



Financial highlights

£72.8m

Revenue – Continuing operations
in line with management expectations
(2021: £59.3 million)

39%

Gross margin – Continuing operations
increased from 34% in 2021, benefiting
from operational leverage in the business

£6.7m

R&D spend
by continuing operations of £6.7 million,
up £1.0 million on 2021 with investment
focused on the ImagineX platform and
product roadmap

(£16.5m)

Net cash outflow – Total operations
During 2022 we acquired businesses
resulting in an initial net cash outlay
of £3.5 million as well as a further
deferred payment for FFEI of £1.7
million. Additionally, we invested £5.4
million on key infrastructure and product
development and a further £9.5 million
in inventory.

2021: £5.0 million inflow – benefitting
from an inflow of £9.3 million on the
sale of Xaar 3D.

Introduction

Over the last three years the Group has been transformed, implementing a new strategy across the business, with a new commercial model shifting our focus to very attractive end markets; expanding our technology capabilities; and creating a growth platform. This strategy is now delivering growth across the business, and we are delighted the Group has returned to full year profit.

At the same time we have also invested significantly in expanding our product and technology capabilities and updating our infrastructure, strengthening our key resource – people – and ensuring we have a robust platform to deliver future profitable growth.

Despite the external macro challenges, we have delivered an impressive performance in 2022 which is borne out in the financial metrics. Our core Printhead business grew in all regions except China which was impacted by COVID-19 restrictions for much of the year, and we have successfully launched our new product Aquinox with a commercial response that has exceeded our expectations.

During the year our US product print business, EPS, delivered its best ever result and with the acquisition of Megnajet we now have a resilient, diverse business well placed to meet the significant market opportunity that exists.

Excellent strategic progress

The turnaround we have described is now at the end of the first phase. We have established a clear strategy and we are ready for the next stage to achieve enduring profitable growth.

The first phase was focused on stabilising the business and establishing a clear strategy. Commercially this has seen the Printhead business reduce complexity in its routes to market by eliminating third party distributors and selling directly to OEMs and UDIs. Our principal objective is to sell more printheads. We provide an integrated solution for customers whereby they can access more of the printing ecosystem, to include supporting elements such as fluid management systems and the electronics required for printing. We help our customers take advantage of the inkjet opportunity, demonstrating to them that working with Xaar means a higher chance of success by being faster to market, making our customers' investment more profitable.

Our strategy is working, we are delivering on what we promised, and the future remains exciting. With phase 1 of the business transformation now complete, the business is stabilised, with a strong management team, delivering profitability and a strong platform on which to build.

Strong revenue growth, improved margin and full-year profitability

We have delivered a strong performance in 2022 in line with our expectations, further demonstrating the operational and strategic progress across the Group. We have improved resilience and have achieved the key milestone of delivering an adjusted profit before tax for the year.

Despite the global macroeconomic and political uncertainties, we are successfully mitigating external challenges, principally the cost of inflation and the ongoing COVID-19 impact in China.

Revenue for the year was £72.8 million representing growth of 23%. Organic growth, before the impact of FFEI and Megnajet acquisitions was 8%.

Revenue grew in the US region by 54% and in EMEA by 20%. This demonstrates the resilience we are developing in the business and helped offset the decrease in revenue from Asia of £3.8 million (32%).

Reduced revenue in China has impacted our Ceramics sector printhead sales, however, we are confident in returning to previous levels of trade with our customers in the region as COVID-19 restrictions continue to be lifted. Our commercial and technology proposition still remains compelling, and we have not lost retained market share in the region.

We have been able to demonstrate the strength of our technology in markets sectors beyond Ceramics and continue to see strong customer engagement in these areas where we have a competitive advantage by enabling customers to reduce their own development times.

Our new product, Aquinox, was launched in November 2022. We have received excellent feedback and significant customer engagement, and early promising success indicators through strong sales of development kits.

EPS has delivered an excellent performance. Revenue increased 41%, with growth across all its product lines, and digital inkjet sales at the core of the success growing 54%. The proactive decisions taken in the last two years to strengthen the management team and rationalise the product range are delivering excellent results and demonstrate the continued importance of the business.

Our recent acquisitions, FFEI and Megnajet, are performing ahead of our initial expectations. We are delighted with these acquisitions and as a result we have an expanded product range providing us real traction and opportunity in the printbar and print engine markets, along with Fluid Management Systems.

With this revenue growth and the strong operational performance, we have increased gross margins in Printhead and EPS, and overall for the Group to 39% (2021: 34%).

While profit before tax from continuing operations of £0.8 million includes some underlying business unit losses (consisting of Printhead £0.3 million loss, EPS £2.8 million profit, FFEI £0.3 million loss and Megnajet £0.4 million profit) we can report positive adjusted EBITDA in each of our businesses for 2022. Group adjusted EBITDA of £6.2 million consists of Printhead adjusted EBITDA of £2.0 million, EPS adjusted EBITDA of £3.1 million, FFEI adjusted EBITDA of £0.5 million, and Megnajet adjusted EBITDA of £0.6 million. This has enabled delivery of full year profitability for the Group.

Investing for future growth

There has been further investment in capability and capacity enabling us to take advantage of the opportunities which we expect to drive our future growth ambitions.

During the year we acquired our fluid management system business, Megnajet, for an initial consideration of £5.1 million. The net cash outflow on acquisition was £3.5 million. This acquisition further strengthens our ability to deliver to customer needs, enhances our technology capability and expands the vertically integrated product offering. It is already delivering profitable growth ahead of expectations, enabling a quick payback on the original investment.

We have invested in inventory, holding higher levels of both raw materials and finished goods. This investment has been undertaken in a controlled, proactive manner to enable continued production of our products and customer supply. This is a vital part of our strategy to ensure we meet customer demand.

As supply chains improve, we can look to reduce our raw materials holding although we will do so in a cautious, well-managed way. Higher levels of finished goods have enabled us to meet customer demand whilst the factory is closed for reorganisation and will leave us well placed to meet any increase in market demand.

R&D investment is critical to the ongoing success of the business, and we will continue to invest in our R&D capabilities across the Group to ensure our technology remains market leading. During the year we increased R&D investment by £1.0 million.

Our underlying positive cash generation in the core business has also enabled us to spend £5.4 million on maintenance and asset improvement across the business during 2022.

Additionally, we have invested approximately £1.2 million in our factory reorganisation project in Q1 2023. We expect a rapid return on this investment due to the energy savings it will provide, coupled with increased manufacturing efficiency.

This is the first phase of our transformation programme which will result in modern, efficient and more environmentally beneficial manufacturing facilities across the business.

Significant market opportunity

We have a strong proposition across our five key market sectors. Our digital inkjet technologies provide compelling propositions to transform print processes across a wide range of applications, and the medium and long-term opportunity for the business remains significant. Whilst we have already grown market share in core, mature markets such as Ceramics and Coding & Marking, further growth opportunities exist as our technology is best-in-class and we have a clear competitive advantage over our competitors.

We can capitalise on a number of sectors which need further digitisation of printing to secure increased market opportunities. These opportunities are 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 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.

By providing an integrated solution for customers whereby they can access more of the printing ecosystem, we help our customers take advantage of the inkjet opportunity and working with Xaar means a higher chance of success by being faster to market, and therefore making our customers' investment more profitable. Ultimately this will help us in our overriding strategy to sell more printheads.

We have seen increased customer engagement as our printhead product range has expanded and our ability to offer a broader solution to customers with fluid management systems and printbars, which is evidenced by the increasing number of customers developing machines with our 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.

Expansion of vertically integrated product offering

The acquisition of FFEI in July 2021 and Megnajet in March 2022 further widened our product offering for our OEM and UDI (User Developer Integrator) 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 will strengthen our offering with more products in the pipeline for 2023.

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 benefiting from the expansion of our product offering.

The latest product powered by our ImagineX platform, our aqueous printhead, Aquinox, was launched in November 2022. This is a significant and tremendously exciting product for the Group and enables 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. We have received positive feedback from customers, evidenced by high engagement and good sales of development kits.

EPS, our product print system business, is performing well, delivering high quality products to a variety of customer sectors. As we explore further opportunities in the US, EPS can play an increasing part in our strategy.

This approach has seen us deliver a more vertically integrated product offering to a wider group of customers in more market sectors.

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, Finance and Human Resources functions. This improved operational capability also includes further and continued investment in infrastructure such as IT, manufacturing, and supply chain management. Our strong and experienced leadership throughout the organisation is focused on delivering a clearly articulated strategy.

During the year we have continued to work on ensuring our values are embedded into our culture. This ongoing 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 year, Xaar 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 to achieve our goals and ambitions across all four 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 are working with an external partner to support us with Scope 3 and TCFD Climate Modelling. This year we have 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 by the end of 2023 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.



With the fundamental advantages our products possess, I believe that within the next decade Xaar will be the number one supplier of industrial inkjet printheads.

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. In early 2022 we launched a salary sacrifice scheme, supported by the UK government, to allow all UK staff the ability to order electric vehicles (EV) through a company scheme. We have also 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 109 attendees across nine events and resulted in 131 hours of learning.

We will further strengthen this approach in 2023 and plan to hold Xaar Group workshops 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 feeding 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 trialled 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.

Digital inkjet printing is inherently more sustainable compared to traditional analogue printing with a smaller carbon footprint. It reduces and prevents excessive waste and uses less energy due to the ability to print short runs or Direct-to-Shape. With TF Technology ink recirculation, Xaar printheads are capable of printing very viscous fluids, which in the Textiles sector, for example, results in a reduction in energy used in intensive drying processes. We are passionate about continuing further adoption and understanding of the environmental benefits our products can bring to customers.

Product development and increased capability

Overall, the market opportunity for Xaar printheads is significant. We have a unique roadmap of product development to ensure we offer an increasingly vertically integrated commercial strategy to capitalise on this market opportunity.

The, already successful, ImagineX platform will deliver a number of features over the next few years which will provide significant enhancements to the current portfolio, including:

- substantially improved speed and throughput (frequencies up to 150kHz, equivalent to a threefold increase in speed compared to current products),
- increased throw distance to improve image quality on curved surfaces,
- increased robustness to improve the life of the printhead and maintain image quality,
- higher viscosities enabling a broader range of fluids to be printed (above 100cP), and
- higher resolutions (up to 1440 dpi).

These features will help strengthen our position in markets where we are already well represented and will drive improved adoption in several markets where we are currently not, such as Wide Format Graphics and Labels. The recently launched Aquinox is positioned to drive our adoption in Packaging and Textiles. The performance enhancements in our product roadmap give a clear path for OEMs to upgrade their products and maintain their product differentiation.

We have made strategic bolt-on acquisitions to the Group that enable us to strengthen our customer offering and we will continue to adopt this approach in the future as we look to continue increasing our capability and become a fully integrated inkjet product provider.

The strong operational gearing that exists in the business, which has already delivered good margin growth, has greater capacity to support further margin improvement in the medium term. The business is well placed to move into the next phase of its transformation and to deliver sustainable profitable growth in the medium term.



Outlook

We have maintained our policy of increased investment in inventory during H2 2021 and throughout 2022 which means we are well placed to satisfy customer demand in 2023 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 and continue to work on delivering efficiency gains aimed at improving gross margins and business profitability in the medium term.

Sales volumes in the Printhead business continue to be affected by the uncertainty in China, which is expected to continue in the short term as COVID cases increase. At this stage it remains unclear when normal levels of business will return, however we can look forward to the medium-term future with confidence.

There is a positive momentum in the business, as is reflected in our 2022 results. Customer engagement and sales orders have been maintained in the first quarter of 2023, in line with our expectations. As previously communicated, we expect the Huntingdon factory reorganisation to impact the first half, however, given continued progress and exciting product launches ahead, the Board remains confident in delivering an outturn for the full year in line with its expectations.

John Mills
Chief Executive
Officer

27 March 2023

Ian Tichias
Chief Financial
Officer

27 March 2023