	13	13	12	(55)	59
Change in working capital	(53)	(11)	(43)	(31)	(75)	(68)	(159)
Net cash from operating activities	64	151	133	155	104	381	541
Capital expenditures	(31)	(27)	(16)	(21)	(37)	(72)	(101)
Proceeds from sale of PP&E	4	0	0	0	0	6	1
Capitalized development expenditure	(24)	(24)	(27)	(27)	(25)	(82)	(103)
Dividend received from associates	-	-	32	17	-	36	49
Purchase of intangible assets and acquisition of							
investments	(2)	(39)	(1)	(2)	(279)	(3)	(321)
Net cash from investing activities	(53)	(90)	(12)	(32)	(341)	(114)	(475)
Payment of lease liabilities	(2)	(2)	(2)	(3)	(3)	(8)	(10)
Dividends to common shareholders	-	-	(122)	-	-	(97)	(122)
Purchase of treasury shares	(58)	-	-	-	-	(140)	-
Proceeds from issuance of treasury shares	3	-	(1)	(0)	-	5	-
Net cash from financing activities	(57)	(2)	(124)	(3)	(3)	(240)	(133)

R&D BREAKDOWN



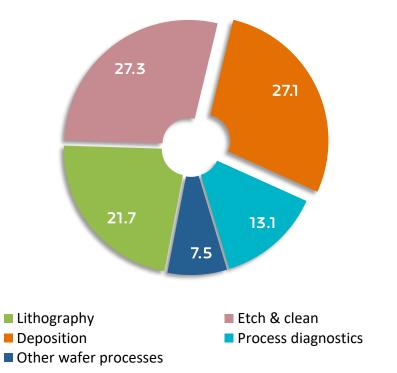
Q4 2021	Q3 2022	Q4 2022	FY 2021	FY 2022
64	78	93	206	302
(24)	(27)	(25)	(82)	(103)
8	9	11	25	35
1	-	-	2	0
49	61	79	151	234
13.0%	12.9%	12.8%	11.9%	12.5%
9.9%	10.0%	10.9%	8.7%	9.7%
49	61	75	151	229
9.9%	10.0%	10.4%	8.7%	9.5%
	64 (24) 8 1 49 13.0% 9.9% 49	64 78 (24) (27) 8 9 1 - 49 61 13.0% 12.9% 9.9% 10.0% 49 61	64 78 93 (24) (27) (25) 8 9 11 1 - - 49 61 79 13.0% 12.9% 12.8% 9.9% 10.0% 10.9% 49 61 75	64 78 93 206 (24) (27) (25) (82) 8 9 11 25 1 - - 2 49 61 79 151 13.0% 12.9% 12.8% 11.9% 9.9% 10.0% 10.9% 8.7% 49 61 75 151

ASM IS FOCUSED ON DEPOSITION EQUIPMENT



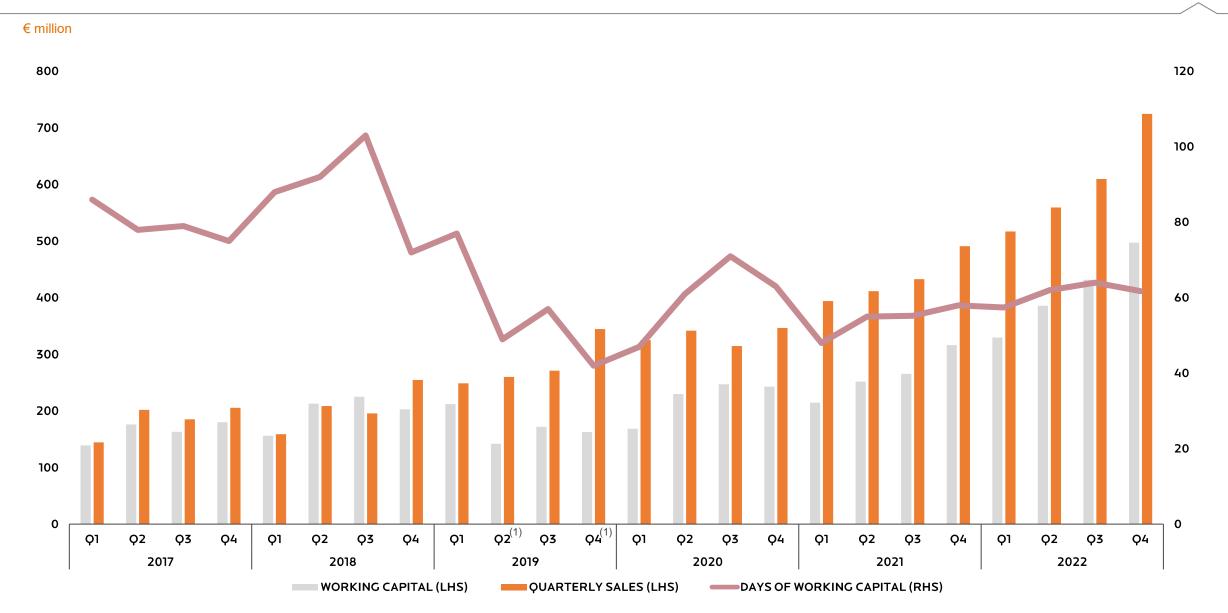
WFE MARKET SEGMENTS 2022

US\$ billion



- > ASM's focus is on deposition
- > We are market leader in ALD (mid 50s% share). ALD accounts for more than half of our total equipment revenue
- Expanding our position in the silicon Epi market and entered the high-growth silicon carbide (SiC) Epi market
- Selective growth in PECVD and vertical furnaces and healthy growth in spares and services

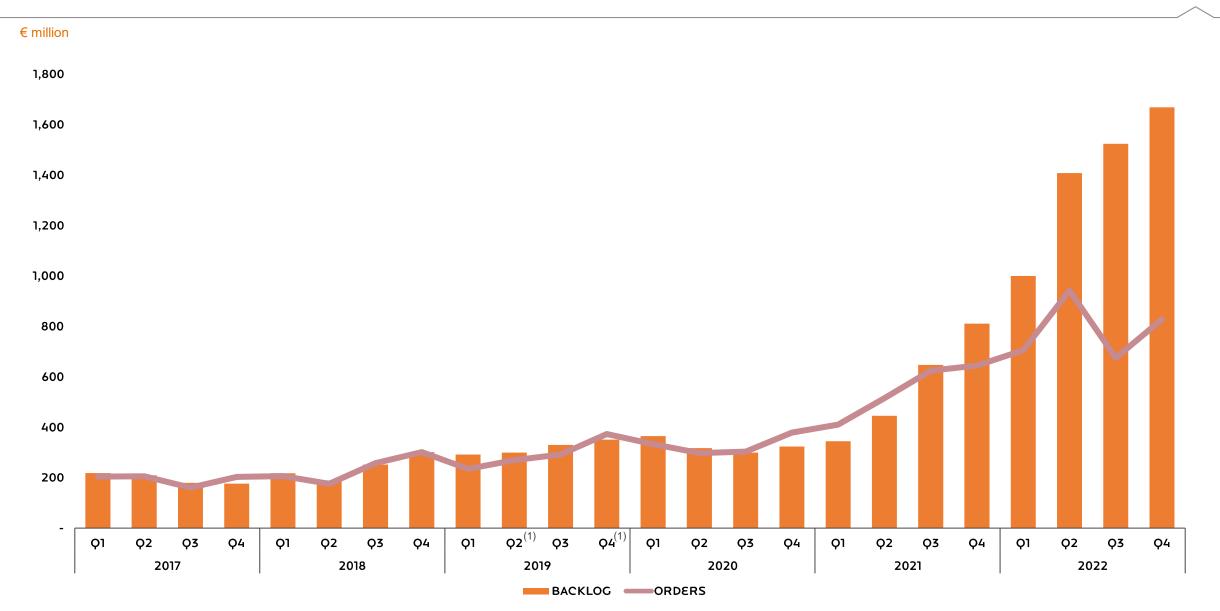
WORKING CAPITAL: HISTORICAL DEVELOPMENT



Numbers based on reported financials (1) Excluding the impact of patent litigation and arbitration settlements



ORDERS AND BACKLOG: HISTORICAL DEVELOPMENT

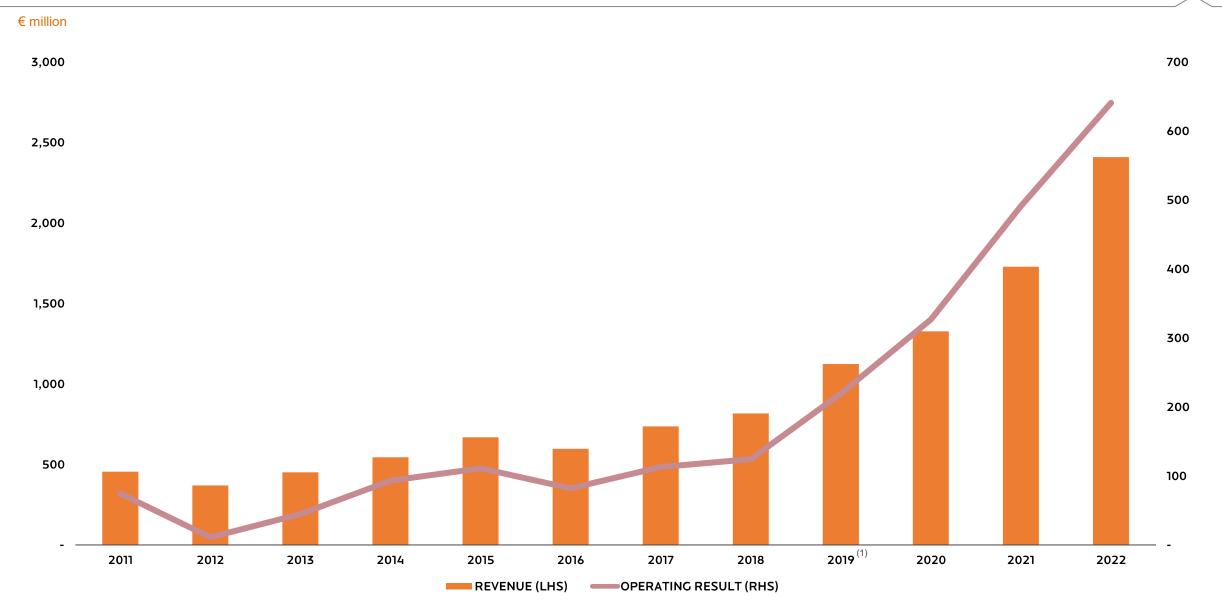


Numbers based on reported financials (1) Excluding the impact of patent litigation and arbitration settlements



REVENUE AND OPERATING RESULT: HISTORICAL DEVELOPMENT





(1) Excluding settlement gains of €159m

EXCESS CASH RETURNED TO SHAREHOLDERS

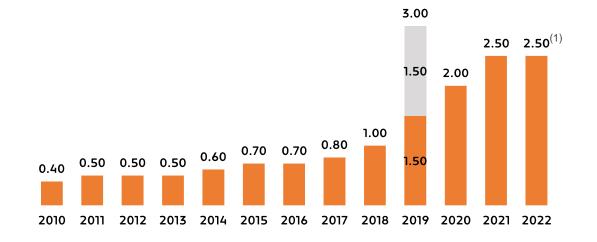


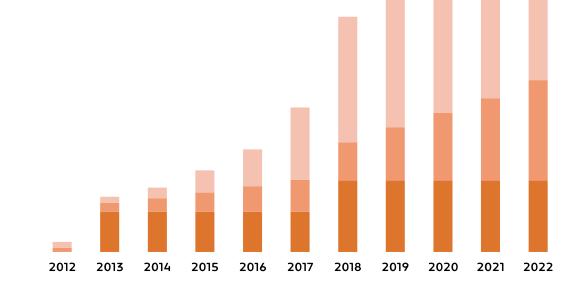
DIVIDEND PER SHARE

€ paid over



€ million





RETURN OF CAPITAL DIVIDENDS SHARE BUYBACKS

REGULAR DIVIDEND EXTRAORDINARY DIVIDEND



FOR ADDITIONAL INFORMATION VISIT ASM.COM