



XAAR

Xaar plc
Interim Report 2022



Our vision

A world where you can print anything you can imagine.

A broader product offering

The acquisition of Megnajet in March 2022 has improved our fluid supply systems offering for our OEM and UDI customers which will help them to accelerate their time to market. In addition, our aqueous printhead launch is on track for Q4 2022.



Our culture

We champion a values-led culture so each member of our team is empowered to do their very best, creating a working environment that people love to be in and where we can all achieve our ambitions.

▶ **Watch our video demonstrating how these values are part of our day-to-day lives.**

Operational and strategic highlights

- Printhead business performed well with strong growth in Europe and the US offsetting a COVID-19 related slowdown in China
- On track for the launch in Q4 2022 of our aqueous printhead, our exciting new superior performing product targeting significant opportunities in new sectors such as Packaging and Textiles
- The new print engine product developed by FFEI, Xaar Versatex, was successfully launched, whilst the acquisition of Megnajet further strengthens the Group's vertical integration offering
- Product Print Systems business (EPS) delivered improved performance with both strong revenue and margin growth
- Management programme underway to enhance margin and support Xaar's 'net zero' commitments by driving increased operational efficiency, reducing costs and energy use
- Launched Sustainability Roadmap to 2030, a principal driver for positive change and investment within the business

Improving financial performance

- Revenue of £36.6 million, up 39% on H1 2021 (14% organic excluding FFEI and Megnajet) and 11% ahead of H2 2021 (9% organic excluding Megnajet)
- Gross margin of 40%, up 9% on H1 2021 and up 4% on H2 2021, as a result of the strong revenue growth and increased operational efficiencies
- Adjusted profit before tax of £1.4 million compared to an adjusted loss before tax of £1.6 million in H1 2021
- Positive adjusted EBITDA¹ delivered across each business unit
- Investment in working capital has strengthened supply chain resilience and, along with sales price increases, is successfully mitigating cost inflation
- Xaar remains well capitalised with a strong balance sheet and net cash of £12.7 million at 30 June 2022

£36.6m

Revenue – continuing operations

H1 2022	£36.6m
H2 2021	£33.0m
H1 2021	£26.3m

(£0.3m)

(Loss)/profit before tax - continuing operations

H1 2022	(£0.3m)
H2 2021	£2.4m
H1 2021*	(£1.4m)

* (restated)

£1.4m

Adjusted profit/(loss) before tax¹

H1 2022	£1.4m
H2 2021	£1.0m
H1 2021*	(£1.6m)

£12.7m

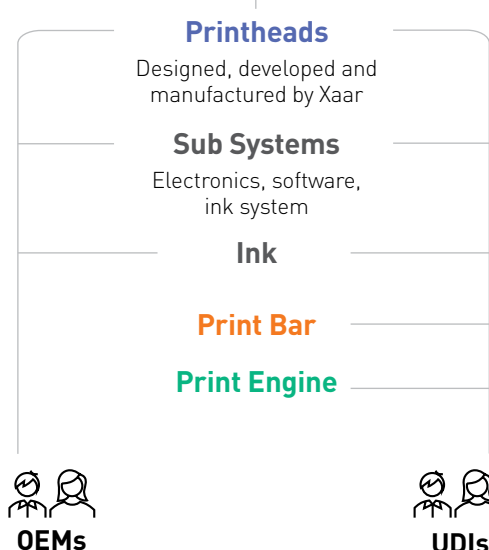
Net cash balance²

H1 2022	£12.7m
H2 2021	£25.1m
H1 2021	£17.1m

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XAAR



- 1 EBITDA is calculated as statutory operating profit before depreciation, amortisation and impairment of property, plant and equipment, intangible assets and goodwill. Adjusted EBITDA is calculated as EBITDA excluding other adjusting items as defined as follows. Adjusted measures exclude items from the IFRS profit/(loss) before tax, including share-based payment charges, exchange differences relating to intra-group transactions, gain on derivative financial instruments, restructuring and transaction expenses, research and development expenditure credit, fair value loss or gains on financial assets at FVPL, amortisation of acquired intangibles, and discontinued operations, per the reconciliation of adjusted financial measures in note 2.
- 2 Net cash includes cash, cash equivalents and treasury deposits, excluding Xaar 3D in 2021.

Figures and percentages included in this report are subject to rounding adjustments arising from conversion to £thousands or £millions from actual figures. Accordingly, figures shown for the same category presented in different tables may vary slightly, and figures shown as totals in certain tables may not be an arithmetic aggregation of the figures that precede them.



Re-energised and delivering results

Excellent strategic progress

We have made excellent progress in the last two years. The business is being transformed and re-energised following a restructuring, rebranding and a new business model which is now delivering results. We passed a key milestone of delivering an adjusted profit in H2 2021 which we have followed up with an increased adjusted profit in H1 2022 and remain ahead of plan to continue to deliver on commitments. The business is well positioned to continue this momentum and deliver further improved performance.

Strong performance in line with expectations

We have delivered a strong performance in H1 2022 in line with expectations which demonstrates we are on track. Further operational and strategic progress has been achieved across the Group and we continue to deliver strong trading momentum. Despite the global macro-economic and political uncertainties, we are successfully mitigating external challenges, principally of cost inflation and the ongoing COVID-19 impact in China. There has been further investment in capability and capacity enabling us to take advantage of the opportunities which we expect to support our future growth ambitions.

Strong revenue growth

Revenue for the period was £36.6 million, representing an increase of 39% compared to H1 2021. Organic growth, before the effects of the acquisition of FFEI and Megnajet, was 14%. It is also pleasing to report increased revenue compared to H2 2021 with growth of 11% (9% organic excluding the part year impact of Megnajet).

The Printhead business has a clear customer-focused commercial strategy which is reaping rewards, delivering revenue growth of 2% compared to H1 2021. This approach includes the removal of ineffective distribution channels, a clear pricing strategy, and a sales process that is focused on selling the printhead products based on its technical merits.

We continue to focus on markets where our technology has a competitive advantage. We work in partnership with customers, both Original Equipment Manufacturers (OEMs) and User Developer Integrators (UDIs), over the entire product lifecycle to reduce their development times and, thereby, their time to market. We also continue to provide improved aftersales support. Customer engagement is increasing both from existing and new customers

Revenue growth in Printhead has been strong in the EMEA and North America regions with growth of 7% and 26% respectively against H1 2021. This is reward for our strategy of focusing on key technology areas with particularly notable revenue growth in Coding & Marking and Additive manufacturing sectors.

Asia, especially China, has been more challenging with revenue falling 22% year-on-year, a result of the continued COVID-19 'lockdown' related restrictions in China, limiting our customers in their ability to develop, manufacture and install products principally in the Ceramics and Glass sectors. Having seen consistent growth over the last two years we are confident in the medium and long-term opportunity in China and we will continue to focus efforts on returning to growth in the region. However, whilst restrictions remain there will continue to be a challenge for our business.

Product Print Systems business (EPS) continues to deliver significantly improved performance demonstrating strong revenue growth of 51% in H1 2022 against H1 2021. Having made structural, organisational changes and developed a more commercial modular approach to products during 2021, we are pleased with the rapid progress, the strengthening of gross margins and the return to profitability. We are confident the business is now well placed to continue to grow profitably.

FFEI delivered revenue of £6.1 million in the period, which is a pleasing performance. We have successfully developed and launched a new print engine product called the Xaar Versatex. This will accelerate Xaar's existing growth strategy of widening the product portfolio thus further engaging UDI customers.

Megnajet was acquired on 2 March 2022 and in the period has delivered revenue of £0.6 million. We are very excited about the opportunity that Megnajet affords the Group, as its ink system product range further strengthens our vertically integrated product offering. The business is operating well and has been successfully integrated into the Group

Improved margins and return to profitability

This strong revenue growth, coupled with operational efficiency gains, saw the Group's overall gross margin increase to 40% in H1 2022 (H1 2021: 31%). We have invested in our capability and efficiency most notably in Operations and Support functions and have continued to exercise discipline in our management of costs.

The increase in Group gross margin is driven by the operational leverage in the Printhead business where the efforts made to focus on and reduce its cost base, whilst driving increased volumes, have improved profitability.

EPS has also significantly grown gross margin, rising to 39% from 19% in H1 2021 (excluding the impact of the non-cash adjustments the underlying gross margin was 28% in H1 2021). This is particularly pleasing as it comes directly from the positive changes we have made to the business and has seen the business return to profitability.

We continue to actively manage costs and take appropriate action in response to the significant cost inflation that is prevalent globally. Our electricity unit costs are fixed into H2 2023 and we have invested in raw materials to further mitigate against rising costs. We have also chosen to increase our holding of finished goods holding to further strengthen our supply chain and ensure we can meet customer demand.

We are confident we have secured all critical components to enable us to fulfil customer orders for the remainder of the year and into 2023. Where possible we have passed cost increases on to our customers through increased sales prices.

Group adjusted profit before tax for H1 2022 was £1.4 million, compared to an adjusted loss before tax of £1.6 million for H1 2021. This is the second successive half year period we have reported an adjusted profit after reporting a profit of £1.0 million in H2 2021. Due to the slowdown in orders from Chinese customers, the Printhead business unit made an adjusted loss before tax of £0.4 million.

Pleasingly we can report positive adjusted EBITDA in each of our businesses for H1 2022 (Group adjusted EBITDA of £3.0 million, is made up of Printhead adjusted EBITDA of £0.9 million, EPS adjusted EBITDA of £1.3 million, FFEI adjusted EBITDA of £0.5 million, and Megnajet adjusted EBITDA of £0.3 million), which is another notable achievement and increases our confidence in delivering full year profitability for the Group.

Strong balance sheet and operational investment

The Group retains a strong balance sheet and cash position. Net cash at 30 June 2022 was £12.7 million. This represents a net outflow of £12.4 million in the period (net cash outflow from continuing operations of £12.0 million, which excludes the net cash outflow from discontinued operations of £0.4 million as detailed in note 10 (H1 2021: net cash outflow from continuing operations of £1.0 million, excluding the net cash inflow from discontinued operations of £0.1 million)).

During the period we acquired Megnajet Ltd and Technomation Ltd (trading as Megnajet) for a combined consideration of £3.9 million net of cash acquired. We have made capital investment of £1.5 million in upgrading our operational capabilities.

During the period we invested £3.2 million in inventory for the Printhead business to successfully secure materials to meet expected 2022 production requirements and to increase our holding of finished goods. This gives us greater assurance that we can deliver on customer demands throughout 2022 and further into 2023. We believe we are winning business through a competitive advantage of offering shorter lead times than our competition. We have taken further proactive actions to adapt product designs to accommodate alternative components, increasing our resilience to supply chain constraints.

The continued strong cash generation across the business and prudent cash management has enabled us to make these investments and we will maintain our disciplined approach to balance sheet management.

We are currently finalising our plans to invest further in our Huntingdon facility. This will be the first stage of a plan that will involve a significant upgrade and modernising our manufacturing capabilities. We will gain from much improved efficiency, yields and reduced product costs in the longer term as a result of this investment. The investment in working capital we are currently making will ensure we are able to meet fully all customer demands whilst this work is being carried out as we close the factory for two months.

Expansion of vertically integrated product offering

The acquisition of FFEI in July 2021 and Megnajet in March 2022 further widens our product offering for our OEM and UDI customers with a broader product range including print engines for adding effects and embellishments digitally. FFEI has been successfully integrated and strengthens Xaar's capabilities and skills and has seen the launch of a new print engine product, the Xaar Versatex. This will accelerate Xaar's existing growth strategy and widen the product portfolio, further engaging UDI customers. We have a growing pipeline with a significant number of opportunities thanks to our technology advantages. This platform provides further opportunities for vertical integration, and we continue to strengthen our offering with more products in the pipeline for 2022.

Megnajet is a global leader in the manufacture of ink supply systems. We are delighted with the acquisition of the business which has been successfully integrated into the Group, and we are already benefitting from the expansion of our product offering that the business brings.

We are on schedule to deliver the next product powered by our ImagineX platform. Our aqueous printhead will be launched in Q4 2022. This is a significant and tremendously exciting product for the Group and will enable us to compete in new sectors, such as Packaging and Textiles, with a product that we believe will deliver superior performance to any currently on the market.

Significantly improved operational capability

We have made further progress in building a world class leadership team, making key appointments which will drive the business in the next phase of our transformation. This has strengthened our capability and experience across the business, most notably in our Operations, R&D and Human Resources functions. This improved operational capability also includes further and continued investment in infrastructure such as IT, manufacturing and supply chain management. We now have strong and experienced leadership throughout the organisation focused on delivering a clearly articulated strategy.

During the period we have continued to work on ensuring our values are embedded into our culture. This continued focus on our values is important to ensure we have a supportive culture with employees who are engaged and empowered to succeed.

Continued commitment to sustainability

Xaar has made significant and positive progress to drive forward its ESG commitments across our operations. We uphold the highest of standards across our business and comply with all relevant regulations in the territories in which we operate whilst enhancing the working environment for our employees and minimising the environmental impact of our products and operations.

During the reporting period, Xaar has launched its Sustainability Roadmap to 2030, which is a principal driver for positive change and investment within the business. Led by our ESG Committee and a Sustainability Team which is comprised of colleagues from across our business operations, chaired by the Group Sustainability Manager; we have been working hard across to achieve our goals and ambitions across all four of our sustainability pillars: Environment, People, Innovation and Community.

Environment

Decarbonisation remains a key objective for us as we move towards our goal of net zero operations by 2030. We are pleased to report that we have identified and appointed an external partner to support us with Scope 3 and TCFD Climate Modelling which will commence in Q3 2022.

This year and in future years Xaar will offset our regulatory Scope 1 and 2 carbon impact, making the Group a carbon neutral inkjet manufacturer in 2022. We are committed to continuing this practice on our journey to achieve complete carbon neutrality in line with our 2030 goal.

We set a target to source 100% of our power from renewable sources and excellent progress has been made. Our move to Green energy is now complete in the UK, and we are pleased to confirm that EPS is now also supplied with power generated from renewable sources. We will continue to assess ways to bring our remaining office locations in line with Green tariff power.

All printhead packaging is now fully recyclable and we are working towards complete packaging recyclability.

Xaar is committed to supporting decarbonisation of staff and visitors' vehicles. During the reporting period, we have launched a salary sacrifice scheme, supported by the UK government, to allow all UK staff the ability to order electric vehicles (EV) through the company scheme. In the same period we have completed the installation of EV charging infrastructure across our sites.

People

Supporting young people and nurturing their skills is key to our ESG strategy and for this reason we have placed significant emphasis on our Early Careers programme. As part of this, Xaar's new Apprenticeship scheme is operational and our first intake is working within our Logistics team. Further efforts are underway to connect with local schools and colleges to allow future work experience programmes to be developed. In the UK, Xaar supported Learning at Work Week in May, which attracted / engaged 109 attendees across nine events and resulted in 131 hours of learning.

A key activity for the second half of 2022 is a Xaar Group workshop bringing together a cross functional group of people with the aim of understanding what makes Xaar an 'employer of choice'. This will help to inform and shape our talent attraction and retention strategies, and will also feed into our wellbeing programmes.

Innovation

We are currently researching ways to use biodegradable structural parts in the manufacture of our products. An area of focus is to find an alternative, more sustainable material than Polylactic Acid (PLA) which is a biodegradable plastic used to print the majority of our jigs and fixtures. Our Operations team has successfully trialed the use of recycled PLA filaments generated from returned and waste PLA. These are supplied in 100% plastic-free sustainable packaging with easy to recycle cardboard spools.

Significant market opportunity

Xaar's digital inkjet technologies are transforming print processes in a wide range of markets, and the medium- and long-term opportunity for the business remains significant. We have already grown market share in core, mature markets such as Ceramics and Coding & Marking. There remains further growth opportunity in these areas as our technology is best in class and we have a clear competitive advantage over our competitors due to our core technologies (TF Technology ink recirculation, High Laydown Technology, Ultra High Viscosity Technology).

Our wider product offering enables us to access an increased market opportunity through sectors that are looking for further digitisation of printing on which we can capitalise. We see opportunities typically in areas where fluid applications are challenging, such as Flat Panel Display, Semiconductors, Printed Electronics and Optics. We are well placed to succeed in these markets as Xaar technology offers an unrivalled method of non-contact, fluid deposition, particularly viscous fluids, with incredible precision, control and speed.

Other markets that already use digital printing such as architectural glass printing and 3D printing are tremendously exciting as our technology has unique benefits that can give our customers commercial advantage in reducing costs and lead times for their products.

Both our current product offering and our product development programme will help drive our success in meeting customer demand in these fast growing sectors.

Outlook

The positive momentum in the Group in the last two years has continued during 2022 and we remain optimistic about the outlook for the business. Customer engagement remains strong and we have seen growth in EMEA and the Americas. Our half year results are in line with our expectations. We anticipate delivering Group revenue growth and continued performance improvements during the second half in line with market expectations.

Our investment in working capital during H2 2021 and H1 2022 means we are well placed to satisfy customer demand for the remainder of the current financial year and we believe we have the supply chain resilience to withstand most disruption. We are continuing to invest in the business, adding skills, capability and capacity. We continue to work on delivering efficiency gains aimed at improving gross margins and business profitability in the medium term.

We are conscious of the continuing impact arising from the economic consequences of wider global issues, particularly with cost inflation, and COVID-19, particularly in China. Whilst we expect this to continue in the short to medium term, we remain on track to report adjusted profit for the full year and look forward to the future with confidence.



John Mills
Chief Executive
Officer

19 September 2022



Ian Tichias
Chief Financial
Officer

19 September 2022



Business performance

Revenue

Revenue for the Group of £36.6 million for the first half of the year, representing a year-on-year increase of £10.3 million (H1 2021: £26.3 million) of which FFEI represents £6.1 million, and Megnajet £0.6 million in the period since acquisition.

It is a very pleasing result given the ongoing restrictions arising from COVID-19 in China, with Printhead business unit revenue increasing 2% and EPS 51%. This is a strong recovery across the business demonstrating the positive customer engagement and trust that is being regained across our customer base and the continued momentum we have in the business.

Revenue of £17.0 million in the Americas grew £7.0 million year-on-year (H1 2021: £10.0 million, H2 2021: £13.6 million), driven by significant growth in EPS revenue of £3.1 million, £2.4 million from FFEI and excellent growth in Printhead of £1.0 million year-on-year (26%). The rise in EPS revenue is driven by the recovery of the business unit and stems from increases in sales of digital machines and peripherals demonstrating the commercial approach established over the last 12 months is being well received by customers.

Revenue in EMEA has continued to rise year-on-year. Printhead revenue was £11.2 million compared to £10.5 million, which maintains the continued upward trend in revenue since H2 2019.

Performance in Asia, and China in particular, has been impacted by the continued COVID-19 restrictions. We have seen orders from our customers delayed as they themselves have been impacted by their own supply chain issues, limiting their ability to fulfil their own orders. Whilst this is disappointing, and we see it continuing throughout 2022, the underlying market demand remains and we are confident in the medium term of returning to the previous growth levels.

Printhead revenue for the half year increased £0.5 million to £20.7 million (H1 2021: £20.2 million), despite the difficulties faced in China. This is also growth of 4% compared to H2 2021. Whilst the revenue growth has been restricted due to Chinese customers in the Ceramics sector, the business has seen growth in other markets such as Coding & Marking (C&M) and Additive manufacturing and 3D printing which is pleasing as this reflects our overall customer strategy and enhanced product portfolio.

Revenue from the EPS business increased by £3.1 million to £9.2 million (H1 2021: £6.1 million).

This has been driven by digital inkjet machines sales with growth of 58%, which is particularly pleasing as this is the core focus for the business and will drive increased profitability. Pad print machine revenue has also increased 38%. Our focus on consumables and

Table A – Group revenue growth – continuing operations

£m ¹	2022 H1	2021 H1	Var to 2021 H1 (%) ¹	2021 H2	Var to 2021 H2 (%) ¹
Printhead	20.7	20.2	2%	19.9	4%
EPS	9.2	6.1	51%	7.8	18%
Organic growth H1 2022 v H1 2021	29.9	26.3	14%	27.7	-
FFEI	6.1	-	-	5.3	15%
Organic growth H1 2022 v H2 2021	36.0	26.3	-	33.0	9%
Megnajet	0.6	-	-	-	-
Total growth	36.6	26.3	39%	33.0	11%

Table B – Group revenue by geographic region – continuing operations

£m ¹	2022 H1					2021 H2				2021 H1		
	PH	EPS	FFEI	MJ	Total	PH	EPS	FFEI	Total	PH	EPS	Total
EMEA	11.2	-	3.6	0.2	15.0	10.4	-	2.8	13.2	10.5	-	10.5
Americas	4.9	9.2	2.4	0.4	17.0	3.4	7.8	2.4	13.6	3.9	6.1	10.0
Asia	4.5	-	0.1	-	4.6	6.1	-	0.1	6.2	5.8	-	5.8
Total	20.7	9.2	6.1	0.6	36.6	19.9	7.8	5.3	33.0	20.2	6.1	26.3

Table C – Printhead revenue

£m ¹	2022 H1	2021 H1	Var to 2021 H1 (%) ¹	2021 H2	Var to 2021 H2 (%) ¹
Ceramic and Glass	9.8	9.5	+3%	9.5	+3%
C&M and DTS	6.8	5.9	+15%	5.2	+31%
WFG and Labels	1.8	3.4	-47%	2.8	-36%
3D and Adv. Manufacturing	1.9	1.0	+90%	1.4	+36%
Packaging and Textiles	0.1	0.2	-50%	0.6	-83%
Royalties	0.2	0.2	-%	0.4	-50%
Total	20.7	20.2	+2%	19.9	+4%

Table D – EPS revenue

£m ¹	2022 H1	2021 H1	Var to 2021 H1 (%) ¹	2021 H2	Var to 2021 H2 (%) ¹
Digital inkjet	5.7	3.6	+58%	4.4	+30%
Pad printing	3.3	2.4	+38%	3.1	+6%
Other	0.2	0.1	+100%	0.3	-33%
Total	9.2	6.1	+51%	7.8	+18%

¹ Figures and percentages are subject to rounding arising from conversion to £m from actual figures.

accessory sales has contributed to the growth with increased revenue from ink, plates and parts. We see a strengthening pipeline and order book and we are well placed to deliver further growth for the full year in 2022.

FFEI revenue was £6.1 million which compares to £5.3 million in H2 2021, with no comparison to H1 2021. We are pleased with this performance, achieved through a period of integration, and whilst establishing a new Group-wide product offering. Similarly we are delighted with the addition to the Group of Megnajet which has delivered revenue of £0.6 million which is ahead of our initial expectations at the time of acquisition.

Gross profit

Gross profit for the period increased by £6.2 million to £14.5 million (H1 2021: £8.3 million) with an increase in the gross margin to 40%

(H1 2021: 31%), the fourth successive half yearly increase in gross margin. This was primarily the result of an improvement in the Printhead business unit's gross profit which grew to 41% from 35% (£8.5 million from £7.1 million). We improved utilisation of the factory as throughput was increased during the period resulting in better overhead cost recovery, supporting gross margin gains. We have worked hard on cost saving initiatives during the period and as we increase volumes there should be further scope for improved overhead recoveries and accordingly margin gains. During the latter half of 2021 and into 2022 we proactively worked to secure raw materials which should reduce further supply chain risks. Issues in supply chains globally are widely known and well documented, particularly so for semi-conductors and other technology materials, with increasing cost pressures.

These actions should insulate us from further costs and mean we are able to meet customer demand throughout 2022 and into 2023. We have increased our working capital with inventory rising £5.8 million. This higher level of both raw materials and finished goods is a deliberate, prudent approach which we believe will see us well placed to both manage customer requirements and further insulate the business from external supply chain risks whilst utilising the high level of operational gearing to deliver further improvements in the gross margin, and potentially providing us with a competitive advantage.

Gross profit for the EPS business increased £2.4 million in the period to £3.6 million (H1 2021: £1.2 million) with gross margin growing year-on-year (H1 2022: 39%, 2021: 19%). The actions taken to refocus the business on future growth opportunities which resulted in non-cash write down adjustments totalling £0.6 million in 2021 have proven correct, as the business has benefitted from these actions and profitably grown.

Gross profit for H1 2022 for the FFEI business was £2.0 million, and for the Megnajet business was £0.3 million.

Research & development

Gross R&D spend of £3.3 million was up £0.7 million on H1 2022 (H1 2021: £2.6 million). This reflects the ongoing investment in the ImagineX platform which will be central to our long-term growth, with the added investment in FFEI of £0.6 million. The total increase is in proportion with our revenue growth and maintains a spend revenue ratio of approximately 10%.

Operating expenses

Sales and marketing spend for the period was £3.7 million (H1 2021: £3.1 million). The increase in spend reflects the focus on sales and business development in the Printhead and EPS business units and the ability for increased travel in some areas. Savings were previously seen in H1 2021 in both the Printhead and EPS businesses due to COVID-19 which limited our ability to visit customers and led to the cancellation of the majority of tradeshows which one, or both, businesses would have attended.

General and administrative expenses increased to £6.0 million from £4.5 million in H1 2021. On a like-for-like basis, the organic increase (Group excluding FFEI and Megnajet) was £0.8 million (18%). The increase largely relates to planned investment in key areas of the business and infrastructure, including Operations, R&D, HR and Finance.

Profit for the period

The adjusted profit before tax was £1.4 million in 2022 (H1 2021: £1.6 million loss).

Total loss for the period before tax was £0.6 million after accounting for share-based payment charges, exchange differences on intra-group transactions, restructuring and transaction expenses, the R&D expenditure credit, fair value gains on financial assets, amortisation of acquired intangible assets, and discontinued operations. Profit after tax and discontinued operations was £0.4 million (H1 2021: loss of £4.3 million), which includes an income tax credit of £0.9 million relating to the recognition of a previously reversed deferred tax asset.

Basic earnings per share from continuing operations was 0.9p (2021: loss 1.6p).

The adjusted performance of the Printhead business improved £0.4 million from a £0.8 million loss in H1 2021 to a £0.4 million loss in H1 2022 driven by increased sales, and an improved gross margin. The EPS business went from an adjusted £0.8 million loss in 2021 to a £1.1 million profit in H1 2022 due to the increased trading performance. FFEI contributed an adjusted profit before tax of £0.4 million in the period, and Megnajet £0.3 million since acquisition in March 2022.

In calculating the adjusted loss before tax, fair value losses on financial assets were £1.5 million (H1 2021: nil) alongside restructuring costs of £0.2 million, foreign exchange gains on intra-group loans of £0.8 million, research and development expenditure credit of £0.1 million, share-based payments of £0.4 million and amortisation of acquired intangible assets of £0.5 million.

The adjusted profit before tax was £1.4 million, compared to £1.6 million loss in H1 2021. This is a significant step forward for the business, emphasised by the improved delivery of adjusted profit in the first half of 2022 following the return to profit in H2 2021.

The adjusted EBITDA for continuing operations in the period was £3.0 million (2021: £0.3 million), a significant step forward with all elements of the business contributing a positive adjusted EBITDA.

The operating loss for the Group was £0.1 million for H1 2022 (H1 2021: £1.3 million), driven by the Printhead business unit which had an operating loss of £1.6 million (H1 2021: £0.5 million). This loss takes account of the H1 2022 fair value loss on financial assets at fair value through profit and loss of £1.5 million relating to the contingent consideration for the sale of Xaar 3D Limited.

Balance sheet

The Group retains a strong balance sheet and a net cash position at 30 June 2022 of £12.7 million. This represents a decline of £12.4 million in net cash since 31 December 2021 (net cash outflow – continuing operations of £12.0 million which excludes the net cash outflow from discontinued operations of £0.4 million as detailed in note 10 (H1 2021: net cash outflow

from continuing operations of £1.0 million, excluding the net cash inflow from discontinued operations of £0.1 million)), which has been primarily driven by planned capital investment, working capital investment and acquisitions.

Non-current assets increased slightly from £47.4 million at 31 December 2021 to £50.4 million in the first half of the year. Property, plant and equipment increased overall by £1.2 million, driven primarily by the depreciation of assets (£1.3 million), £2.2 million of capital additions and £0.3 million of foreign currency exchange movements. Goodwill and intangible assets have increased by £3.4 million which primarily relates to the acquisition of Megnajet and Technomation. The fair value of the financial asset at fair value through profit or loss decreased by £1.6 million.

Current assets decreased overall by £3.2 million. Overall inventory value has increased by £5.8 million, £3.2 million of which relates to an increase in inventory held by the Printhead business. Trade and other receivables increased by £3.7 million driven by an increase in revenue in the Group and the addition of Megnajet customer balances.

Current liabilities were reduced overall by £1.0 million due mainly to the decrease in trade and other payables.

As a result of the managed investment in inventory, working capital saw an outflow of £10 million, because of continuous operational investment.

The Group maintains a strong disciplined focus on cash, and this will continue throughout 2022. During H1 2022 investing activities saw cash spend of £4.9 million, primarily driven by the acquisition of Megnajet.

The business has a clear plan and strategy which the strong balance sheet and cash position will support. There remain external development opportunities which, if they expand our capabilities and expertise, we will look to potentially add to the Group. We will also continue to invest internally to ensure we have the operational capacity and efficiency to meet future demand, alongside investment in our product roadmap development.

Dividend

No interim dividend has been declared for 2022. The Board regularly reviews capital allocation and believes that prioritising investment to enable profitable growth for the business is currently the most appropriate use of capital.



John Mills
Chief Executive
Officer

19 September 2022



Ian Tichias
Chief Financial
Officer

19 September 2022

Governance update

Risks and uncertainties

A number of potential risks and uncertainties exist which could have a material impact on the Group's performance over the second half of the financial year and could cause actual results to differ materially from expected and historical results.

The Group has been revisiting and enhancing the processes in place for identifying, evaluating and managing the key risks which could have an impact upon the Group's performance. The key risks identified at the year-end and a description of how they relate to the Group's strategy and the approach to managing them are set out on pages 44 to 55 of the Xaar plc Annual Report and Financial Statements 2021, which is available on the Group's website at www.xaar.com.

Management and the Board have reviewed these risks and concluded that the majority of them will continue to remain relevant for the second half of the financial year. Some risks however have been revisited and enhancements to the risk management process are still ongoing and will continue to develop over the next 12 to 18 months.

All the changes in the risk from the year-end are summarised in the table below. Management identified a new risk which is related to the current political situation – the war in Ukraine, which resulted in multiple economic consequences, the most significant of which is high levels of inflation.

The full list of the principal risks as at the half year is the following:

Risk area	Description	Likelihood / magnitude	Reason for the change	Update on actions and mitigation
Market	<p>1. Competition</p> <p>Failure to continually improve may mean that we lose market share or have to reduce prices. Since there are fixed factory costs, reductions in sales volumes may substantially reduce profit margins.</p> <p>We are the only true independent printhead company in the world and we are competing with vertically integrated large scale multinational companies.</p>	<p>Unlikely (-1) / Very High</p> <p>▼</p>	<p>Given recent acquisitions and strategic progress, there is a well-defined value proposition and Product Development Roadmap focused on competitive/market leading product features. This greatly reduces the likelihood of emerging technology outpacing our own development.</p>	No change.
	<p>2. Failure to identify market requirements</p> <p>Products need to meet the changing demands of the market, including regulatory changes.</p> <p>Failure to meet future market requirements/specifications could impact on long-term revenue and profit.</p>	<p>Probable (-1) / Very High</p> <p>▼</p>	<p>Xaar's product development process and roadmap setting is now heavily anchored to end use case customer requirements, ensuring product specifications are very closely aligned with target market sector needs, and competitiveness is against incumbent competition. As a result the likelihood of this risk occurring is reduced.</p>	No change.

Key to change




- ⬆ Increase
 - ↔ No change
 - ⬇ Decrease
- NEW

Risk area	Description	Likelihood / magnitude	Reason for the change	Update on actions and mitigation
Market continued	<p>3. Commercialising new products</p> <p>Failure to test new products under all relevant application conditions could lead to unexpected cost and loss of reputation due to quality failures.</p>	<p>Probable / High</p> <p>⬆</p>	<p>Although we endeavour to work with beta partners at the development stage, it is not possible to test all application conditions pre-launch. This risk is foreseen to stay at this level.</p>	<p>New products are thoroughly tested before launch. Xaar's manufacturing facilities are ISO 9001 accredited. We proactively engage with customers for all new products to ensure all incompatibilities are reviewed quickly using a consistent and thorough investigation process.</p>
	<p>4. Merger and acquisition opportunities</p> <p>Our strategy is predicated primarily on organic growth.</p> <p>Failure to realise the expected benefits of an acquisition or post acquisition performance of the acquired business not meeting the expected financial performance at the time acquisition terms were agreed could adversely affect the strategic development, future financial results and prospects of the Group.</p>	<p>Likely / Medium (-2)</p> <p>⬇</p>	<p>Multiple acquisitions over the past five to six years have been a significant learning experience, which together with a strengthened senior team leads to a reduced possible impact.</p>	<p>The Board reviews the Group strategy annually. Each acquisition is thoroughly reviewed by the Board at each stage.</p> <p>Whenever a potential for M&A is identified, robust modelling of the opportunity is undertaken through involving third party subject matter experts. The competence and independence of the third party involved gets assessed separately by the Board. Professional due diligence is a required step in any acquisition.</p> <p>Senior management and the Board monitor customer and supplier activity through regular meetings and other sources such as industry gatherings.</p> <p>Senior management reviews any relevant M&A activity in the market and decides on specific actions to defend Xaar's position. The overall landscape is constantly reviewed with assistance from external advisors.</p>
	<p>5. Coronavirus (COVID-19) – External</p> <p>In the uncertain environment of a global pandemic, the impact of COVID-19 can be felt within the entire customer base and supply chain.</p> <p>We operate in a global environment with significant exposure as part of the new business model to OEM customers in China, Europe and USA.</p> <p>Any slowdown in the global economy could lead to delays in capital investment for new equipment that utilises Xaar printheads.</p> <p>Temporary disruption to the supply chain may threaten to slow down production.</p>	<p>Certain / High</p> <p>⬆</p>	<p>Remains very high and is one of the key risks the Group is going to face over the next 12-18 months, until China, a key market for Xaar, recovers from Coronavirus. We have plans in place to cope with this period, which include a longer-term plan of expansion into alternative regions (i.e. Americas) and shorter-term measures of advance purchasing of materials and components to protect the supply chain.</p>	<p>No change.</p>

Governance update continued

Risk area	Description	Likelihood / magnitude	Reason for the change	Update on actions and mitigation
Operational	6. Climate change	Probable / Very high ›	Remains unchanged from the date of the Annual Report as the Group continues to evolve the climate risk assessment and response. We anticipate the analysis will be complete by the end of the year, at which point we will have the data to base our future actions on, which will reduce this risk further.	No change.
	7. Organisational capability Our people remain key to our business. Ensuring the right people are in the right roles is critical to our future success and growth. Operations in remote locations or highly competitive markets make attracting and retaining skilled employees challenging. We need to attract and retain the right talent to enable achievement of our strategic aims. Failure to do this risks delivery and growth.	Probable (-1) / Medium ▼	We have significantly increased the strength of the senior team to deliver the strategy, our voluntary turnover is below the industry average and the analysis of our actions proves they have been effective. So the probability of this risk should be reduced.	No change.
	8. Coronavirus (COVID-19) – Internal / Operations Impact across all business operations and locations: Reduction in staff availability and development of commercial opportunities.	Probable (-1) / Low (-1) ▼	The internal Coronavirus risk is significantly reduced due to a much more mature vaccination programme in the countries Xaar operates in, as well as well-established and well-functioning hybrid working arrangements.	No new actions, this risk will be considered for removal in the next review.
	Brexit Removed.	Removed	This is no longer a risk, and our response to all the changes Brexit brought is now operational.	Removed.
	Manufacturing facility Removed.	Removed	No longer a principal risk, since the probability is very low. The only remaining risk is around the supply chain, which is called out separately below.	Removed.




Key to change

-  Increase
-  No change
-  Decrease
- NEW

Risk area	Description	Likelihood / magnitude	Reason for the change	Update on actions and mitigation
Operational continued	<p>9. Partnerships</p> <p>If key partners we have alliances with are acquired, this can change the relationships they have with us.</p>	<p>Probable / Medium</p> 	<p>No change in the rating.</p>	<p>The IP and Legal team focuses on the extensive review of legal agreements and in particular IP with such partners.</p> <p>Partnerships are constantly reviewed both internally and with those partners at the most senior level to develop long-term partnerships and supply agreements to the benefit of both parties.</p> <p>Where significant investment and research is undertaken there will be contractual arrangements to ensure appropriate governance and Board structure to support the business and product development.</p>
	<p>10. Supply chain</p> <p>The Group is dependent on retaining its key suppliers and ensuring that deliveries are on time and the materials supplied are of appropriate quality.</p> <p>There has been a shift from a finished goods risk to a component materials risk particularly where components have a single source of supply.</p> <p>There are challenges with the supply of some key components that are used in production and global logistics routes have experienced some disruption.</p>	<p>Unlikely (-2) / High (-1)</p> 	<p>The risk in the last years was very high due to global shortages in the electronics manufacturing sector. During the past year we have been working with all of our supply chain partners and since the beginning of 2022 we have significantly removed risks from areas of the supply chain through multiple methods such as long-term supply contracts, consignment stock and increased inventory investment as well as re-design on some high risk materials.</p>	<p>Focused on monitoring and securing continuity of supply of components necessary to maintain production and the supply of printheads for the following 18 months.</p> <p>We conduct regular audits of our key suppliers and in addition keep large amounts of safety inventory of key components, which we also regularly review.</p> <p>Dual sourcing for critical components is in place for some suppliers, and there is ongoing work to extend this to the full list of critical suppliers.</p> <p>We will continue to diversify and localise our supply chains, and investigate developing a circular manufacturing approach by recovery of materials from finished goods to be re-utilised in production.</p>
	<p>11. War in Ukraine and world economy (new)</p> <p>The war in Ukraine has materially altered the near-term outlook for the UK and global economies and increased uncertainty over the path ahead. Energy prices are by far the greatest concern for the UK economy which also result in further upward pressure on inflation and a potential hit to GDP growth over the next two years.</p>	<p>Likely / Medium</p> <p>NEW</p>	<p>This risk is new.</p>	<p>We have fixed our unit electricity costs and will continue to do so in future.</p> <p>We have been proactive in buying materials and components to enable continued production.</p> <p>We have no direct operations in Ukraine or Russia.</p> <p>We will continue to evaluate this risk as it evolves further.</p>

Risk area	Description	Likelihood / magnitude	Reason for the change	Update on actions and mitigation
IT	<p>12. IT systems and information failures</p> <p>IT networks, infrastructure and business systems resilience is not sufficient causing access issues for end users.</p> <p>Inability to operate effectively or loss of operating capability.</p> <p>Loss of information, incurring financial or regulatory penalties.</p> <p>Fraud committed through manipulation of IT business systems or data.</p>	<p>Probable / High (+1)</p> <p>^</p>	<p>The acquisition of Megnajat earlier this year increased the risk of integration further.</p> <p>In addition to this, the recent IT controls gap analysis has identified areas for further improvement, which we are going to continue to work on.</p>	<p>Investment has been made to move to a hybrid cloud model, strengthen the resilience and security of our IT infrastructure, rationalise and modernise our business systems, and re-align systems with improved operational business processes.</p> <p>Developed the IT Service Delivery maturity and increased capacity in the Group IT function.</p> <p>Access to systems and data is only provided on a 'need-to-know' and 'least privilege' basis consistent with the user's role and requires the appropriate authorisation.</p> <p>Key business systems are being developed to strengthen IT system controls and further reduce the burden from manual controls.</p>
	<p>13. IT transformation</p> <p>IT transformation programme does not deliver the IT environment that the business requires in a timely and efficient manner leading to the business being hindered in delivering the business strategy and achieving its objectives.</p> <p>The IT transformation programme fails to deliver the key elements of the IT Strategy and achieve the vision for IT.</p> <p>Inability to progress sufficiently quickly to avoid disproportionate increases in the operational cost base as the business operating volumes continue to recover and grow.</p> <p>Lack of alignment between business processes and IT systems.</p>	<p>Unlikely (-1) / Medium (-1)</p> <p>v</p>	<p>Effective change management and programme governance structures established in 2021 and now embedded.</p> <p>Very strong project delivery performance in 2021 and 2022 with all planned projects in the IT infrastructure and IT security work streams delivered to plan.</p> <p>Several key business systems upgraded to the latest supported software releases, including ERP, Product Lifecycle Management and Maintenance Management.</p> <p>As a result of the mitigating actions, the probability of this risk has been reduced and some of the impacts reduced.</p>	<p>Continue with monthly Executive governance and oversight for the IT Transformation programme ensuring it is adequately resourced, milestones are achieved and key decisions are approved.</p> <p>Continue with six monthly Board updates.</p> <p>This risk will be considered for removal in the next risk review.</p>
	<p>14. Cyber threat and information security</p> <p>Malicious cyber-attack breaches IT security leading to a loss of IT infrastructure, business systems, or data and disruption to business operations, ranging from inability to operate effectively to a complete loss of operating capability.</p>	<p>Probable / Medium</p> <p>></p>	<p>Significant progress made in:</p> <p>Strengthening Xaar's IT security defences and reducing the number of vulnerabilities that malicious attackers could exploit.</p> <p>Modernising IT infrastructure and business systems and standardising on a defined set of IT security and recovery solutions across all business units across the Group.</p>	<p>External advisors hired to undertake a comprehensive cyber threat risk assessment.</p> <p>Implemented a risk-based security testing approach across IT infrastructure and systems to identify ongoing vulnerabilities and prioritise remediation.</p> <p>Continue to mitigate against the risk and impacts of a cyber-attack with a number of new or improved capabilities to be delivered.</p>

Key to change

-  Increase
 -  No change
 -  Decrease
- NEW

Risk area	Description	Likelihood / magnitude	Reason for the change	Update on actions and mitigation
Financial	<p>15. Ability to access sufficient capital</p> <p>Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organisation, as well as the strategic plan and vision.</p> <p>Significant investment is required to bring new products to market and ramp up to meaningful volumes.</p>	<p>Unlikely (-1) / High</p> <p></p>	<p>We have established partnerships with our banks who understand our strategic plans. We have a strong, well capitalised balance sheet.</p> <p>We returned to profitability which transformed our ability to raise less expensive financing.</p>	Please see the previous box, no change.
	<p>16. Customer credit exposure</p> <p>The Group may offer credit terms to its customers which at times could be extended beyond what are considered normal terms for products in early stages of their lifecycle. The Group is at risk to the extent that a customer may be unable to pay the debt on time, thus impacting working capital.</p>	<p>Unlikely (-1) / Medium</p> <p></p>	Strong customer credit controls together with continued history of low bad debts demonstrate that the probability of this risk is going down.	<p>No change.</p> <p>This risk will be considered for removal in the next review.</p>
	<p>17. Inventory obsolescence</p> <p>Holding excess inventory levels when compared to demand, leads to increased risk of obsolescence and write-off before consumption, and working capital restrictions.</p>	<p>Probable (+1) / High</p> <p></p>	The probability has been adjusted upwards due to higher stock levels as at 30 June 2022.	No change.
	<p>18. Volatility in exchange rates</p> <p>Global economic events and uncertainty may cause currencies to fluctuate and currency volatility contributes to variations in our sales of products and services in impacted jurisdictions.</p>	<p>Likely / Medium (+1)</p> <p></p>	Due to the state of the current world economy, the impact of this risk is higher.	Ongoing review to mitigate impact of exposure through USD/EUR movements.

Directors' responsibilities statement

We confirm that to the best of our knowledge:

- The condensed set of financial statements has been prepared in accordance with International Accounting Standard 34 – Interim Financial Reporting as adopted by the UK
- The interim management report includes a fair review of the information required by:
 - DTR 4.2.7R of the Disclosure Guidance and Transparency Rules, being an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed set of financial statements; and a description of the principal risks and uncertainties for the remaining six months of the year; and
 - DTR 4.2.8R of the Disclosure Guidance and Transparency Rules, being related party transactions that have taken place in the first six months of the current financial year and that have materially affected the financial position or performance of the entity during that period; and any changes in the related party transactions described in the last Annual Report that could do so.

By Order of the Board



John Mills
Chief Executive Officer

19 September 2022

Condensed consolidated income statement

for the six months ended 30 June 2022

	Notes	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited, restated) £'000	Twelve months ended 31 December 2021 (audited) £'000
Revenue	3	36,608	26,302	59,254
Cost of sales		(22,118)	(18,027)	(39,064)
Gross profit		14,490	8,275	20,190
Research and development expenses		(3,319)	(2,619)	(5,706)
Research and development expenditure credit		79	200	270
Sales and marketing expenses		(3,665)	(3,106)	(6,342)
General and administration expenses		(5,954)	(4,507)	(10,070)
Impairment (losses)/reversal of financial assets		(46)	14	388
Restructuring and transaction expenses	2	(226)	(873)	(1,404)
Fair value (loss)/gain on financial assets at FVPL	9	(1,469)	-	987
Gain on derivative financial liabilities		-	1,269	2,919
Operating (loss)/profit		(110)	(1,347)	1,232
Investment income		22	2	4
Finance costs		(213)	(45)	(242)
(Loss)/profit before tax		(301)	(1,390)	994
Income tax credit/(expense)	4	990	51	(299)
Profit/(loss) for the period from continuing operations		689	(1,339)	695
(Loss)/profit from discontinued operations after tax	10	(338)	(2,928)	13,533
Profit/(loss) for the period		351	(4,267)	14,228
Attributable to:				
Owners of the Company		351	(2,929)	16,219
Non-controlling interest		-	(1,338)	(1,991)
Profit/(loss) for the period		351	(4,267)	14,228
Earnings/(loss) per share – Total				
Basic	5	0.5p	(3.8p)	20.9p
Diluted	5	0.4p	(3.8p)	20.6p
Earnings/(loss) per share – Continuing operations				
Basic	5	0.9p	(1.6p)	0.9p
Diluted	5	0.9p	(1.6p)	0.9p

No dividends were paid in the current or prior period.

Condensed consolidated statement of comprehensive income for the six months ended 30 June 2022

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited, restated) £'000	Twelve months ended 31 December 2021 (audited) £'000
Profit/(loss) for the period attributable to shareholders	351	(4,267)	14,228
Exchange differences on translation of net investment	623	(22)	143
Other comprehensive income/(loss) for the period	623	(22)	143
Total comprehensive income/(loss) for the period	974	(4,289)	14,371
Total comprehensive income/(loss) attributable to:			
Owners of the Company	974	(2,947)	16,366
Non-controlling interest	-	(1,342)	(1,995)
	974	(4,289)	14,371

Condensed consolidated statement of financial position

as at 30 June 2022

	Notes	As at 30 June 2022 (unaudited) €'000	As at 31 December 2021 (audited) €'000
Non-current assets			
Goodwill	8	7,139	5,894
Other intangible assets		6,230	4,043
Property, plant and equipment		17,404	16,226
Right of use asset		8,492	9,368
Financial asset at fair value through profit or loss		10,280	11,850
Deferred tax asset		841	-
		50,386	47,381
Current assets			
Inventories		24,637	18,839
Trade and other receivables		15,799	12,138
Current tax asset		235	531
Cash and cash equivalents		12,689	25,051
		53,360	56,559
Total assets		103,746	103,940
Current liabilities			
Trade and other payables		(20,755)	(21,489)
Provisions		(287)	(264)
Lease liabilities		(928)	(1,231)
		(21,970)	(22,984)
Net current assets		31,390	33,575
Non-current liabilities			
Deferred tax liabilities		-	(1)
Lease liabilities		(8,160)	(8,499)
Provision		(300)	(300)
Other financial liabilities		(3,792)	(3,354)
		(12,252)	(12,154)
Total liabilities		(34,222)	(35,138)
Net assets		69,524	68,802
Equity			
Share capital		7,844	7,844
Share premium		29,427	29,427
Own shares		(2,070)	(1,923)
Translation reserves		1,634	1,011
Other reserves		22,164	21,820
Retained earnings		10,525	10,623
Total equity		69,524	68,802

Condensed consolidated statement of changes in equity

for the six months ended 30 June 2022

	Share capital £'000	Share premium £'000	Own shares £'000	Translation reserve £'000	Other reserves £'000	Retained earnings £'000	Total £'000	Non-controlling interest £'000	Total equity £'000
Balances at 1 January 2022	7,844	29,427	(1,923)	1,011	21,820	10,623	68,802	–	68,802
Loss for the period	–	–	–	–	–	351	351	–	351
Exchange differences on retranslation of net investment	–	–	–	623	–	–	623	–	623
Total comprehensive loss for the period	–	–	–	623	–	351	974	–	974
Own shares sold in the period	–	–	353	–	–	(200)	153	–	153
Own shares acquired in the period	–	–	(500)	–	–	–	(500)	–	(500)
Cash-settled share-based payments	–	–	–	–	–	(249)	(249)	–	(249)
Credit to equity for equity-settled share-based payments	–	–	–	–	344	–	344	–	344
Balances at 30 June 2022	7,844	29,427	(2,070)	1,634	22,164	10,525	69,524	–	69,524
Balances at 1 January 2021	7,833	29,328	(1,957)	864	21,167	(5,564)	51,671	3,771	55,442
Loss for the period (as originally reported)	–	–	–	–	–	(3,699)	(3,699)	(1,559)	(5,258)
Correction of error (note 11)	–	–	–	–	–	770	770	221	991
Loss for the period (as restated)	–	–	–	–	–	(2,929)	(2,929)	(1,338)	(4,267)
Exchange differences on retranslation of net investment	–	–	–	(18)	–	–	(18)	(4)	(22)
Total comprehensive loss for the period (restated)	–	–	–	(18)	–	(2,929)	(2,947)	(1,342)	(4,289)
Issue of share capital	1	–	–	–	–	–	1	–	1
Own shares sold in the period	–	–	28	–	–	(26)	2	–	2
Credit to equity for equity-settled share-based payments	–	–	–	–	134	–	134	–	134
Balances at 30 June 2021 (restated)	7,834	29,328	(1,929)	846	21,301	(8,519)	48,861	2,429	51,290

Condensed consolidated cash flow statement

for the six months ended 30 June 2022

	Notes	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited) £'000	Twelve months ended 31 December 2021 (audited) £'000
Net cash used in operating activities	7	(6,943)	(659)	(2,054)
Investing activities				
Investment income		22	11	13
Movement in treasury deposits		-	161	161
Purchases of property, plant and equipment		(1,470)	(1,221)	(1,876)
Proceeds on disposal of property, plant and equipment		11	-	209
Acquisition of intangible assets		-	(10)	(38)
Cash earn-out received from financial asset at FVPL		101	-	-
Proceeds from disposal of investment in subsidiary		-	-	9,272
Cash attributable to subsidiary sold		-	-	(96)
Acquisition of subsidiary, net cash acquired		(1,202)	-	168
Asset acquisition (Technomation), net of cash acquired		(2,334)	-	-
Net cash (used)/generated in investing activities		(4,872)	(1,059)	7,813
Financing activities				
Proceeds from sale of own shares		181	6	150
Payment of cash-settled share-based payments		(249)	-	-
Payment for own shares acquired		(500)	-	-
Payment of lease interest		(138)	(52)	(165)
Payment of lease liabilities		(284)	(296)	(659)
Net cash used in financing activities		(990)	(342)	(674)
Net (decrease)/increase in cash and cash equivalents		(12,805)	(2,060)	5,085
Effect of foreign exchange rate changes		443	(155)	(110)
Cash and cash equivalents at beginning of period		25,051	20,076	20,076
Cash and cash equivalents at end of period		12,689	17,861	25,051
Cash and cash equivalents attributable to assets held for sale		-	782	-
Cash and cash equivalents		12,689	17,079	25,051

Cash and cash equivalents (which are presented as a single class of asset on the face of the condensed consolidated statement of financial position) comprise cash at bank and other short-term highly liquid investments with a maturity of three months or less. The carrying amount of these assets is approximately equal to their fair value.

Notes to the interim financial information for the six months ended 30 June 2022

1. Basis of preparation and accounting policies

Basis of preparation

These interim financial statements have been prepared in accordance with the accounting policies set out in the Group's Annual Report and Financial Statements 2021 on pages 120 to 129 (available at www.xaargroup.com) and were approved by the Board of Directors on 19 September 2022. The interim financial statements for the six months ended 30 June 2022 have been prepared in accordance with IAS 34 'Interim Financial Reporting' as adopted by the United Kingdom. The interim financial statements do not include all the information and disclosures in the annual financial statements and should be read in conjunction with the Group's annual financial statements as at 31 December 2021.

The interim financial statements are unaudited but have been reviewed by the auditor Ernst & Young LLP. They do not constitute statutory financial statements as defined in section 434 of the Companies Act 2006. The comparative figures for the financial year ended 31 December 2021 are derived from the Group's statutory accounts for that financial year. Those accounts have been reported on by the Company's auditor and delivered to the Registrar of Companies. The report of the auditor was (i) unqualified, (ii) did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying their report, and (iii) did not contain a statement under section 498(2) or 498(3) of the Companies Act 2006.

Judgements and estimates

In preparing these interim financial statements, the significant judgements made by management in applying the Group's accounting policies and the key sources of estimation uncertainty were the same as those that applied to the consolidated financial statements for the year ended 31 December 2021.

Significant accounting policies

The accounting policies adopted in the preparation of the interim condensed consolidated financial statements are consistent with those followed in the preparation of the Group's annual financial statements for the year ended 31 December 2021.

Principal risks and uncertainties

The Board has overall responsibility for the establishment and oversight of the Group's risk management framework. The Board has an established, structured approach to risk management, which includes continuously assessing and monitoring the key risks and uncertainties of the business. An outline of the key risks and uncertainties faced by the Group is detailed on pages 44 to 55 of the Xaar plc Annual Report and Financial Statements 2021, which is available on the Group's website at www.xaargroup.com

The Board has reviewed these risks as part of a half year risk assessment update including several changes which are reflected in the Xaar plc Interim Report 2022. The potential impact of these risks on our strategy and financial performance, together with details of our specific mitigation actions, are set out in the Xaar plc Annual Report and Financial Statements 2021, and on pages 8 to 13 of this report which includes all the key changes since the Xaar plc Annual Report and Financial Statements 2021.

Going concern

The Board continuously reviews the performance of the business and its future prospects, together with other factors likely to affect its future development, performance and position.

There are continuing risks arising from the economic consequences of wider global issues, particularly with cost inflation, and COVID-19 continues to be a risk to economic disruption, particularly in Asia where we have seen delayed sales orders from our customers in China due to continued COVID-19 restrictions. Whilst we expect this to continue in the short to medium term, we remain on track to return the business to consistent profitable growth and the Board looks forward to the future with confidence. The Group continues to enjoy a healthy cash position and is well positioned to cope with the current situation. The Board remains confident in the long-term future prospects for the Group and its ability to continue as a going concern for the foreseeable future.

The Group's day-to-day working capital requirements are expected to be met through the current cash and cash equivalents and the Group was debt free as at 30 June 2022. The Board has a reasonable expectation that the Group has adequate resources to continue in operational existence for the period to 31 December 2023, taking account of reasonably possible changes in trading performance. For this reason, the Group continues to adopt the going concern basis in preparing the interim financial statements.

2. Reconciliation of adjusted financial measures

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited, restated) £'000	Twelve months ended 31 December 2021 (audited) £'000
(Loss)/profit before tax from continuing operations	(301)	(1,390)	994
Share-based payment charges	435	155	758
Exchange differences relating to intra-group transactions	(792)	267	95
Gain on derivative financial liabilities	-	(1,269)	(2,919)
Restructuring and transaction expenses	226	873	1,404
Research and development expenditure credit	(79)	(200)	(270)
Fair value loss/(gain) on financial assets at FVPL (note 9)	1,469	-	(987)
Amortisation of acquired intangible assets	486	-	354
Adjusted profit/(loss) before tax from continuing operations	1,444	(1,564)	(571)
Interest income	(22)	(2)	(4)
Finance costs	213	45	242
Depreciation of property, plant and equipment	1,293	1,697	3,318
Amortisation of intangible assets (other than acquired intangibles)	20	66	121
Loss on asset disposal	85	95	77
Adjusted EBITDA from continuing operations	3,033	337	3,183

EBITDA is calculated as statutory operating profit before depreciation, amortisation and impairment of property, plant and equipment, intangible assets and goodwill. Adjusted EBITDA is calculated as EBITDA excluding other adjusting items as defined.

Adjusted financial measures are alternative performance measures, which adjust for recurring and non-recurring items that management consider are not reflective of the underlying performance of the Group. Recurring items are adjusted each year irrespective of materiality to ensure consistent treatment. Non-recurring items are identified and adjusted for by virtue of their size or nature.

Share-based payment charges include the IFRS 2 charge for the period of £344,000 (H1 2021: £134,000) and the expense relating to National Insurance on the outstanding potential share option gains of £91,000 (H1 2021: £21,000). These costs were included in the general and administrative expenses in the consolidated income statement.

Exchange differences relating to the operations in the United States represent exchange gains or losses recorded in the consolidated income statement as a result of intra-group transactions in the United States. These costs were included in general and administrative expenses in the consolidated income statement.

Gain on derivative financial instruments relates to gains made on call option contracts. The option was exercised in 2021. These amounts are included in the consolidated income statement under Gain on derivative financial liabilities.

Restructuring and transaction expenses in the first half of 2022 of £226,000 (H1 2021: £873,000) mainly relate to costs incurred and provisions made in relation to acquisition transaction costs of £196,000 and re-organisation costs. Cash expenditure arising from restructuring costs and transaction expenses in the first half of 2022 was £657,000 (H1 2021: £396,000).

The research and development expenditure credit relates to the corporation tax relief receivable relating to qualifying research and development expenditure. This item is shown on the face of the consolidated income statement. Cash receipts of £199,000 received during the year were in relation to the XaarJet Limited RDEC claim which related to the financial year 31 December 2021. There were no RDEC receipts in 2021.

The fair value loss/(gain) on financial assets at fair value through profit and loss relates to the sale of Xaar 3D Limited. The net consideration includes contingent consideration that is valued and reported at fair value. The fair value movement is recognised in the income statement as fair value loss/(gain) on financial assets at fair value through profit and loss.

The amortisation of acquired intangible assets relates to the acquisition of FFEI Limited in 2021 and the acquisition of Megnajet Ltd and Technomation Ltd in 2022. These include patents and customer relationships for FFEI which are being amortised over six years and IP, brand and customer relationships for Megnajet and Technomation which are being amortised over eight to ten years. These costs were included in general and administrative expenses in the consolidated income statement.

Notes to the interim financial information continued

for the six months ended 30 June 2022

2. Reconciliation of adjusted financial measures continued

	Six months ended 30 June 2022 (unaudited) Pence per share	Six months ended 30 June 2021 (unaudited, restated) Pence per share	Twelve months ended 31 December 2021 (audited) Pence per share
Basic earnings/(loss) per share from continuing operations (note 5)	0.9p	(1.6p)	0.9p
Share-based payment charges	0.6p	0.2p	1.0p
Exchange differences relating to the intra-group transactions	(1.0p)	0.3p	0.1p
Gain on derivative financial liability	–	(1.6p)	(3.8p)
Restructuring and transaction expenses	0.3p	1.1p	1.8p
Fair value loss/(gain) on financial assets at FVPL	1.9p	–	(1.3p)
Amortisation of acquired intangible assets	0.6p	–	0.5p
Tax effect of adjusting items	0.1p	(0.1p)	(0.2p)
Adjusted basic earnings/(loss) per share from continuing operations	3.3p	(1.7p)	(1.0p)

The tax credit effect in the adjusted basic earnings per share reflects the fact that the gain on derivative financial liability (in prior periods), fair value loss on financial assets at FVPL and transaction costs were non-deductible. In addition, deferred tax assets were largely not recognised in respect of share-based payments.

This reconciliation is provided to align with how the Board measures and monitors the business at an underlying level, and is a measure used in establishing remuneration.

3. Business segments

For management reporting purposes, the Group's operations are analysed according to the four operating segments of 'Printhead', 'Product Print Systems' (EPS), 'Digital Imaging' (FFEI) and 'Ink Supply Systems' (Megnajet). These four operating segments are the basis on which the Group reports its primary segment information and on which decisions are made by the Group's Chief Executive Officer and Board of Directors, and resources allocated. Each business unit is run independently of the others and headed by a general manager. The Group's chief operating decision maker is the Chief Executive Officer. There is no aggregation of segments for disclosure purposes.

Digital Imaging was added in the second half of 2021 as a result of the FFEI acquisition and Ink Supply Systems was added this half year as a result of the Megnajet acquisition on 2 March 2022.

Segment information for continuing operations is presented below:

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited) £'000	Twelve months ended 31 December 2021 (audited) £'000
Continuing operations			
Revenue			
Printhead	20,658	20,183	40,104
Product Print Systems	9,227	6,119	13,900
Digital Imaging	6,108	–	5,250
Ink Supply Systems	615	–	–
Total revenue	36,608	26,302	59,254

3. Business segments continued

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited, restated) £'000	Twelve months ended 31 December 2021 (audited) £'000
Continuing operations			
Result			
Printhead	(1,149)	(364)	2,352
Product Print Systems	1,115	(828)	(821)
Digital imaging	43	–	459
Ink supply systems	316	–	–
Total segment result	325	(1,192)	1,990
Net unallocated corporate expenses	(435)	(155)	(758)
Operating (loss)/profit	(110)	(1,347)	1,232
Investment income	22	2	4
Finance costs	(213)	(45)	(242)
(Loss)/profit before tax	(301)	(1,390)	994
Tax	990	51	(229)
Profit/(loss) for the period attributable to shareholders	689	(1,339)	695

Unallocated corporate expense relates to administrative activities which cannot be directly attributed to any of the principal product groups, consisting of share-based payment charges.

4. Income tax

The major components of income tax (credit)/expense in the income statement are as follows:

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited, restated) £'000	Twelve months ended 31 December 2021 (audited) £'000
Current income tax			
Income tax charge	9	139	186
Deferred income tax			
Relating to origination and reversal of temporary differences	(999)	(101)	83
Income tax (credit)/charge	(990)	38	269
Income tax (credit)/charge reported in the statement of profit and loss	(990)	(51)	299
Income tax charge attributable to discontinued operations	–	89	(30)
Income tax (credit)/charge	(990)	38	269

Whilst the Board believes in the long-term potential and profitability of the Printhead business unit, the forecast taxable losses over the next couple of years mean that the UK tax losses will not be utilised in the short term. Therefore, no deferred tax asset has been recognised relating to UK losses for 2022. However, due to forecasted taxable profits for the EPS business unit, a deferred tax asset in relation to brought forward US losses has been fully recognised resulting in a tax credit for the period, and is expected to be used over 2022, 2023 and 2024.

In the year ending 31 December 2021, the Group claimed R&D expenditure credit (RDEC), where the R&D credit receivable is included in operating loss. In the current period, the eligible UK companies in the Group are claiming R&D tax relief, and RDEC for paid for development.

Notes to the interim financial information continued

for the six months ended 30 June 2022

5. Earnings per ordinary share – basic and diluted

The calculation of basic and diluted earnings per share is based upon the following data:

	Six months ended 30 June 2021 (unaudited) £'000	Six months ended 30 June 2021 (unaudited, restated) £'000	Twelve months ended 31 December 2021 (audited) £'000
Earnings			
Earnings for the purposes of earnings per share being net loss attributable to equity holders of the parent	351	(2,929)	16,219
from continuing operations	689	(1,250)	695
from discontinued operations	(338)	(1,678)	15,524
Number of shares			
Weighted average number of ordinary shares for the purposes of basic earnings per share	77,657,189	77,514,560	77,528,064
Effect of dilutive potential ordinary shares:			
Share options	1,481,799	–	1,261,215
Weighted average number of ordinary shares for the purposes of diluted earnings per share	79,138,987	77,514,560	78,789,279
(Loss)/earnings per share – Total			
Basic	0.5p	(3.8p)	20.9p
Diluted	0.4p	(3.8p)	20.6p
(Loss)/earnings per share – Continuing operations			
Basic	0.9p	(1.6p)	0.9p
Diluted	0.9p	(1.6p)	0.9p

6. Share capital and own shares

During the six months ended 30 June 2022, there were no new ordinary shares issued. During the six months ended 30 June 2021, a total of 9,138 new ordinary shares of 10 pence each were issued to satisfy exercises under the Company's LTIP schemes with a £nil exercise price.

During the six months ended 30 June 2022, the ESOP purchased 221,751 shares for £0.5 million (H1 2021: nil), and 128,533 shares were used by the ESOP to satisfy share award exercises (H1 2021: 10,573 shares).

7. Notes to the cash flow statement

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited, restated) £'000	Twelve months ended 31 December 2021 (audited) £'000
(Loss)/profit before tax from continuing operations	(301)	(1,390)	994
(Loss)/profit before tax from discontinued operations	(338)	(2,839)	13,503
Total (loss)/profit before tax	(639)	(4,229)	14,497
Adjustments for:			
Share-based payments	344	135	758
Depreciation of property, plant and equipment	1,293	1,698	3,318
Depreciation of right of use assets	518	361	871
Amortisation of intangible assets	506	67	475
Research and development expenditure credit	(79)	(305)	(582)
Investment income	(22)	(2)	(4)
Interest expense	212	50	252
Foreign exchange (gains)/losses	(837)	289	(23)
Gain on re-measurement of derivative liability	-	(1,269)	(2,919)
Fair value loss/(gain) on financial assets at fair value through profit or loss	1,469	-	(987)
Loss on disposal of property, plant and equipment	85	95	77
Profit on disposal of investment in subsidiary	-	-	(17,899)
Decrease/(increase) in provisions	20	92	(74)
Operating cash flows before movements in working capital	2,870	(3,018)	(2,240)
Increase in inventories	(5,047)	(3,335)	(7,964)
Increase in receivables	(3,383)	(882)	(1,525)
(Decrease)/increase in payables	(1,594)	6,741	9,525
Cash used in operations	(7,154)	(494)	(2,204)
Income taxes received/(paid)	211	(165)	150
Net cash used in operating activities	(6,943)	(659)	(2,054)

8. Goodwill

The carrying amount of goodwill at 30 June 2022 was £7,139,000 (31 December 2021: £5,894,000).

Goodwill acquired in a business combination is allocated, at acquisition, to the cash-generating units (CGUs) that are expected to benefit from that business combination. Goodwill occurred from the acquisition of Engineered Printing Solutions (EPS) in July 2016, FFEI Limited in July 2021 and Megnajet Ltd in March 2022.

	30 June 2022 £'000	31 Dec 2021 £'000
Balance at the beginning of the year	5,894	5,152
Addition – acquisition of Megnajet (2021: FFEI)	661	689
Foreign currency translation	584	53
Balance at the end of the year	7,139	5,894

As part of the reportable segments, goodwill amounting to £5,789,000 is attributed to Product Print Systems (a single CGU), £689,000 is attributed to FFEI (a single CGU), and £661,000 is attributed to Megnajet.

The Group tests goodwill annually for impairment or more frequently if there are indications that goodwill might be impaired. No impairment has been identified and therefore no impairment loss has been recognised during the current or preceding period. The recoverable amount of the CGU is determined from a value-in-use calculation. The annual impairment review for Product Print Systems and Megnajet will continue to be performed on 31 December each year.

FFEI Limited goodwill impairment review

Following the acquisition of FFEI Limited on 11 July 2021, the Group has performed the annual impairment review for goodwill at half year, one year post acquisition. A cash flow forecast was prepared for a period of five years based upon the strategic plan for the business and a terminal value determined using a 1.01% growth rate in FFEI Limited, based on OECD growth rates.

Notes to the interim financial information continued

for the six months ended 30 June 2022

8. Goodwill continued

FFEI Limited goodwill impairment review continued

To evaluate the risk of impairment, the Group adjusted its cash flows over the five-year period to reflect constraints on key assumptions including new product introductions, regional expansion and growth rates of existing products. These adjusted cash flows are based on the sensitised forecast as described and bring a reduction of £49.3 million to the initial value in use. This adjusted case is broadly aligned with the cash flows assumed within the original acquisition accounting, with additional growth arising from product and market developments in the 12 months since acquisition. The discount rate applied to the cash flow projections is 11.35% and reflects external third party advice on the discount rate associated with FFEI Limited. The discount rate reflects the risk free rate, equity beta and local market premium as calculated at 30 June 2022.

The recoverable amount calculated based on the sensitised forecast set out above exceeds the carrying value of the FFEI Limited CGU by £7.2 million. Further sensitivity analysis has been completed on each key assumption (Revenue, Gross Margin, Discount Rate, Long Term Growth Rate and EBITDA) for the FFEI Limited business. The carrying amount of goodwill would exceed its recoverable amount, when compared to the adjusted cash flows, if the following 'reasonably possible changes' were to occur:

- revenue growth were to decline to 7% across the forecast period;
- average gross margin on sales were to decline from 31% to 28% over the five-year period.

9. Derivative financial instruments

Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis:

Some of the Group's financial assets and financial liabilities are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation technique(s) and inputs used).

Financial asset/financial liabilities	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Relationship and sensitivity of unobservable inputs to fair value
Financial asset at fair value through profit or loss (Level 3)	<p>Monte Carlo Simulation model</p> <p>The following variables were taken into consideration: revenue projections, management forecast and discount rate.</p> <p>The milestone consideration and 3% earn-out consideration are calculated based on the terms of the proposed transaction and by reference to simulated revenue. This is then discounted back to the valuation date using a discount rate over a period commensurate with the year in which payments are payable.</p>	<p>Revenue volatility</p> <p>Risk-adjusted discount rate</p>	<p>10% increase/(decrease) in revenue volatility would result in £23,000 decrease and £11,000 increase in fair value respectively.</p> <p>2% increase/(decrease) in discount rate would result in £50,000 decrease and £53,000 increase in fair value respectively.</p>

There were no transfers between Level 1 and 2 during the current or prior year.

Reconciliation of Level 3 fair value measurements of financial instruments:

On 1 November 2021, the sale of Xaar 3D Limited to Stratasys was completed and Xaar received net cash of £9,272,000 and contingent consideration of £10,863,000. The contingent consideration had a fair value of £11,850,000 as at 31 December 2021. The contingent consideration is recognised as financial asset at fair value through profit or loss. During the period, Xaar received an earn-out income amounting to \$128,000 or £101,000. The fair value of the contingent consideration as at 30 June 2022 is £10,280,000 with a fair value movement of £1,469,000.

	Six months ended 30 June 2022 (unaudited) £'000
Balance at 1 January 2022	11,850
Earn out received	(101)
Fair value loss on financial assets at FVPL	(1,469)
Balance at 30 June 2022	10,280

10. Discontinued operations

The Thin Film business which was discontinued in 2019 incurred costs in 2022 which mainly related to some maintenance costs and a goodwill repayment to a customer.

As detailed in the 2021 Annual Report, Xaar 3D business completed its divestment on 1 November 2021. The business unit was deconsolidated from the Group and there are no transactions recorded for the period ended 30 June 2022.

The results of Thin Film and 3D related activities for the period are shown below:

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited) £'000	Twelve months ended 31 December 2021 (audited) £'000
Thin Film			
Revenue	-	334	384
Expenses	(338)	(485)	(623)
Loss before income tax	(338)	(151)	(239)
Income tax charge	-	-	-
Loss after income tax from discontinued operations	(338)	(151)	(239)

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited, restated) £'000	Twelve months ended 31 December 2021 (audited) £'000
3D			
Revenue	-	1,472	2,918
Expenses	-	(4,159)	(7,075)
Loss before income tax	-	(2,687)	(4,157)
Income tax (charge)/credit	-	(89)	30
Net loss before gain on sale	-	(2,776)	(4,127)
Gain on sale of investment in subsidiary	-	-	17,899
(Loss)/profit after income tax from discontinued operation	-	(2,776)	13,772

Out of the £4,357,000 expenses (restated), £197,000 relates to a service charge from the Group undertaking which has to be eliminated in the Group's consolidated income statement.

Notes to the interim financial information continued

for the six months ended 30 June 2022

10. Discontinued operations continued

The net cash flows incurred by Thin Film and 3D are as follows.

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited) £'000	Twelve months ended 31 December 2021 (audited) £'000
Thin Film			
Net cash (outflow)/inflow from operating activities	(394)	120	103
Net cash (outflow)/inflow from discontinued operations	(394)	120	103

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited) £'000	Twelve months ended 31 December 2021 (audited) £'000
3D			
Net cash outflow from operating activities	–	(1,210)	(1,792)
Net cash outflow from investing activities	–	(41)	(122)
Net cash outflow from financing activities	–	(74)	(98)
Net cash outflow from discontinued operations	–	(1,325)	(2,012)

	Six months ended 30 June 2022 (unaudited) £'000	Six months ended 30 June 2021 (unaudited, restated) £'000	Twelve months ended 31 December 2021 (audited) £'000
Earnings per share			
Basic, (loss)/earnings per share for the period from discontinued operations	(0.4p)	(2.2p)	20.0p
Diluted, (loss)/earnings per share for the period from discontinued operations	(0.4p)	(2.2p)	19.7p

Potential ordinary shares are treated as dilutive if their conversion to ordinary shares would decrease earnings per share or increase loss per share. Therefore, the diluted earnings per share is not impacted by the effect of dilutive potential ordinary shares.

11. Restatement of prior period

The financial statements include a prior period restatement in relation to non-cash inventory related adjustments identified at EPS in 2021, that relate prior to 2020. Inventory items with a total value of \$827,000 (£589,000) were identified as being held on the balance sheet that had been previously disposed, scrapped or consumed prior to 1 January 2020. The errors occurred as a result of the internal control deficiencies identified in the EPS subsidiary, in respect of the adequacy of controls over inventory management, as disclosed in the 2020 Annual Report and Financial Statements.

Additionally, an amount owed to an EPS supplier of \$153,000 (£109,000) was incorrectly classified as a vendor deposit on the balance sheet when the payment was made to them in 2020, which should have been recognised as an expense in 2016. A deferred tax credit of \$274,000 (£198,000) was recognised as at 30 June 2021 relating to the loss generated by these adjustments. Within the 2021 interim financial statements the inventory and vendor deposit adjustments were recorded within cost of sales, however following further investigation (and consistent with the 2021 full year financial statements) the adjustment has been updated to restate opening reserves as the issue pre-dates the periods reported in these financial statements. The increase in the brought forward tax losses as a result of these adjustments was not recognised as a deferred tax asset but increased the level of unused tax losses.

Actions were taken in 2021 to remediate the deficiencies identified. Process changes have been made to prevent the reoccurrence of such errors, which have continued during 2022.

Furthermore, there is also a prior period restatement in respect to depreciation and amortisation of 3D assets held for sale. The adjustment relates to a reversal of depreciation and amortisation from the time 3D has been classified as assets held for sale to 30 June 2021. This adjustment is required because in accordance with IFRS depreciation and amortisation of non-current assets should cease from the point the assets are classified as assets held for sale.

The following tables summarise the impact of the prior period restatement on the financial statements of the Group for the period ended 30 June 2021:

	Six months ended 30 June 2021			
	As reported £'000	EPS inventory £'000	3D depreciation £'000	Restated £'000
Consolidated income statement				
Revenue	26,302	–	–	26,302
Cost of sales	(18,725)	698	–	(18,027)
Gross profit	7,577	698	–	8,275
Research and development expenses	(2,619)	–	–	(2,619)
Research and development expenditure credit	200	–	–	200
Sales and marketing expenses	(3,106)	–	–	(3,106)
General and administrative expenses	(4,507)	–	–	(4,507)
Impairment gains on financial assets	14	–	–	14
Restructuring and investment expenses	(873)	–	–	(873)
Gain on derivative financial liabilities	1,269	–	–	1,269
Operating (loss)/profit	(2,045)	698	–	(1,347)
Investment income	2	–	–	2
Finance costs	(45)	–	–	(45)
(Loss)/profit before tax	(2,088)	698	–	(1,390)
Income tax credit/(expense)	249	(198)	–	51
(Loss)/profit for the period from continuing operations	(1,839)	500	–	(1,339)
(Loss)/profit for the period from discontinued operations	(3,419)	–	491	(2,928)
(Loss)/profit for the period	(5,258)	500	491	(4,267)
Attributable to:				
Owners of the Company	(3,699)	500	270	(2,929)
Non-controlling interests	(1,559)	–	221	(1,338)
	(5,258)	500	491	(4,267)
Earnings/(loss) per share – total				
Basic	(4.8p)	0.65p	0.35p	(3.8p)
Diluted	(4.8p)	0.65p	0.35p	(3.8p)
Earnings/(loss) per share – continuing operations				
Basic	(2.3p)	0.69p	–	(1.6p)
Diluted	(2.3p)	0.69p	–	(1.6p)

Notes to the interim financial information continued

for the six months ended 30 June 2022

11. Restatement of prior period continued

Consolidated statement of comprehensive income	Six months ended 30 June 2021			
	As reported £'000	EPS inventory £'000	3D depreciation £'000	Restated £'000
(Loss)/profit for the period	(5,258)	500	491	(4,267)
Exchange differences on retranslation of net investment	(22)	-	-	(22)
Other comprehensive loss for the period	(22)	-	-	(22)
Total comprehensive (loss)/income for the period	(5,280)	500	491	(4,289)
Attributable to:				
Owners of the Company	(3,717)	500	270	(2,947)
Non-controlling interests	(1,563)	-	221	(1,342)
	(5,280)	500	491	(4,289)

Consolidated statement of financial position	Six months ended 30 June 2021			
	As reported £'000	EPS inventory £'000	3D depreciation £'000	Restated £'000
Current assets				
Disposal group assets held for sale	8,986	-	491	9,477
Equity				
Translation reserve	800	46	-	846
Retained earnings	(8,527)	(262)	270	(8,519)
Non-controlling interests	2,208	-	221	2,429

Consolidated cash flow statement	Six months ended 30 June 2021			
	As reported £'000	EPS inventory £'000	3D depreciation £'000	Restated £'000
Loss before tax from continuing operations	(2,088)	698	-	(1,390)
Loss before tax from discontinued operations	(3,330)	-	491	(2,839)
Depreciation of property, plant and equipment	1,864	-	(166)	1,698
Depreciation of right of use assets	425	-	(64)	361
Amortisation of intangible assets	328	-	(261)	67
(Increase)/decrease in inventories	(2,637)	(698)	-	(3,335)

12. Related party transactions

From 1 November 2021, both product sales between Xaar and Stratasys and related party transactions associated with the 'go-to-market' functions were no longer classed as related party. As detailed in the 2021 Annual Report, Xaar 3D business completed its divestment and deconsolidated from the Group.

There have been no material changes to the related party arrangements as reported in note 34 to the Annual Report and Financial Statements for the year ended 31 December 2021. Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

13. Business combination

On 2 March 2022, Xaar completed the acquisition of 100% of the share capital of Megnajet Ltd and Technomation Ltd. The companies trade together under the name of Megnajet, and design and manufacture industrial ink management and supply systems for digital inkjet. The acquisitions will accelerate the Company's growth strategy by creating a more integrated inkjet solution whereby customers can access more of the printing ecosystem (such as ink supply systems and the electronics) from Xaar.

Technomation Ltd was acquired for its Intellectual Property and know-how. The acquisition has been accounted for as an asset acquisition using the optional concentration test within IFRS 3. The purchase price of £3,038,000, which includes £187,000 deferred consideration, was allocated to its Intellectual Property amounting £1,990,000 (being the purchase price net of £517,000 cash balance and £531,000 balance relating to working capital and tax). Whilst Megnajet Ltd was accounted for as a business combination and the details of the net assets acquired, goodwill and purchase consideration are as follows:

13. Business combination continued

Recognised amounts of identifiable assets acquired and liabilities assumed	Fair value £'000
Cash	1,067
Trade and other receivables	487
Corporate tax payable	(27)
Inventories	503
Property, plant and equipment	53
Intangible assets	703
Trade and other payables	(821)
Deferred tax liability	(170)
Total net identifiable assets	1,795
Goodwill	661
Total consideration	2,456
Satisfied by:	£'000
Cash	2,269
Deferred consideration	187
Total consideration transferred	2,456
Net cash outflow arising on acquisition	£'000
Cash consideration	2,269
Less: cash and cash equivalents acquired	1,067
Total net cash outflow arising on acquisition	(1,202)

The fair value of acquired receivables is £250,000. The gross contractual amount for trade receivables due is £252,000, with a loss allowance of £2,000 recognised on acquisition. Other receivables relate to VAT amounting to £237,000.

The goodwill of £661,000 arising from the acquisition represents those characteristics and valuable attributes of the acquired business that cannot be quantified and attributed to separately identifiable assets in accounting terms. This goodwill is underpinned by a number of elements, the most significant of which is the well established, skilled and assembled workforce and potential new customer relationships and contracts which enable Megnajet to accelerate the development of Ink Management and Supply Systems through the shared expertise, technologies and resources across the Group. None of the goodwill recognised is expected to be deductible for income tax purposes.

The fair value of the intangible assets attributed to the acquisition of the business relates to customer relationships (£422,000) and brand (£281,000). These have an estimated useful life of eight and ten years respectively. The amortisation from the date of acquisition to 30 June 2022 is £27,000 which is included in the income statement under general and administrative expenses.

In addition to the cash consideration, deferred consideration shall be paid in the second year anniversary from the date of acquisition. The undiscounted amount of all future payments that the Company is required to make under the deferred consideration arrangement is £200,000.

Acquisition related costs which are included in administrative expenses in the consolidated income statement for the period ended 30 June 2022 amounted to £191,000.

The acquired business contributed revenues of £615,000 and net profit of £315,000 to the Group for the period from 2 March 2022 to 30 June 2022. If the acquisition had occurred on 1 January 2022, consolidated pro-forma revenue and profit for the period ended 30 June 2022 would have been £1,170,000 and £389,000 respectively. These amounts have been calculated using the subsidiary's results and adjusting them for differences in the accounting policies between the Group and the subsidiary; and the additional depreciation and amortisation that would have been charged assuming the fair value adjustments to property, plant and equipment and intangible assets had applied from 1 January 2022, together with the consequential tax effects.

14. Date of approval of interim financial statements

The interim financial statements cover the period 1 January 2022 to 30 June 2022 and were approved by the Board on 19 September 2022.

Further copies of the interim financial statements are available from the Company's registered office, 3950 Cambridge Research Park, Waterbeach, Cambridge CB25 9PE and can be accessed on the Xaar plc website, www.xaargroup.com.

Independent review report to Xaar plc for the six months ended 30 June 2022

Conclusion

We have been engaged by the Company to review the condensed set of financial statements in the half-yearly financial report for the six months ended 30 June 2022 which comprises the condensed consolidated income statement, condensed consolidated statement of comprehensive income, condensed consolidated statement of financial position, condensed consolidated statement of changes in equity, condensed consolidated cash flow statement and related notes 1 to 14. We have read the other information contained in the half yearly financial report and considered whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of financial statements.

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of financial statements in the half-yearly financial report for the six months ended 30 June 2022 is not prepared, in all material respects, in accordance with UK adopted International Accounting Standard 34 and the Disclosure Guidance and Transparency Rules of the United Kingdom's Financial Conduct Authority.

Basis for conclusion

We conducted our review in accordance with International Standard on Review Engagements 2410 (UK) "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" (ISRE) issued by the Financial Reporting Council. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

As disclosed in Note 1, the annual financial statements of the group are prepared in accordance with UK adopted international accounting standards. The condensed set of financial statements included in this half-yearly financial report has been prepared in accordance with UK adopted International Accounting Standard 34, "Interim Financial Reporting".

Conclusions relating to going concern

Based on our review procedures, which are less extensive than those performed in an audit as described in the Basis of Conclusion section of this report, nothing has come to our attention to suggest that management have inappropriately adopted the going concern basis of accounting or that management have identified material uncertainties relating to going concern that are not appropriately disclosed.

This conclusion is based on the review procedures performed in accordance with this ISRE, however future events or conditions may cause the entity to cease to continue as a going concern.

Responsibilities of the Directors

The directors are responsible for preparing the half-yearly financial report in accordance with the Disclosure Guidance and Transparency Rules of the United Kingdom's Financial Conduct Authority.

In preparing the half-yearly financial report, the directors are responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the review of the financial information

In reviewing the half-yearly report, we are responsible for expressing to the Company a conclusion on the condensed set of financial statements in the half-yearly financial report. Our conclusion, including our Conclusions Relating to Going Concern, are based on procedures that are less extensive than audit procedures, as described in the Basis for Conclusion paragraph of this report.

Use of our report

This report is made solely to the company in accordance with guidance contained in International Standard on Review Engagements 2410 (UK) "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Financial Reporting Council. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company, for our work, for this report, or for the conclusions we have formed.

Ernst & Young LLP
Cambridge, United Kingdom

19 September 2022

Company information and advisors

Registered office

3950 Cambridge Research Park
Waterbeach
Cambridge CB25 9PE

Registered number

3320972

Company Secretary

Camila Cottage

Brokers

Investec

30 Gresham Street
London, EC2V 7QP

Registered auditor

Ernst & Young LLP

Cambridge Business Park
Cowlley Rd
Cambridge CB4 0WZ

Solicitors

Mills & Reeve LLP

Botanic House
100 Hills Road
Cambridge CB2 1PH

Bankers

HSBC Bank plc

63-64 St Andrews Street
Cambridge CB2 3BZ

Registrars

Link Group

10th Floor
Central Square
29 Wellington Street
Leeds LS1 4DL

Unsolicited mail:

The Company is obliged by law to make its share register publicly available should a request be received. As a consequence, shareholders may receive unsolicited mail from organisations that use it as a mailing list. Shareholders wishing to limit the amount of such mail should either write to Mailing Preference Service, DMA House, 70 Margaret Street, London W1W 8SS, register online at www.mpsonline.org.uk or call the Mailing Preference Service (MPS) on +44 (0)845 703 4599. MPS is an independent organisation which offers a free service to the public.

Warning to shareholders – boiler room scams

Each year in the UK, £1.2bn is lost to investment fraud, with the average victim losing around £20,000. What is more, it is estimated that only 10% of the people that become victims of investment fraud actually report it.

Investment scams are becoming ever more sophisticated – designed to look like genuine investments, they are increasingly difficult to spot. They are targeted at those most at risk, typically people in retirement who are actively seeking an investment opportunity.

Protect yourself

1. Reject cold calls

If you have been cold called with an offer to buy or sell shares, it is likely to be a high-risk investment or scam. You should treat the call with extreme caution. The safest thing to do is hang up.

If you are offered unsolicited investment advice, discounted shares, a premium price for shares you own, or free company or research reports, you should get the name of the person and organisation contacting you and take these steps before handing over any money.

2. Check the firm on the Financial Services Register at www.fca.org.uk/register

The Financial Services Register is a public record of all the firms and individuals in the financial services industry that are regulated by the FCA.

Use the details on the Financial Services Register to contact the firm.

3. Get impartial advice

Think about getting impartial financial advice before you hand over any money. Seek advice from someone unconnected to the firm that has approached you.

REMEMBER, if it sounds too good to be true, it probably is!

If you use an unauthorised firm to buy or sell shares or other investments, you will not have access to the Financial Ombudsman Service or Financial Services Compensation Scheme if things go wrong.

Report a scam

If you suspect you have been approached by fraudsters please tell the FCA using the share fraud reporting form at www.fca.org.uk/scams, where you can find out more about investment scams.

You can also call the FCA Consumer Helpline on +44 (0)800 111 6768.

If you have lost money to investment fraud, you should report it to Action Fraud on +44 (0)300 123 2040 or online at www.actionfraud.police.uk.

 Find out more at www.fca.org.uk/scamsmart

Xaar plc

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