Electric Thermal Solutions

> As ETS continues to improve operational performance, increasing shipments and reducing lead times, we anticipate further strengthening of our market position and customer relationships.

Andrew Mines
Managing Director, Electric Thermal Solutions

Financial progress

Demand

Demand for ETS solutions remained robust in 2024. Industrial Process Heating continues to carry a large orderbook and in Industrial Equipment Heating, demand from Semicon customers began to recover in the fourth quarter, albeit against a very weak prior year comparative. We are continuing to see strong interest in decarbonisation-related electrification solutions, with a significant pipeline of customer enquiries, including for some material large projects. As we continue to improve our operational performance, increasing shipments and reducing lead times, we anticipate further strengthening of our market position and customer relationships.

Sales

Full year 2024 sales of £404.6 million were 10% higher organically or 7% higher after an adverse exchange rate impact. Growth was driven by operational improvements in Industrial Process Heating (76% of ETS 2024 sales) that materially increased shipments from the large orderbook carried into 2024. Following a weak first half in Industrial Equipment Heating (24% of ETS 2024 sales), we saw a return to growth in the second half, supported by sales to Nuclear and Power sector customers, early signs of a recovery in demand from the Semicon sector (10% of ETS 2024 sales and 3% of Group 2024 sales), and against a weak comparator. As a result, ETS sales were 15% higher organically in the second half, building on the 5% growth in the first half.

Margin

Full year adjusted operating profit of £64.7 million was 13% higher organically or 9% higher after an adverse exchange rate impact. Full year margin of 16.0% was 50bps higher organically with strong progress in Industrial Process Heating partially offset by a lower margin in Industrial Equipment Heating.

The strong improvement in Industrial Process Heating margin was supported by operating leverage from improvements in the performance of our Ogden, Utah (USA) manufacturing facility and progress at Vulcanic. This was partially offset by ongoing investment to deliver operational improvements and a lower drop-through of sales to profit on the shipment of historic orders that could not be re-priced for inflation. During 2025, we will continue to ship our carried forward orders, although they will account for a lower proportion of total sales. Margins in Industrial Equipment Heating were lower due to costs related to the transfer of USA production from Thermocoax to Durex Industries' facility in Chicago, Illinois and the costs of ERP implementation in Thermocoax France.

Statutory results

Sales of £404.6 million were up 7% including an adverse exchange rate impact of 3%. Statutory operating profit of £46.1 million was up 79% compared to 2023, reflecting lower amortisation of acquired intangibles and acquisition-related credits in the year. Statutory operating profit margin of 11.4% was 460bps higher than in 2023.

Operational progress

Operational Excellence

Improving manufacturing throughput in our Chromalox facilities was a critical area of focus for 2024 and will continue into 2025. After several years of flat output, we saw a material improvement in shipments, particularly from the Ogden, Utah (USA) facility that manufactures large Low Voltage and Medium Voltage heaters such as those supporting our decarbonisation solutions. Management and leadership changes have proved vital to unlocking resolution of the operational issues that impeded progress historically, beginning with the appointment of a new Head of Manufacturing and a new General Manager for the Ogden facility in the first half of 2024, a new Design Engineering Manager in the second half of 2024 alongside other critical hires and culminating with the appointment of a new MD for ETS.

Within Industrial Process Heating, a key competitive advantage and point of differentiation is providing customers with best-in-class bespoke process heating solutions, built with our proprietary technology and deep process knowledge. In Chromalox, we are improving key operational processes to meet customers' bespoke requirements with greater efficiency and reduced lead times. We are introducing controls over complex designs and better interfaces between sales, engineering and manufacturing to address production challenges and the significant backlog. Addressing this 'quote-to-cash' process has been the new team's focus to shorten lead times in design engineering, improve resource planning and production scheduling, better manage customer change requests and thereby deliver higher throughput and improve efficiency. An important part of this effort has been learning from the existing best practice from within ETS and in particular from Vulcanic.

These measures delivered a double-digit increase in Chromalox sales, with shipments from Ogden increasing by close to 40% leading to a backlog reduction of over 20%, as well as improved margins through operating leverage. Separately, the expansion of the Ogden facility, specialising in the manufacture of Medium Voltage solutions, is progressing well and remains on track for completion during 2025. Ramp-up costs associated with the expansion, prior to achieving full production, will impact on the rate of improvement in the Industrial Process Heating margin during 2025.

As part of our focus on maximising utilisation of manufacturing capacity, in the USA we migrated Thermocoax's production to our Durex Industries site in Chicago, Illinois. We will continue to review our ETS manufacturing footprint to optimise production.

Organisational Fitness

We are driving improved collaboration across ETS with the establishment of a new organisational structure, comprised of three Sales Divisions: Industrial Process Heating, Industrial Equipment Heating and Heat Trace. In Industrial Process Heating, we are bringing Vulcanic and Chromalox closer together, aligning the regional sales teams and across ETS we are combining responsibility for all our manufacturing sites.

In Industrial Equipment Heating, Thermocoax and Durex Industries are highly complementary, in both engineering expertise and manufacturing processes to deliver solutions to our customers, with significant opportunities to leverage both brands and technologies in our target markets. We have begun to drive closer collaboration in customer engagement and new product development through the teams' combined expertise, for example in Semicon wafer fabrication equipment manufacture where both businesses are present in complementary parts of the wafer fabrication process.

Decarbonising Thermal Energy

Leveraging ETS' strong research and development capabilities in resistive heating, we have developed additional higher voltage and higher temperature solutions (12kV and 7.2kV) to expand the reach of our existing North American Medium Voltage solutions (4.2kV), across Europe and China, and into additional applications such as in the Oil & Gas sector. These new-to-world products remain in early phases of testing and we are selecting strategic customers to conduct proof-of-concept pilots.

Outlook

With a strong carried forward orderbook and operational improvements supporting increased throughput in Industrial Process Heating, as well as early signs of recovering Semicon demand in Industrial Equipment Heating, we anticipate mid to high-single digit organic sales growth in 2025.

Operating leverage from increasing sales and a recovery in higher margin Semicon sales will support continuing improvement in the ETS margin, partly offset by a ramp-up in operating costs at the new Medium Voltage facility in Ogden.

In the medium term, growth in our end-markets, ongoing recovery in Semicon demand and growing contribution to our order intake from decarbonisation-related demand, are expected to drive above mid-single digit sales growth, which together with progress in delivering our operational priorities will support a 20% operating margin by 2027.

Growth focus: Low and Medium Voltage Solutions

Operational Excellence...

The importance of Medium Voltage (MV) technology

As countries convert their power generation to renewable, carbon-free sources, our electric resistive heaters can convert that electricity into carbon-free process heating at virtually 100% efficiency.

By leveraging the more efficient power of MV, reducing the amount of current used to deliver that power by a staggering 16 times when compared to traditional Low Voltage solutions, MV delivers:

- 5 to 10 times more heating power into processes
- Lower costs of installation and higher efficiency
- Reduced Capex and substantial long-term operational cost savings

The role of Chromalox, Ogden

Chromalox's Ogden manufacturing facility in Utah, USA is of critical importance to the growth of the ETS Industrial Process Heat (IPH) Division and to ensuring that ETS achieves its full potential as a significant growth engine within Spirax Group.

Ogden is where Chromalox's proprietary Low and Medium Voltage heating solutions are manufactured. These heaters, which can weigh 15,000 kg and measure up to 5.6m x 2.0m x 2.6m, are designed to meet a customer's specific requirement and can take beyond 24 months from design to shipment. The size, scale and bespoke nature of these heating solutions, combined with growing demand for IPH solutions to support the decarbonisation of industrial thermal energy use, has presented historic challenges for the team, delaying shipments and creating supply bottlenecks.

Addressing historic challenges

During 2024, in response to these historic challenges and with the support of new leadership, the Ogden team demonstrated how they are 'together for growth' by leveraging our Values of Collaboration, Customer Focus and Excellence to unlock these supply bottlenecks.

Recognising that the customer-specific requirements for each heater often presents new and significant challenges when moving from the design phase into manufacturing, work has been underway to reduce the levels of individual configuration required for each heater. By analysing customer needs, production processes and then building 'block designs' to standardise the base design elements, the team has eliminated 20-30% of the variables required for each heater, while still meeting the customer's individual requirements.

The Ogden team has also improved production planning, redesigned the plant layout, created standardised manufacturing processes and reduced rework and scrap rates.

...powering growth at Chromalox, Odgen

We are making clear progress:

22

Medium Voltage solutions manufactured in 2024 (2023: 19)

~40%

increase in Ogden sales in 2024

20+%

reduction in backlog

- Improved routings
- Improved resource planning
- Reduced complexity
- Reduced tooling requirements
- Reduced scrap rates
- Higher productivity/ reduced lead times

Collaboration and best practice

The team has also worked collaboratively across ETS, bringing in tried and tested processes from Vulcanic which leads the production of IPH solutions in Europe. By integrating these processes into their workflows, the Ogden team has created more effective alignment and handover across the quote, applied engineering, design engineering and manufacturing phases.

Recognised for Operational Excellence

As part of our Operational Excellence focus, production teams have used Lean Manufacturing events to enhance customer service, cash flow and profitability. The 'MaxiZone' area team held a 'Kaizen' event, reconfiguring the space to boost efficiency and throughput. A similar event in the 'Air Heater' area also improved efficiency and throughput. Both teams were recognised in the Group's Operational Excellence Quarterly Awards.

These and other initiatives being taken at Ogden are producing encouraging results. During 2024, increasing production of LV and MV heaters has delivered close to 40% sales growth.

Investing in growth through expansion

We are also making good progress with the Ogden expansion project. Our US$58 million investment to add 100,000 square feet to the facility, expanding its capacity by 60%, is progressing well with first production due in the second half of 2025. The shell and core have been completed on time and within budget.

Fulfilling our potential

Strong operational performance from Odgen is critical to ETS fulfilling its potential to deliver organic growth of above IP and margins above 20%.

MV technology has opened up a vast new market opportunity as these highly engineered, completely customised systems are integral to the success of our customers' processes. Our heaters are installed in mission-critical applications across industries, from solar production to petrochemicals and from power generation to pulp and paper.

A major chemicals manufacturer wanted to decarbonise their mission-critical chemical production process which relied on traditional carbon-emitting direct-fired heaters to elevate their chemical gas to 500°C at 300 PSI. Through solution-selling and engaging directly with the customer to understand fully their process requirements, we proposed a custom-engineered 500kW system. This was successfully delivered in 2024.