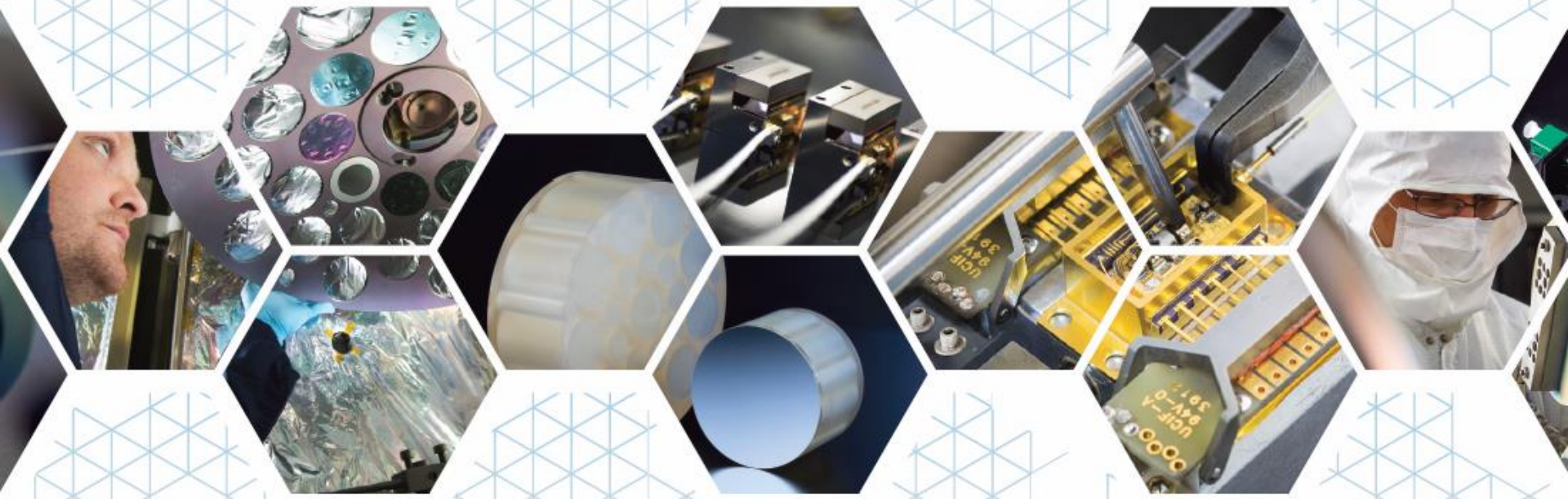

PRELIMINARY RESULTS

YEAR ENDED 30 SEPTEMBER 2017

CEO: Mark Webster / **CFO:** Andrew Boteler

Gooch & Housego
ENABLING PHOTONIC TECHNOLOGIES

Highlights

Operational & Financial Highlights

- Strong financial performance set against a backdrop of favourable market conditions.
- Demand particularly high for critical components used in precision lasers for microelectronic manufacturing and hi-reliability fibre couplers used in undersea cable networks.
- StingRay Optics, acquired in February 2017, has integrated well into the wider group and is performing above our expectations.
- Investment in R&D up 16.2%, 22 new products introduced, 7 new patents granted.
- Adjusted profit before tax up 13.7%.
- Strong cash performance delivering net cash of £14.9 million at year end (2016: £11.7m), after investing £5.7m in acquisitions and £5.8 million in property, plant & equipment.
- Record year-end order book of £72.1 million, up 36.5% from 30 September 2016.
- 13.3% growth in full year dividend at 10.2p per share (2016: 9.0p)

"G&H met its FY 2017 financial goals and was able to make strategically important investments in key skills, processes, systems and the latest capital equipment. Significant progress has been made towards meeting our strategic aims of diversifying the business and moving up the value chain."

Mark Webster, CEO

G&H
ENABLING PHOTONIC TECHNOLOGIES

Financial Overview

Income Statement - Highlights

Year Ended 30 September	2017	2016	% Change
Revenue (£m)	**112.0**	**86.1**	30.2%
Gross profit (£m)	**46.1**	**32.3**	42.7%
Gross profit margin (%)	41.1%	37.5%	
Adjusted operating profit (£m)*	**16.4**	**14.3**	15.1%
Adjusted operating profit margin (%)*	14.6%	16.6%	
Adjusted profit before tax (£m)*	**16.1**	**14.2**	13.7%
Adjusted earnings per share (pence)*	**49.4**	**42.5**	16.2%
Statutory profit before tax (£m)	**12.6**	**10.1**	24.8%
Basic earnings per share (pence)	**36.4**	**29.1**	25.1%
Total dividend per share (pence)	**10.2**	**9.0**	13.3%

Key points:

- Group revenue for the year was a record £112.0m, 30.2% higher.
- Excluding the impact of foreign exchange, revenue increased by 18.7%. The StingRay acquisition contributed £5.3m in the year.
- Adjusted* operating margin of 14.6% (2016: 16.6%), as a result of FX and investment.
- G&H invested £8.6m in R&D, 7.7% of revenue and 16.2% higher than FY16 (2016: £7.4m).
- The adjusted effective tax rate was 25.2% (2016: 27.3%).
- Adjusted EPS up 16.2%.

*Adjusted measures are used to illustrate the impact of non-recurring and non-trading items and are related to the amortisation of acquired intangible assets, costs associated with restructuring activities, the provision for regulatory risk compliance, goodwill impairment, release of contingent consideration and also the gain on bargain purchase in FY16.

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Financial Overview

Cash Flow

Year Ended 30 September	2017 £'000	2016 £'000
Cash flow from operating activities	**17,569**	**12,573**
Cash flow from investing activities		
Acquisition of subsidiary	(5,658)	(5,687)
Purchase of property, plant and equipment & intangibles	(6,374)	(10,339)
Sale of property plant and equipment	-	-
Interest received	27	39
	(12,005)	**(15,987)**
Cash flow from financing activities		
Movement in borrowings	395	5,387
Proceeds from issuance of share capital	-	-
Interest paid	(326)	(111)
Dividends paid to ordinary shareholders	(2,289)	(2,055)
	(2,220)	**3,221**
Net increase in cash and cash equivalents	**3,344**	**(193)**
Exchange (losses) / gains	(86)	804
Cash and cash equivalents	**26,425**	**23,167**

Key points:

- Net cash flows from operations generated £17.6m, compared with £12.6m in 2016.
- Invested:
  - £5.7m in acquisitions
  - £5.8m in PP&E
- Working capital as a percentage of revenue reduced to 19.2% (2016: 24.5%). Benefitted from the year end FX and management's focus on this metric.
- Strong cash conversion. Operating cash flow : Adjusted operating profit 119% (2016: 96%).
- Net cash £14.9m as at 30 September 2017 (2016: £11.7m).

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Financial Overview

Balance Sheet

As at 30 September		2017 £'000	2016 £'000
Non-current assets	Tangible assets	33,890	32,384
	Intangible assets	40,250	29,916
	Other	2,703	2,674
		76,843	**64,974**
Current assets	Inventories	21,078	18,973
	Trade & other receivables	24,990	23,073
	Cash & cash equivalents	26,425	23,167
		72,493	**65,213**
Current liabilities	Trade & other creditors	(23,758)	(19,624)
	Borrowings	(6)	(4)
	Other	(5,753)	(1,831)
		(29,517)	**(21,459)**
Non current assets	Borrowings	(11,492)	(11,494)
	Other	(10,191)	(7,062)
		(21,683)	**(18,556)**
Net assets		**98,136**	**90,172**

Key points:

- Strong balance sheet maintained.
- Trade receivables were unchanged at £20.5m. Strong shipment profile towards the end of the year and the acquisition of StingRay largely offset by movements in the Dollar exchange rate.
- Inventory has increased by £2.1m. Excluding FX & acquisitions underlying inventory increased by £1.6m, or 8.5% in the year.
- Other current & non-current liabilities include £8.5m (2016: £2.3m) in respect of deferred consideration on acquisitions.

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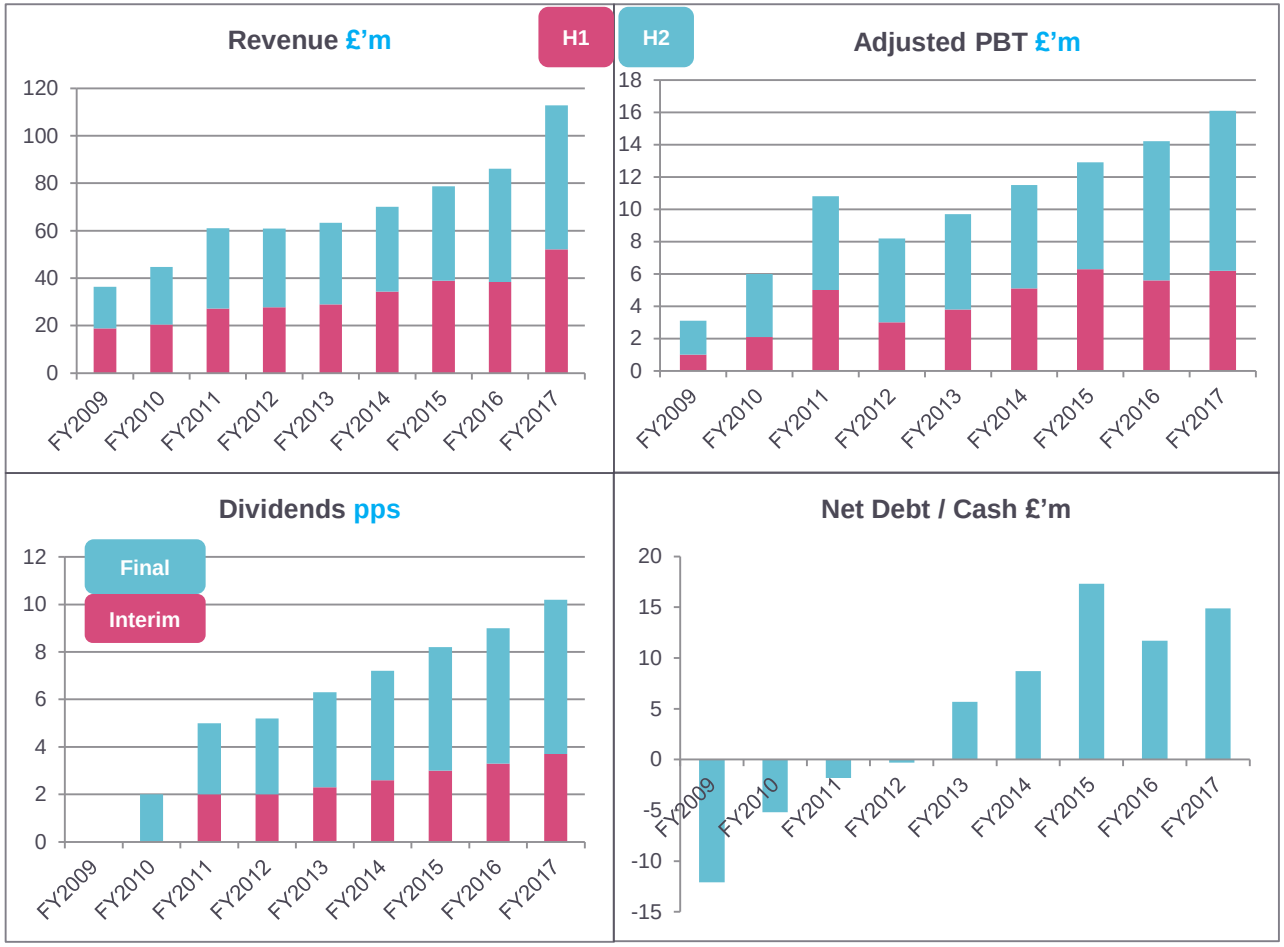
Financial Overview

Financial Track Record



Key points:

- The business has delivered profitable growth over an eight year period.
- 15% CAGR in revenues since FY2009.
- 23% CAGR in adjusted PBT since FY2009.
- 26% CAGR in dividends since FY2010.
- Since the end of FY2009 :
  - Invested £28.5m in PP&E
  - Invested £22.9m in acquisitions
  - Moved from a net debt position of £12.1 million to a net cash position of £14.9 million.

"The business has delivered profitable, cash generative growth over an eight year period."

Andrew Boteler, CFO

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Technology, Products & Markets

Markets & Applications

Industrial

Revenue:

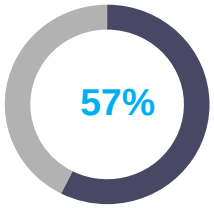
£64.3m

(2016: £54.3m)

Adjusted Operating Profit:

£11.8m

(2016: £10.8m)

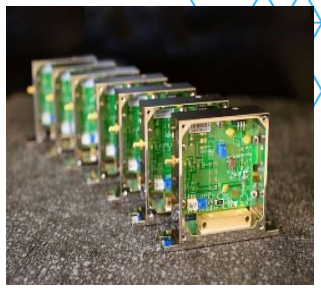


Markets

- **Micro-electronics & light manufacturing.**
- **Fibre optic sensing.**
- **Telecommunications.**
- **Metrology.**

Applications

- Fibre lasers.
- Solid state lasers.
- Semi-conductor equipment.
- Inspection equipment.



- Perimeter sensing.
- Laser scanners.
- Wind turbines.

- Undersea amplifiers.
- Specialist networks.
- 40G & 100G Modulation systems.

- Laser interferometers.

Year ended 30 September 2017

- In micro-electronics the need for the latest laser enabled production techniques for next generation products drove strong growth. Invested in our Ilminster and Fremont, CA sites to meet current demand and establish a platform for future growth.
- Telecommunications continues to be a strong sector, driven by an ongoing need for more data from government, industry and the consumer. Demand for hi-reliability fibre couplers used in undersea cable networks remains high due to ‘Silicon Valley’ firms laying their own networks.

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Technology, Products & Markets

Markets & Applications

Aerospace & Defence

Revenue:

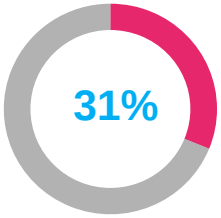
£34.9m

(2016: £20.0m)

Adjusted Operating Profit:

£4.3m

(2016: £1.5m)



Markets

- **Target designation & range finding.**
- **Navigation systems.**
- **Space photonics.**
- **Countermeasures.**
- **Periscopes and sighting systems.**
- **Opto-mechanical sub systems.**

Applications

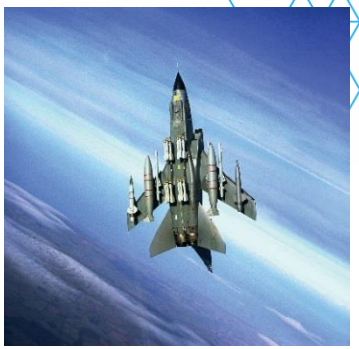
- Aircraft platforms.
- Missile systems.

- Ring laser gyroscopes.
- Fibre gyroscopes.

- Telco satellites.
- Space navigation.

- Infra-red countermeasures.
- RF countermeasures.

- Armoured Fighting Vehicles.



Year Ended 30 September 2017

- A&D sector now represents 31.1% (2016: 23.3%) of our revenue driven by a combination of organic growth and acquisitions.
- G&H is now able to bring a wide range of photonic capabilities to this sector that represent the ‘direction of travel’ in key growth areas.
- Space satellite communication is undergoing a technology revolution, using fibre optic lasers to transmit information.
- G&H is now able to leverage opto-mechanical design capability in a variety of applications including the high growth area of UAVs.

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Technology, Products & Markets

Markets & Applications

Life Sciences

Revenue:

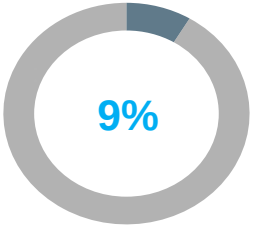
£9.6m

(2016: £7.9m)

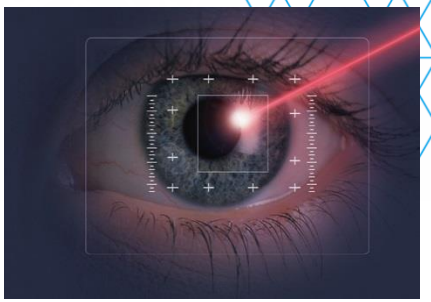
Adjusted Operating Profit:

£1.0m

(2016: £1.6m)



Markets	Applications
Optical coherence tomography (OCT).	• Ophthalmic imaging. • Cardiovascular.
Laser surgery.	• Prostate surgery. • Cosmetic surgery. • Tattoo removal.
Microscopy.	• Confocal microscopes.



Year ended 30 September 2017

- Strong demand for a wide range of OCT components in a number of end use applications.
- Despite revenue growth, profit declined year on year, primarily due to investment in future capabilities.
- Life Sciences sector is currently a relatively small sector, but a strategically important one for G&H going forward.

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Technology, Products & Markets

Markets & Applications

Scientific Research

Revenue:

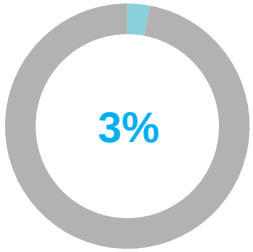
£3.3m

(2016: £3.9m)

Adjusted Operating Profit:

£0.4m

(2016: £0.7m)



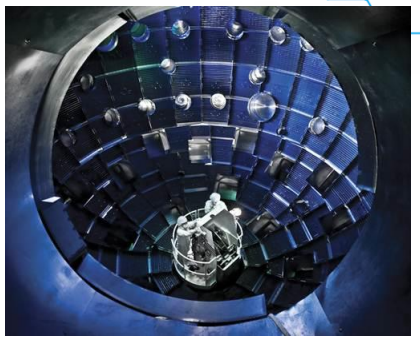
Markets

- **Inertial confinement fusion.**
- **Scientific instrumentation.**

Applications

- National Ignition Facility.
- Laser Mega Joule.

- Research institutes.
- Universities.



Year ended 30 September 2017

- A prestigious and profitable area, capable of single digit growth over the medium term, but not a core growth sector for G&H.
- FY 2017 profit decline is due to order phasing.

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Acquisitions

Strategic acquisition completed in the year

Strategic goal to create a critical mass in A&D (& Life Sciences) through investment in R&D and acquisitions. Both sectors provide a counter balance to the industrial sector's exposure to the economic cycle and provide greater opportunity to move up the value chain.

StingRay Optics

- Acquired in February 2017.
- USA based specialist designer and manufacturer of high performance optical and opto-mechanical sub systems for demanding defence and commercial applications.
- Proven capability in **system-level** optical products for harsh environments.
- Their product range is focused on laboratory, ground based, airborne, unmanned aerial vehicles (‘UAVs”) and space applications for key US defence customers.
- Synergies include leveraging G&H’s greater reach through our global sales teams and expertise in manufacturing infrared precision optics and specialist coatings.
- Post acquisition StingRay contributed £5.3m in revenue and £1.0m of profit after tax in FY2017.

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Our Strategy

Remains “Diversify” & “Move up the Value Chain”

Diversify

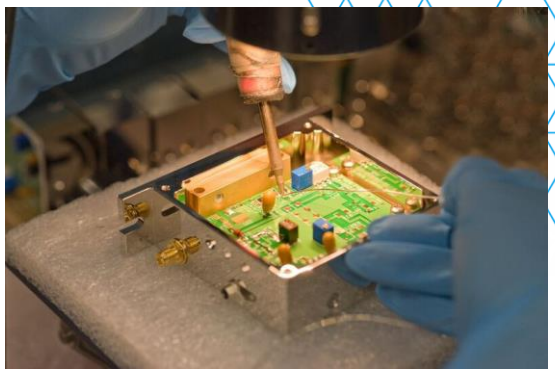
Exploit high-growth opportunities for photonics technology in targeted sectors to provide balance and reduce cyclicality.
Establish critical mass in the A&D and Life Sciences sectors through a combination of investment in R&D and further acquisitions.

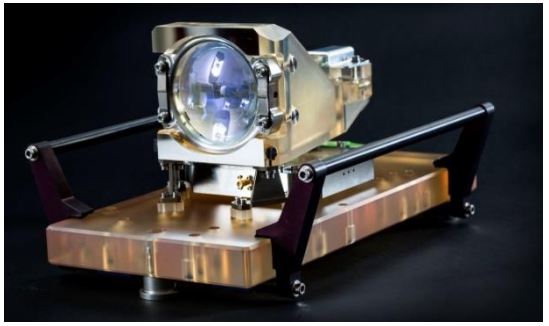
Targeted High Growth areas include:

- New generation of precision lasers and laser systems
- Precision inspection equipment for microelectronic manufacturing
- OCT medical diagnostics
- Laser surgery
- Space satellite communications
- Opto-mechanical systems for UAVs
- Optical systems for armoured vehicles compatible with USA military standards
- Optical sensing for use in harsh environments

Move up the value chain

- Expansion of the Systems Technology Group, providing electronic, software and mechanical engineering expertise required for advanced systems development in Torquay and in the USA.





G&H
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Performance Improvement Programme

Progress to date

- **Operational excellence** - Established a more scalable organisational model for future growth. Our ten manufacturing sites have been organised into three manufacturing centres. They are based on our areas of technical expertise, namely Acousto Optic / Electro Optic, Precision Optics and Fibre Optics.

- **Investment in facilities** - The major infrastructure projects in Fremont, CA and Cleveland, OH are now substantially complete. Accelerated investment in key skills, lean processes and the latest capital equipment in sites that provide critical components used in microelectronic manufacturing, namely Ilminster and Fremont, CA.

- **Business Development** - We have continued to expand our business development group, adding a microelectronic business development executive. The established A&D and life science business development executives have brought enhanced access to tier 1 A&D companies and medical diagnostic organisations and have been instrumental in the development of some of our most notable R&D projects.

- **Targeted R&D approach** - During FY 2017 we introduced a record 22 new products and we expect the full value of these products to peak over the next three years. Revenue generated from new products this year was £11.1 million.

G&H
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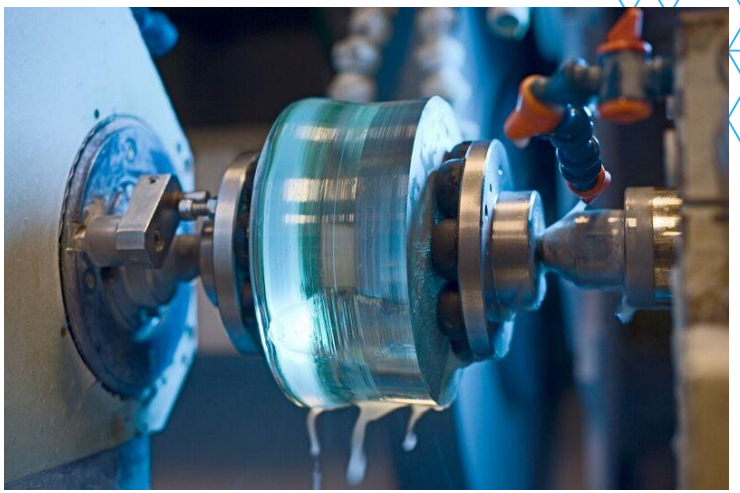
Summary & Outlook

During FY2017 G&H:

- Met its FY 2017 financial objectives.
- Undertook strategically important investments in key skills, processes, systems and the latest capital equipment.
- Made significant progress towards our strategic aims of diversifying and moving up the value chain.
- Increased A&D revenue to 31% of Group revenue.
- Increased systems and sub-systems revenue to 22% of our business.
- Acquired StingRay in February 2017 which has integrated well and has performed strongly.



We will continue an active policy of progressing towards a more diverse and balanced business, by building 'critical mass' in A&D and life sciences through a mix of investment in R&D and acquisitions.

G&H intend to take the performance improvement programme to the next level by further investment in business development activity, focusing our global R&D resources on a few high return projects and continuing to improve operational activity.
We believe the introduction of three manufacturing centres will provide a scalable platform for enhanced lean manufacturing practice.

"These strategic initiatives combined with a record year-end order book mean we are confident that G&H will deliver further progress in FY2018 and beyond."
Mark Webster, CEO

G&H
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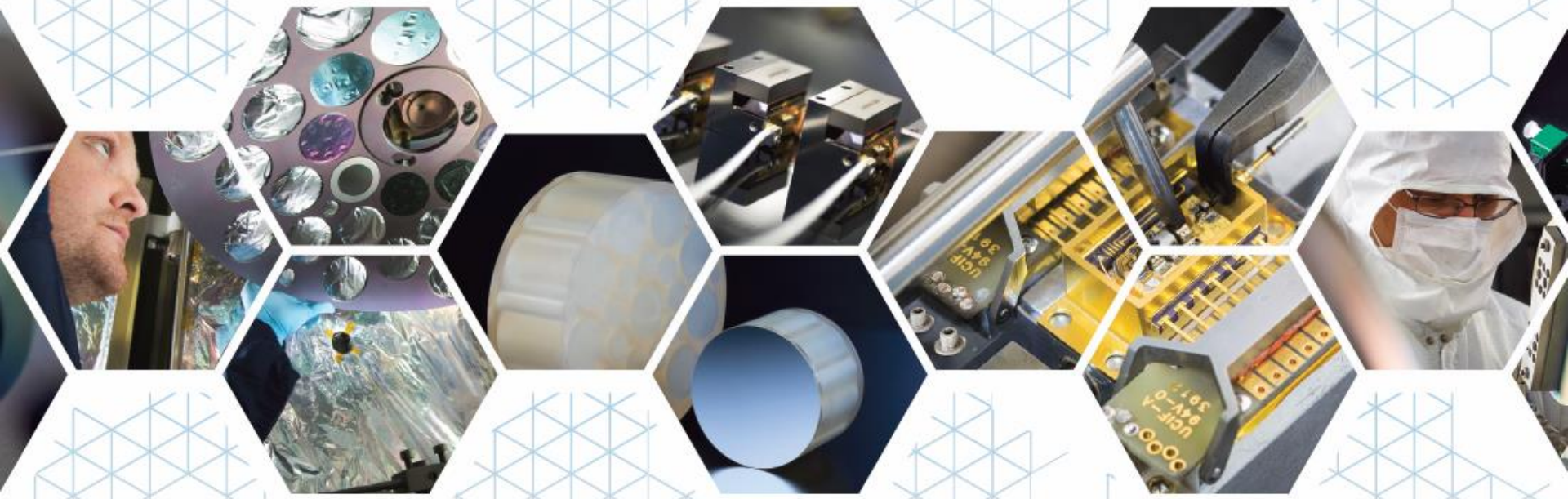

Appendices

Gooch & Housego
ENABLING PHOTONIC TECHNOLOGIES

About us

Gooch & Housego is a photonics technology business headquartered in Ilminster, Somerset, UK, with operations in the USA and Europe.

A world leader in its field, the company researches, designs, engineers and manufactures advanced photonic systems, components and instrumentation for applications in the aerospace & defence, industrial, life sciences and scientific research sectors.

World leading design, development and manufacturing expertise is offered across a broad range of complementary technologies: acousto-optics, crystal optics, electro-optics, fibre optics and precision optics.

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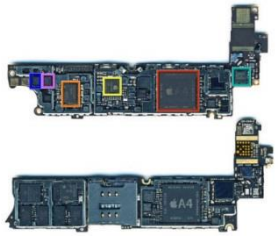
G&H photonics – part of our everyday lives

You probably use G&H photonics every time you use the internet or make a transatlantic phone call

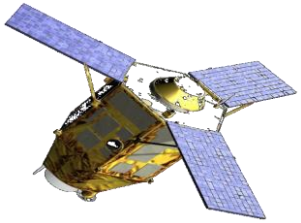
Your smartphone or tablet was manufactured and tested using G&H photonic components:

- Lasers containing G&H acousto- and electro-optics are used in virtually every step in the manufacturing process
- Lithography systems containing G&H precision optics and acousto-optics are used in semiconductor and PCB manufacture
- Wafers, masks and boards are inspected with laser scanners incorporating G&H acousto-optics
- Displays are measured using G&H instruments

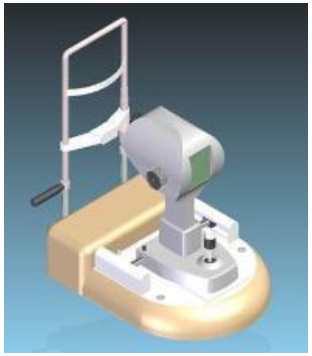


When you travel on holiday or business the airliner you are flying in will be guided by a ring laser gyroscope that probably incorporates G&H optical components

When you use a sat nav in your car you are relying on GPS satellites that incorporate G&H lasers and fibre-optic components



When you have your eyes tested you will be examined with instruments made possible by G&H fibre-optic modules and precision optical components



If you have laser surgery it is likely that G&H photonics are an integral part of the surgical system

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Our Vision

Our vision is of a world in which photonics becomes ubiquitous

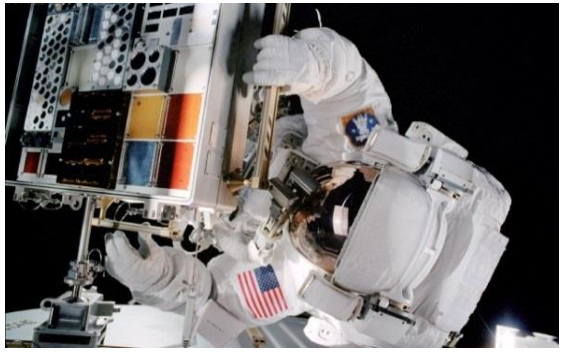
Photonics is already transforming manufacturing, aerospace, communications and medicine

Photonics provides the human interface for digital information

In a future where optics and electronics become inextricably linked all systems become Photonic Systems

Opportunities exist for businesses that have both the vision and capability to enable such transformational shifts in technology

G&H is such a company



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New Products & Capabilities introduced in 2017

Key: 22 New products introduced in FY2017 (2016: 21)	Technology	Precision Optics	Acousto/Electro Optics	Fibre Optics	Instrumentation
Markets					
Aerospace & Defence		1		4	
Industrial			7	3	2
Life Sciences			1	4	
Scientific Research					

"G&H sees the continued investment in R&D, in all areas of our business, as fundamental to the continued growth of the company. There were 22 product releases in 2017."
Mark Webster - CEO

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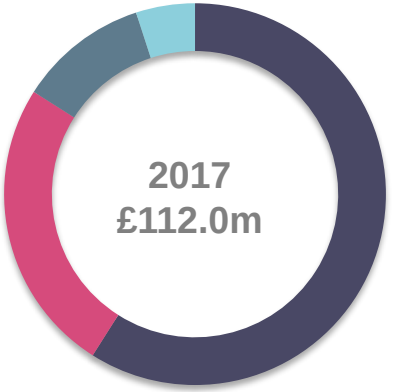
Growth through diversification

The newer markets of Aerospace & Defence and Life Sciences, together with new application areas within our Industrial market, offer the potential for significant growth through their rapid adoption of photonic technologies



Nine Year CAGR By Market

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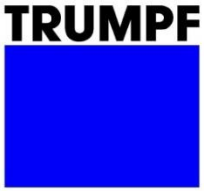
Key Customers