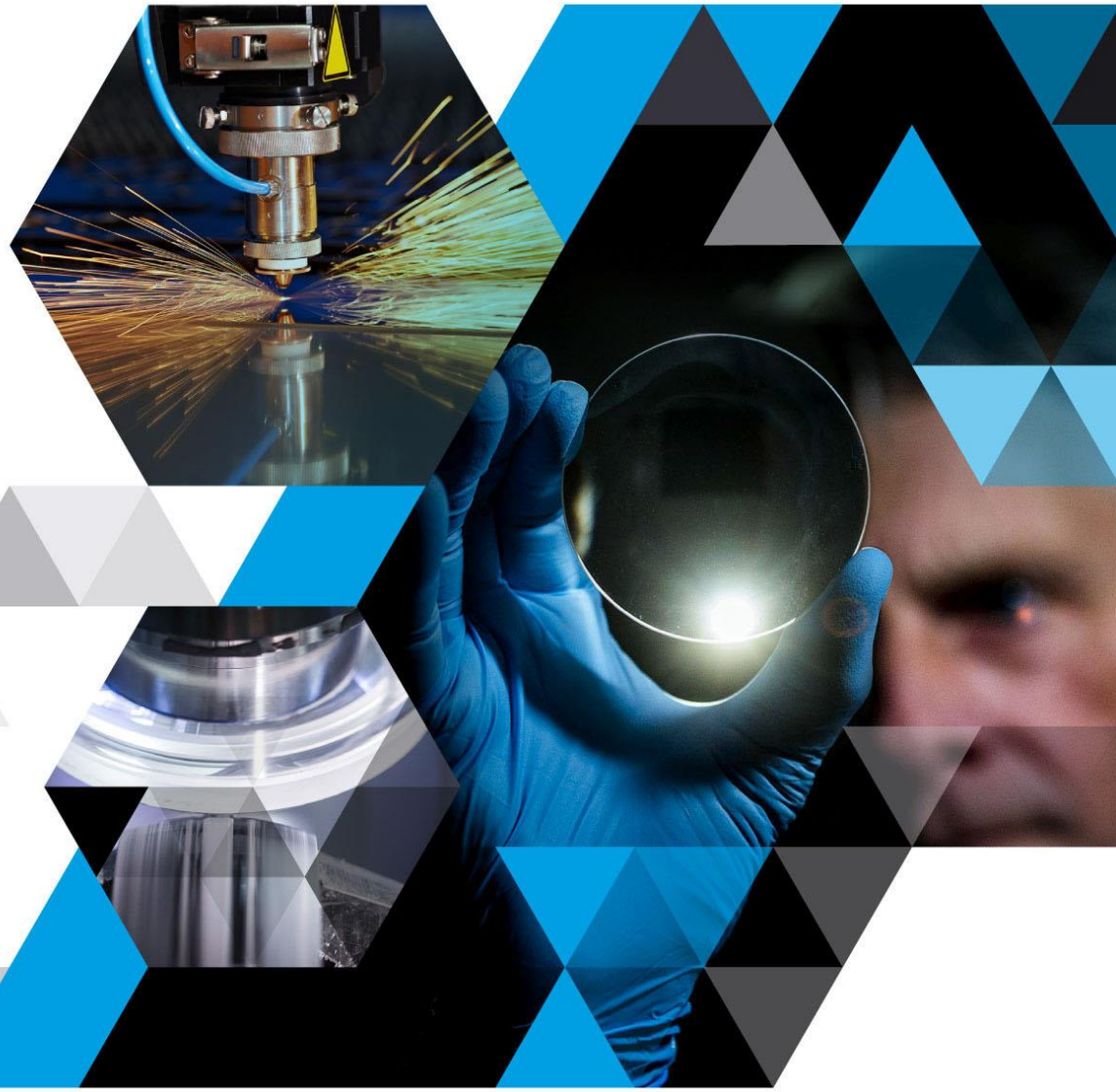


ANNUAL GENERAL MEETING

24 February 2021

CEO Mark Webster

Photonics and the future

- Photonics is the study and design of systems that depend on the transmission, modulation or amplification of streams of photons, the basic unit of light.
- Photonics is increasingly providing better solutions than electronics alone.
- Photonics is already transforming manufacturing, aerospace, communications and medicine.
- Optics and electronics are becoming inextricably linked and we believe the application of photonics will become ubiquitous.
- G&H has world class photonics components and systems capabilities.
- G&H is well placed to take advantage of and enable what is a transformational shift in technology.

Key highlights, FY 2020

- **Trading:** Reflected a challenging global economic environment due to the COVID-19 pandemic. G&H is proud of the way our staff responded. Management actions contributed to a stronger second half of the year. This included, ensuring all our manufacturing sites in USA, UK and China were able to operate at full capacity, compliant with all relevant health and safety regulations and guidelines.

- **Order Book:** Overall demand for our technologies and capabilities was robust. Medical diagnostics saw strong demand and industrial lasers were below 'normalised' levels.

- **Strategic investment:** Our plans to streamline our manufacturing remained on track to deliver the previously announced profitability. New products contributed record revenue of £16.9 million in FY2020(FY2019: £13.5 million). We continued to invest in our high priority R&D targets, were able to maintain a strong balance sheet and improved our liquidity levels.

- **Strategic goals**: We made considerable progress on further diversification and moving up the value chain, in large part due to continued growth in our A&D and life science businesses.

"Our priority during the ongoing COVID-19 pandemic remains the health and safety of our staff, customers and suppliers. We are very proud of the way our staff have responded to this unprecedented challenge."
Mark Webster, CEO

First four months FY2021- trading performance

- During the first four months of the new financial year, we have seen improved levels of demand for industrial lasers. In line with previously reported trends there have been continued high levels of demand for fibre optic modules, hi- reliability fibre couplers and our A&D capabilities. Life sciences continues to show strong growth.

- Asian markets have led the industrial laser recovery, though US and European markets are showing encouraging trends. Roll out of new technologies, such as 5G, have fuelled the demand led growth.

- Medical diagnostics continued to show good growth and we are now seeing improved levels of demand for our medical laser products, which were affected by the reduction in non-COVID-19 procedures in FY2020.

- All our manufacturing sites remain fully open. We have established effective working practices which prioritise the health and safety of our staff, customers and suppliers. Nevertheless, travel restrictions and the need for some customers to self isolate has presented some operational challenges.

- The Group's cash generation remained robust and the net debt of the Group has further reduced, despite the final earn out payment associated with the acquisition of ITL.

- As at 31 January 2021 our order book was £95.0 million (31 January 2020: £94.1 million) an increase of 1.0%, or 3.3% at constant currency.

First four months FY2021- manufacturing streamlining

- Good progress has been made on our manufacturing streamlining programme.
- All product lines have been transferred from Glenrothes, Scotland to our new UK Precision Optics hub in Ilminster and the Glenrothes site has been closed.
- Outsourcing of Acousto Optic products from Ilminster to our contract manufacturer in the Far East is progressing well and we expect this to be substantially complete by the end of the financial year. Costs and benefits are in line with previous announcements.
- Two further projects were launched.
- Production at our Baltimore, MD facility will be transferred to our Boston, MA and Torquay, Devon sites. This will result in two fibre optic hubs, one on each side of the Atlantic.
- Production at St Asaph, Wales site will be transferred to our Precision Optics hub in Ilminster. An optical engineering and design centre will be retained in St Asaph to enable our world leading optical systems engineers to continue their work developing a pipeline of innovative new products.
- Both projects are targeted to complete by the end of the financial year and to reap the full year benefits of the reduced cost base in FY 2022.

Our Strategy

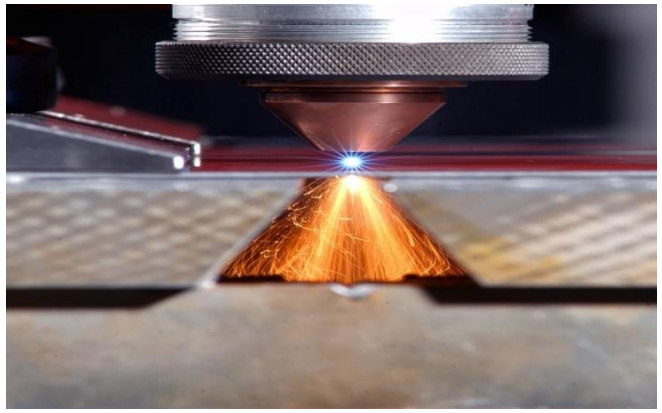
Remains diversification & moving up the value chain

Diversify

Aim to establish ‘critical mass’ in both the A&D and life science sectors and in an ‘ideal world’ there would be an equal split between the three market sectors across G&H. A&D now represents about one third of Group revenue and life sciences over 25%.

Exploit near/ medium term opportunities in:

- Precision and ultrafast lasers, including those targeted at nanoelectronics.
- Optical sensing in harsh environments
- Space satellite communications
- Opto-mechanical systems for UAVs
- Optical systems for armoured vehicles
- Laser surgery
- OCT medical diagnostics
- Laser microscopy
- Medical diagnostic systems



Move up the value chain

- Generate growth by adding value for our customers through enhanced design, engineering, systems and service capability.
- Leverage excellence in components to become a systems or solutions provider.
- Acquisition of ITL has significantly enhanced our systems capability.
- Systems and modules now represent about one third of Group revenue.

R&D – enabling new applications

Space

- Amplifiers and transmitters for satellite and UAV laser links
- Credit-size fibre-optic systems for communications
- Acousto-optic devices for space exploration

Aerospace & Defence

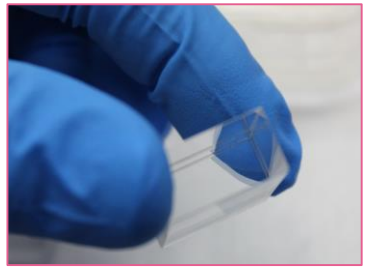
- Super-broadband & lightweight imaging systems
- Fibre-optic laser modules for navigation systems
- NightCrawlIR – HD MWIR Zoom lenses

Sensing

- Next-generation Fibre-Qs for sensing in Oil, Gas & Security
- High efficiency AO drivers for sensing applications
- Mid Infrared Pockels Cells for heat & carbon signature sensing

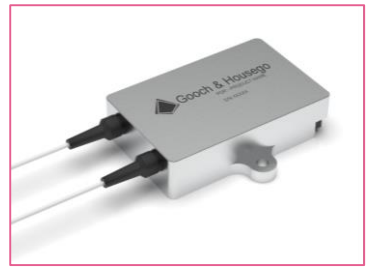
Industrial & Telecoms

- Acousto-optic deflectors for micro-electronics
- Photonic modules for photolithographic systems
- Fibre optic couplers for undersea networks



Bio-photonics

- Photonic devices for cardiovascular OCT scanners
- Non-invasive Nitric Oxide delivery systems
- “At-home” point of care for detecting respiratory pathogens

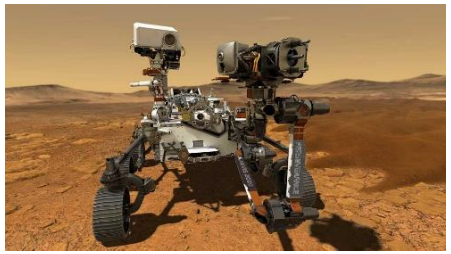


G&H

Space programme

Inter-satellite links (Japanese Data Relay System, JAXA)
World's first 1550nm amplifier system flying in GEO orbit (28/11/20)
Delivered second amplifier system for LEO spacecraft

Deep space missions (Perseverance Rover, NASA)
Acousto-optic technology on the surface of Mars (landed: 18/2/21)
Enables material composition analysis of samples collected
Complements our acousto-optic device orbiting Mars since 2016



LEO to ground links using CubeSats (CubeCAT, ESA)
Delivered prototype miniaturise laser transmitter (22/12/2020)
World's highest speed communications terminal in a CubeSat size
Flight model in build; to be launched on-board NordSat-1D (2021)

GEO to ground feeder links (HICALI, NiCT)
First 1550nm amplifier system to enable GEO to ground downlink
Scheduled for launch on-board ETS-IX satellite (2022)

Summary and Outlook

- G&H has a world class photonics capability and is well placed to take advantage of the opportunities in our target sectors.
- FY 2020 was a challenging year due to the global impact of the COVID-19 pandemic. We are proud of the way our staff responded and we were able to exit in a relatively strong position.
- In the first four months of FY2021 we have seen improved levels of demand for industrial and medical lasers. There remains high demand for fibre modules, hi- reliability fibre couplers and our A&D capabilities. Medical diagnostic demand continues to show good growth.
- Group's cash generation remains robust and net debt has been reduced further.
- Good progress has been made against our ongoing manufacturing streamlining programme. Two further streamlining projects were started. We expect all current projects to be substantially complete by the end of the current financial year and to reap the full year benefits of the reduced cost base in FY 2022.
- Considerable progress has been made against our strategic goals of diversification and moving up the value chain. A&D now represents a third of group revenues and life sciences over 25%. We are securing new orders thanks to our growing systems capability across all three business sectors.
- There remains substantial long term growth potential for our photonic technologies and system capabilities in all target sectors. The pandemic has validated our long-term strategic goals and we intend to vigorously pursue these goals through internal investment and where appropriate, acquisitions.

G&H