Chief Executive Officer's review

Advanced Technologies

The Advanced Technologies division develops and manufactures compound semiconductor fabrication capital equipment (Severn Beach, UK), cryogenic and superconducting magnet technology (Oxford, UK), and X-ray tubes (Scotts Valley, USA).

The two larger businesses in Advanced Technologies each benefit from a dedicated, focused approach to reflect their specialist markets (compound semiconductor and quantum), unique growth drivers and principally separate customer bases. The division has a different profile from Imaging & Analysis, selling much lower product volumes of larger-scale complex systems.

Our strategic priorities for Advanced Technologies are to 'fix, improve and grow', leveraging the well-invested base in both key businesses, delivering improved margins and growing our commercial customer revenues. Both businesses have made good progress following our targeted actions, resulting in strong growth in both halves of the year. Revenue was up 21.3% CC year on year, and, as predicted, the division delivered a profitable full-year performance.

Our compound semiconductor business continues to scale as it reaps the benefits of its new, state-of-the-art facility, which has tripled capacity to address structural growth in datacomms (including AI datacentre scaling), power electronics, and augmented reality. Strong double-digit growth in both revenue and orders reflects the business's increasing foothold in carefully diversified and profitable niches within the burgeoning compound semiconductor sector. Greater focus on fewer product lines has supported improved productivity.

Our quantum-focused facility has delivered a good year of recovery, returning to profitability as it leveraged a reduced cost base and installed the first orders for a key global technology customer as part of a major technology demonstration programme. We have crystallised the performance improvement through the sale of the business, due to complete in the third quarter of FY2025/26.

The division's strong growth is particularly notable in the context of our regional pivot, which saw us end new quantum sales to China and target alternative customers and applications in compound semiconductor in the country. At a divisional level, we have delivered strong growth in revenue as we gained traction in North America and East and Southeast Asia, and rebuilt our position in China, with more than 50% CC order growth year on year.

Orders overall were slightly behind last year, reflecting the lumpy order profile of the large capital equipment typically sold in the division, and a large biannual framework order that our X-Ray Technology business received a few days into the new financial year.

Key highlights

Advanced Technologies	2025	2024	Growth	OCC growth ¹
Orders	£145.1m	£152.5m	(4.9%)	(3.3%)
Revenue	£170.1m	£142.3m	+19.5%	+21.3%
Adjusted ² operating profit	£6.0m	£1.3m	+351.1%	+486.5%
Adjusted ² operating margin	3.5%	0.9%	+260bps	
CC operating margin	4.5%	0.9%		+360bps
Statutory operating profit/(loss)	(£0.7m)	£2.2m		
Statutory operating margin	(0.4%)	1.5%		

1. For definition refer to note on page 2.

2. Details of adjusting items can be found in note 2 to the financial statements.

Chief Executive Officer's review

Compound semiconductor operational developments and market dynamics

Our compound semiconductor business has completed a successful first full year at its new facility at Severn Beach, near Bristol, UK. Growth plans are firmly on track, with 13% CC growth in both revenue and orders, as the business takes advantage of the improved layout and process flow of the new site, and simplified production. A key development in the year has been the completion of the site's cleanroom, which is one of the most advanced in the world for compound semiconductor process development, and is now fully signed off and operating to ISO5 specifications. Final systems, including showcasing our Imaging & Analysis metrology capabilities, are being installed and tested. The sale of our legacy site is expected to complete in H1 of FY2025/26.

Our exceptional high-tech facilities have increased our ability to partner with leading blue-chip manufacturers. Customer demonstrations are up 30% year on year, and our qualified pipeline of opportunities has grown by 7% year on year, with improved conversion rates.

The business has grown revenue by successfully focusing on carefully chosen subsets within the growing compound semiconductor market where we have leading-edge capabilities, and where we are able to deploy pricing power to command a higher margin than in more standardised processes. We enable next generation device architectures for better performance, helping our industrial customers to accelerate their own growth by improving wafer performance, yield and therefore cost per wafer. Our market applications range from datacomms to augmented reality, next-generation power electronics and quantum, the blend of which provides valuable resilience to fluctuations in any single area. This year has seen strong growth in applications for datacentres, including a significant and ongoing partnership with global manufacturer of advanced chips Coherent Corp. to support Coherent's 6" InP fab ramp in Europe and the US for Al datacentres.

We have also successfully grown revenue from quantum applications, as customers (ranging from blue chip global technology companies to leading universities and start ups) use our equipment to make qubits, and develop their capabilities in quantum sensing and quantum communications.

Gallium nitride (GaN) applications which enable customers to increase power and drive efficiency, have delivered significant revenue growth over the year, with Tier 1 blue chips in Japan deploying our technology into 5G and 6G, and other customers using GaN to enable more efficient power in energy hungry data centres. We continue to target growth in GaN power applications for the year to come.

In silicon carbide, where we have strong capabilities but limited exposure (representing 2% of FY2024/25 orders for this facility), we have delivered modest revenue growth despite the downturn in the electric vehicle market, as customers invest in R&D for next-generation silicon carbide performance.

In tandem with the move to the new site, and the strategic decision to focus in on the technologies where we have a significant competitive edge, we have also generated efficiencies by streamlining the product portfolio of this business. More than 80% of orders in the year came from sales of three core platforms – Plasma Pro, IonBeam and ALD (atomic layer deposition) – with modular assembly carried out in dedicated bays, and fewer complex and resource-hungry one-off products.

A strengthened focus on service has also contributed to the business's growth, with service revenue up 18% CC year on year.

Quantum operational developments and market dynamics

We are pleased with the progress made at our quantum-focused facility Oxford Instruments NanoScience, based just outside Oxford, with the business having achieved a return to profitability, delivering the first systems of a key commercial partnership with a globally significant technology player and benefiting from reductions in its cost base made in the first half.

The key partnership is founded on the strength of our modular Proteox proposition, which delivers vital cooling capabilities to support the scaling of this customer's quantum computing programme. The customer has received the first of our largest Proteox QX systems to be installed anywhere in the world.

Our products, including ongoing deliveries of our smaller Proteox MX, are key to enabling our customer to scale significantly past current cryogenic refrigeration limitations to deliver its quantum roadmap.

A further contributor to the business's recovery in 2024/25 was our action to address the operational challenges which have hampered growth in recent years. We made progress with productivity initiatives, and addressed supply chain management and inventory challenges which became apparent following the introduction of a new ERP system. This allowed us to strengthen output through the first half and deliver a record closing month, with more systems shipped than in any previous period.

As set out on pages 4 and 12, we have now agreed the sale of Oxford Instruments NanoScience to Quantum Design. The divestment will enable the Group to focus its capital deployment on business capabilities with higher margin and potential for shareholder returns, and is consistent with our focus on our three core markets: materials analysis, semiconductor, and healthcare and life science.