Advanced Technologies

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

Orders
£133.1m
(2025: £104.8m)

Revenue
£108.5m
(2025: £112.9m)

Key highlights

Advanced Technologies	2026	2025[1]	growth	CC growth[2]
Order intake	**£133.1m**	£104.8m	27%	28.1%
Revenue	**£108.5m**	£112.9m	(3.9%)	(3.2%)
Adjusted operating profit[3]	**£2.8m**	£6.3m	(55.6%)	(47.6%)
Adjusted operating profit margin[3]	**2.6%**	5.6%	(300bps)	
Operating profit margin OCC[3]	**3.0%**	5.6%		(260bps)
Statutory operating profit/(loss)	**£1.5m**	£0.7m		
Statutory operating margin	**1.4%**	0.6%		

1 FY25 restated to reclassify NanoScience business as a discontinued operation.
2 For definition refer to note on page 3.
3 Details of adjusting items can be found in Note 2 to the financial statements.

The Advanced Technologies division has a different profile from Imaging & Analysis, primarily selling much lower product volumes of larger-scale complex capital equipment for the compound semiconductor market. Our compound semiconductor business represents more than 90% of the division's revenue, with the remainder in our small components business specialising in X-ray tubes.

Compound semiconductor market dynamics

The market is currently in a phase of strong growth, driven primarily by surging demand for high-performance electronics in applications such as the hyperscale data centres needed to support growth in AI. Additionally, the shift toward electrification and renewable energy systems is accelerating adoption, as these materials enable smaller, faster, and more energy efficient power devices compared with traditional silicon.

Market insight from Yole Group indicates that the size of the overall semiconductor capital equipment market is c. $130bn with a CAGR of 10–12%. Compound semiconductor, which represents the majority of AT's business and therefore the majority of Oxford Instruments' activity at Group level, accounts for c. $10bn of that figure, growing rapidly and with an expanding number of applications.

Our own current positive momentum is underpinned by our expertise in, and our strategic focus on, select key markets with strong opportunity, such as power, datacomms, micro LED and augmented reality, where we know we can add value through our leading technology and partnerships with our customers.

As major semiconductor manufacturers ramp up production optoelectronics applications for data centres to support AI applications, our differentiated capabilities are attracting an increasing portfolio of reference customers, who use our equipment to fabricate laser transceivers. These include a significant and ongoing partnership with global advanced chips manufacturer Coherent Corp. to support its 6" indium phosphide fab ramp for AI data centres in Europe and the US, with several orders placed in FY26.

Post year-end, the business received a significant long-term purchase agreement from a US customer for a number of large, fully automated etch and deposition systems to be delivered over the latter part of FY27 and into FY28, aligned with the customer's fab build out. This order exemplifies the shift we have made from a relatively small-scale academic R&D specialist to become a strategic partner of many of the world's leading technology companies. The growing demand for our capabilities is testament to over 40 years of specialist expertise which have enabled us to develop market-leading capabilities in our chosen niches.

We have also been chosen by a leading provider of optoelectronic components to install a number of large, fully automated etch and deposition systems as it rolls out new manufacturing capacity to support the need for high-speed data transceivers. With existing customers, we see three primary drivers for sustained engagement:

- repeat orders to support capacity requirements, where we are the process of record;
- the opportunity to cross sell, both in terms of processes for next-generation devices and for 'commodity' applications, where production cost is key; and
- the capacity of our new facility which allows us offer highly competitive lead times on occasions where this makes a material impact on our ability to win orders.

Gallium nitride (GaN) power electronics applications, which enable customers to increase power and drive efficiency in applications including onboard automotive chargers, consumer devices and AI servers, are a further focus area for the business. With this market in the positioning stage, we continue to see strong customer interest in piloting and validating applications for future production.

Micro LED is a further future growth area, currently in a corporate research stage as customers explore the feasibility of future consumer technology. Advances in process technology are enabling more cost-effective manufacturing of micro LEDs which is critical for market adoption and unlocking new end market applications, such as display applications where high brightness and small emitter size are required. We are already working with globally recognised customers to advance their technology roadmaps for products such as augmented reality glasses, in applications including meta lenses, wireless charging and 3D sensors. We received a £10m micro LED order from a single customer in FY26, marking the business's largest ever order to that point (superseded since by the major multi-year optoelectronics order for data centres referenced above).

We also continue to play a role in the transition of quantum technology from academic research to corporate R&D, providing products and applications to support the fabrication of qubits, and the acceleration of capabilities in quantum sensing and quantum communications. We recently won a significant order from Rigetti to supply atomic layer etch capabilities to its dedicated quantum fab in California.

The silicon carbide market remains weak globally. However, we continue to be active in the sector, and are focusing on applications that enable next-generation devices, winning a small number of orders in the period.

Across our process portfolio, the combination of our deep expertise in our chosen niches, and the differing life cycle stage of each technology ramp, provides us with strong growth opportunities stretching well into the medium term, and protection against overconcentration on a single market area. Demand indicators are very positive, with a record pipeline of qualified compound semiconductor opportunities even after accounting for the significant order growth in FY26, and growing visibility of customers' fab ramp roadmaps.

Strategic and operational progress

As set out in 'NanoScience successfully divested' above, we divested our Oxford-based quantum-focused business at the beginning of January 2026. This strategic divestment crystallised the value of the business following its return to profitability and, as intended, will enable us to devote full management focus to maximising the division's opportunity for profitable growth amid tailwinds in the compound semiconductor market.

We also completed the move to our new compound semiconductor site during the year, giving us scope to increase capacity by 3x versus our legacy site at Yatton, in North Somerset. Following the transfer of tools via a phased programme over the summer of 2025, the Yatton site was sold in early September for £4.8m.

We are now focusing on maximising the benefits of our ISO 5-standard cleanroom and increased production capacity as we prepare to execute on our order book for FY27.
Our new cleanroom dramatically increases our ability to demonstrate our IP and capability in a 'customer-equivalent' fab environment which improves our success rate in order conversion.

We continue to generate efficiencies by streamlining our product portfolio. More than 90% of system orders (up from 75% in FY25) were generated from sales of three core platforms – Plasma Pro, IonBeam and ALD (atomic layer deposition) – with modular assembly carried out in dedicated bays. The production of fully automated and larger production systems has grown significantly as a proportion of overall system orders year on year, supporting our strategy of growing our reach within compound semiconductor production markets.

A team from our OpEx programme has been embedded at the site since January 2026 to support the business' growth trajectory. The first phase of the programme has focused on:

- optimising clean room planning, prioritisation and operational execution;
- optimising front end operations in sales and engineering;
- improving sales, inventory and operational planning; and
- streamlining manufacturing operations by implementing lean methodologies and more modular builds.

Our new state-of-the-art Severn Beach facility is optimised to facilitate growth

Addressing these areas will support improved scheduling of production which is now feasible given our increased order book visibility, as well as helping to ensure that we extract full value from the new clean room. Good initial progress has been made, exemplified by a doubling of demonstration forecast visibility, ensuring that the most impactful demonstrations are prioritised, and a 40% reduction in build time on Plasma Pro ASP systems. A second phase of the programme is now getting under way.

Customer service is an important contributor to our current and future growth, with service contracts increasingly sold alongside systems (including, this year, our largest ever service contract at €1.4m). The business has achieved 34% year-on-year growth in service orders as we work to support the 24/7 uptime requirements of our high-volume production customers, including the introduction of a higher level of service whereby customers can have a dedicated representative embedded on site for all service needs.

As part of our commitment to maximising our customers' use of our technology, we have opened a dedicated technical training suite at Severn Beach, where customers can pursue in-depth hands-on training covering system operation, process optimisation, troubleshooting, and maintenance.