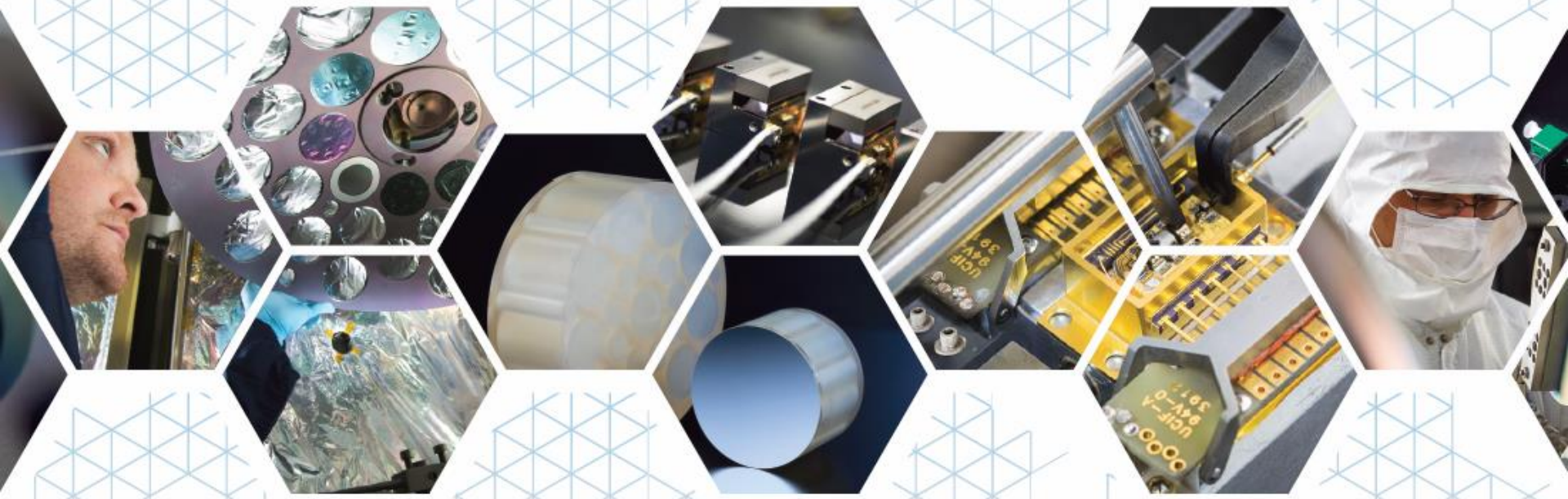

PRELIMINARY RESULTS

YEAR ENDED 30 SEPTEMBER 2016

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

Gooch & Housego
ENABLING PHOTONIC TECHNOLOGIES

Highlights

Operational & Financial Highlights

- Excellent performance from our fibre-based business, driven by telecoms and fibre sensing.
- Strong second half performance with good momentum going into FY2017.
- Two highly complementary acquisitions completed in the Aerospace & Defence sector.
- Substantially upgraded a number of our real estate assets.
- Investment in R&D up 15.4%, 21 new products introduced and 5 new patents granted.
- Adjusted profit before tax up 9.7%.
- Strong cash performance delivering net cash of £11.7 million at year end (2015: £17.3 million), after investing £5.7 million in acquisitions and £9.7 million in property, plant & equipment.
- Record year-end order book of £52.8m, up 45% from 30 September 2015.
- 9.8% growth in full year dividend at 9.0p per share (2015: 8.2p)

"During FY2016 G&H made good progress with its strategic goals of further diversification and moving up the value chain; we met our financial objectives; made a number of strategically important investments and have acquired two highly complementary companies" Mark Webster, CEO

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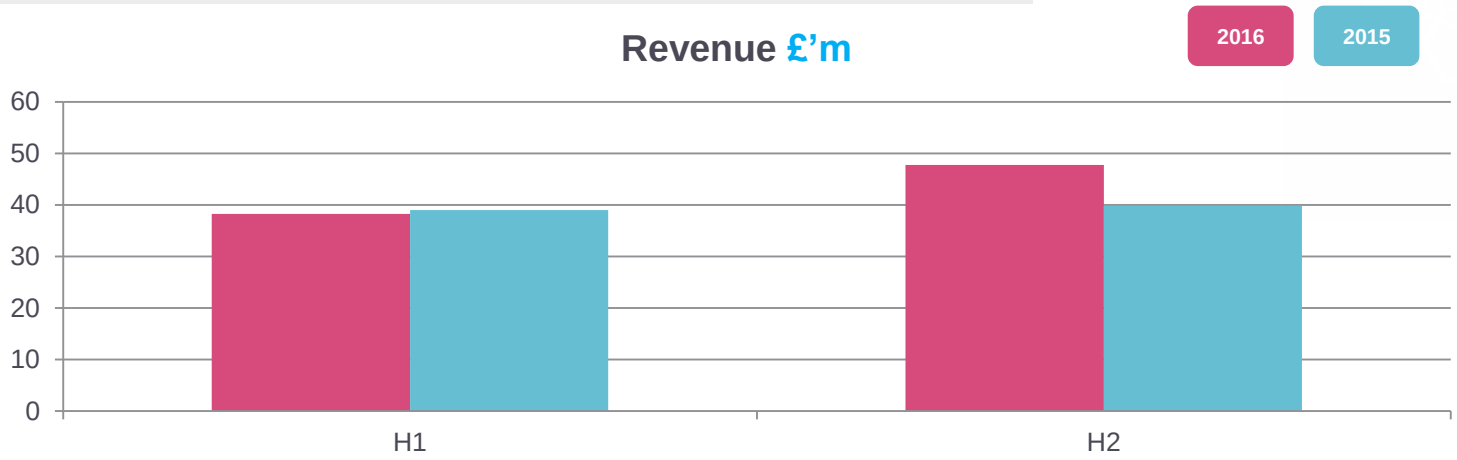
Highlights

Revenue & Order Book Phasing



- Challenging first quarter market conditions in our Industrial Lasers business.
- H2 revenue weighting of 55% compared with 51% for the same period last year.
- Full year results are testament to active policy of diversification and resilience of the business.
- H2 order intake 17% higher than H1.
- Good momentum going into FY2017.
- Record order book of £52.8 million, up 45% compared with 30 September 2015.

"Strong second half performance with good momentum going into FY2017"
Mark Webster, CEO

G&H
ENABLING PHOTONIC TECHNOLOGIES

Financial Overview

Income Statement

Year Ended 30 September	2016 £'000	2015 £'000	% Change
Revenue	**86,051**	78,702	9.3%
Gross profit	**32,299**	31,043	4.0%
Operating expenses	**(18,041)**	(17,941)	0.6%
Adjusted operating profit	**14,258**	13,102	8.8%
Adjusted operating profit %	**16.6%**	16.6%	
Acquired intangible assets, amortisation and exceptional items	**(4,074)**	(2,808)	45.1%
Operating profit	**10,184**	10,294	(1.1%)
Net finance costs	**(88)**	(188)	(53.2%)
Profit before tax	**10,096**	10,106	(0.1%)
Tax expense	**(3,048)**	(2,647)	15.1%
Profit for the period	**7,048**	7,459	(5.5%)
Basic earnings per share	**29.1p**	30.9p	(5.8%)
Adjusted profit before tax	**14,170**	12,914	9.7%
Adjusted basic earnings per share	**42.5p**	39.5p	7.6%

Key points:

- Group revenue for the year was a record £86.1m, 9% higher.
- Excluding the impact of foreign exchange, revenue increased by 3%.
- Adjusted* profit before tax increased by 10%.
- Adjusted* operating margins remained stable at 16.6% (2015: 16.6%).
- G&H invested £7.4m in R&D. This represents 8.6% of revenue and is 15.4% higher than FY15 (2015: £6.4m).
- Net finance costs reduced by 32%.
- Effective tax rate, after taking account of goodwill movements, was 27.7% (2015: 26.2%). The majority of this increase is due to a change in the treatment of R&D tax credits.

*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 and also include the gain on bargain acquisition and goodwill impairment.

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Financial Overview

Cash Flow

Year Ended 30 September	2016 £'000	2015 £'000
Cash flow from operating activities	**12,573**	**13,625**
Cash flow from investing activities		
Acquisition of subsidiary	(5,687)	-
Purchase of property, plant and equipment & intangibles	(10,339)	(3,846)
Sale of property plant and equipment	-	635
Interest received	39	26
	(15,987)	**(3,185)**
Cash flow from financing activities		
Movement in borrowings	5,387	(3,609)
Proceeds from issuance of share capital	-	115
Interest paid	(111)	(189)
Dividends paid to ordinary shareholders	(2,055)	(1,823)
	3,221	**(5,506)**
Net increase in cash and cash equivalents	**(193)**	**4,934**
Exchange gains	804	528
Cash and cash equivalents	**23,167**	**22,556**

Key points:

- Net cash £11.7m as at 30 September 2016 (2015: £17.3m), after investing:
  - £5.7m in acquisitions
  - £9.7m in PP&E
- Net cash flows from operations generated £12.6m, compared with £13.6m in 2015, after a £1.7m cash effect of one off items. (2015: £1.0m).
- Working capital as a percentage of revenue increased to 24.5% (2015: 20.3%), as a result of higher debtors following strong year end shipments and the effect of acquisitions.
- Maintained strong cash conversion. Adjusted operating cash flow : Adjusted operating profit 100% (2015: 112%).

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Financial Overview

Balance Sheet

As at 30 September		2016 £'000	2015 £'000
Non-current assets	Tangible assets	32,384	24,915
	Intangible assets	29,916	20,155
	Other	2,674	2,552
		64,974	**47,622**
Current assets	Inventories	18,973	16,013
	Trade & other receivables	23,073	15,248
	Cash & cash equivalents	23,167	22,556
		65,213	**53,817**
Current liabilities	Trade & other creditors	(19,624)	(14,059)
	Borrowings	(4)	(39)
	Other	(1,831)	(753)
		(21,459)	**(14,851)**
Non current assets	Borrowings	(11,494)	(5,189)
	Other	(7,062)	(3,032)
		(18,556)	**(8,221)**
Net assets		**90,172**	**78,367**

Key points:

- Strong balance sheet maintained
- Comparative balance sheet positions impacted by the acquisitions and FX.
- £9.7m invested in property, plant & equipment (2015 : £3.1m).
- Debtors have increased by £7.8m. Once the impact of currency and the acquisitions are removed, underlying debtors increased by £1.4m, or 9% in the year.
- Inventory has increased by £3.0m. Once the impact of currency and the acquisitions are removed, the underlying inventory fell by £0.5m, or 3% in the year.
- Other non-current liabilities include £2.3m in respect of deferred consideration on acquisitions.

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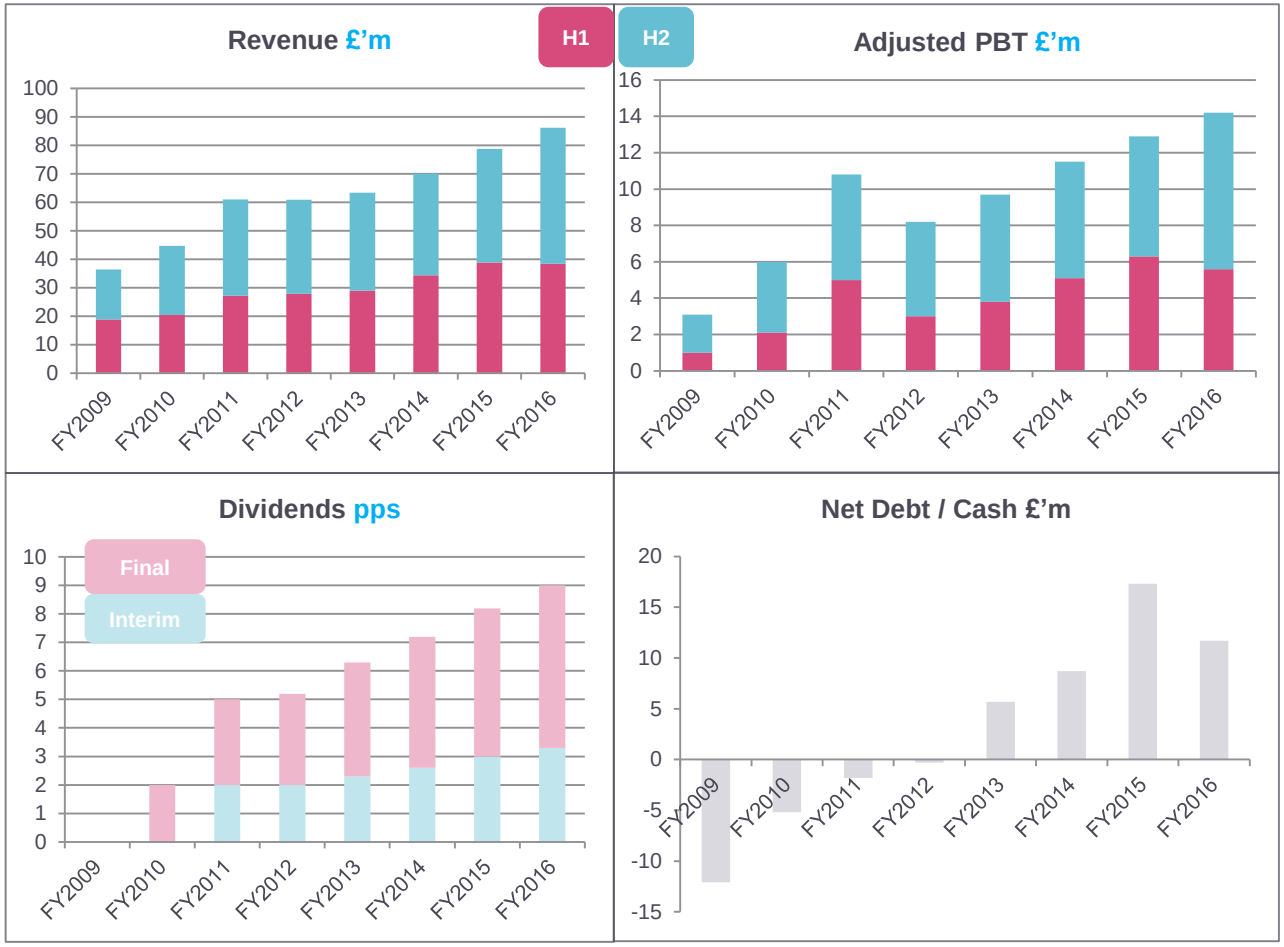
Financial Overview

Financial Track Record



Key points:

- The business has delivered profitable growth over an eight year period.
- 13% CAGR in revenues since FY2009.
- 24% CAGR in adjusted PBT since FY2009.
- 29% CAGR in dividends since FY2010.
- Since the end of FY2009 :
  - Invested £22.7m in PP&E
  - Invested £17.2m in acquisitions
  - Moved from a net debt position of £12.1 million to a net cash position of £11.7 million.

"The business has delivered profitable, cash generative growth over an eight year period" Andrew Boteler, CFO

G&H
ENABLING PHOTONIC TECHNOLOGIES

Technology, Products & Markets

Markets & Applications

Industrial

Revenue:

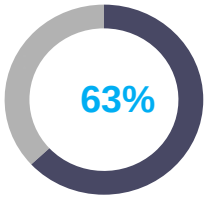
£54.3m

(2015: £46.1m)

Adjusted Operating Profit:

£10.8m

(2015: £9.6m)



Markets	Applications
Micro-electronics & light manufacturing	• Fibre lasers • Solid state lasers • Semi-conductor equipment • Inspection equipment
Fibre optic sensing	• Perimeter sensing • Laser scanners • Wind turbines
Telecommunications	• Undersea amplifiers • Specialist networks • 40G & 100G Modulation systems
Metrology	• Laser interferometers

Year ended 30 September 2016

- Industrial laser products for microelectronic manufacturing were slow in the first quarter, but then recovered strongly in the second half of the year.
- Telecommunications business strong, driven by undersea fibre components and crystal wafers for modulation systems.

G&H
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Technology, Products & Markets

Markets & Applications

Aerospace & Defence

Revenue:

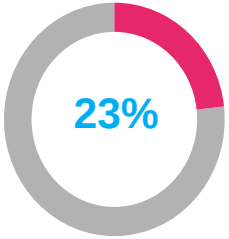
£20.0m

(2015: £19.8m)

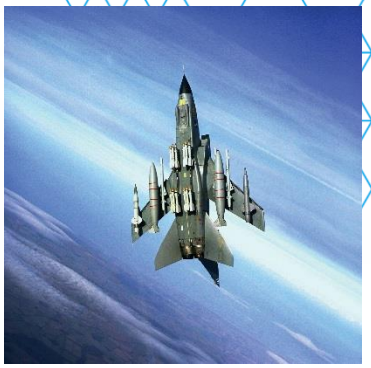
Adjusted Operating Profit:

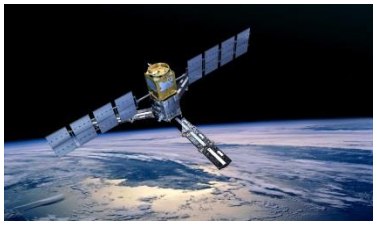
£1.5m

(2015: £2.1m)



Markets	Applications
Target designation & range finding	• Aircraft platforms • Missile systems
Navigation systems	• Ring laser gyroscopes • Fibre gyroscopes
Space photonics	• Telco satellites • Space navigation
Countermeasures	• Infra-red countermeasures • RF countermeasures
Periscopes and sighting systems	• Armoured Fighting Vehicles





Year Ended 30 September 2016

- Operating margins impacted by tighter margins on navigation components and programme delays.
- Move to fibre and infra-red plays to G&H's strengths. Exciting potential for SatCom business.
- Sector provides excellent opportunities for G&H's core technologies and to move up the value chain.
- Acquisitions will positively impact 2017 growth in terms of current business and synergies.

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Technology, Products & Markets

Markets & Applications

Life Sciences

Revenue:

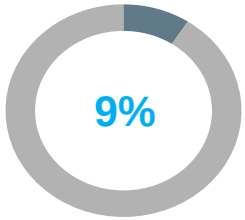
£7.9m

(2015: £9.0m)

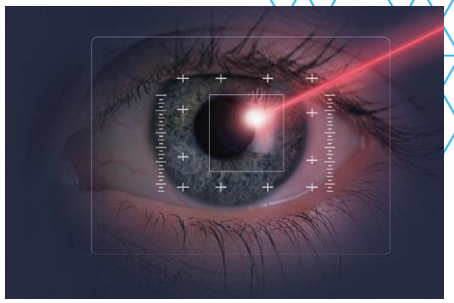
Adjusted Operating Profit:

£1.6m

(2015: £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 2016

- Strong demand for components for laser surgery and laser treatment applications.
- Offset by a decline in sales into OCT due to customer product lifecycles.
- Sector provides excellent opportunities for G&H's core technologies and to move up the value chain.

G&H
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Technology, Products & Markets

Markets & Applications

Scientific Research

Revenue:

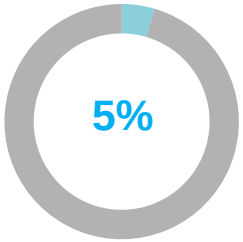
£3.9m

(2015: £3.9m)

Adjusted Operating Profit:

£0.7m

(2015: £0.7m)



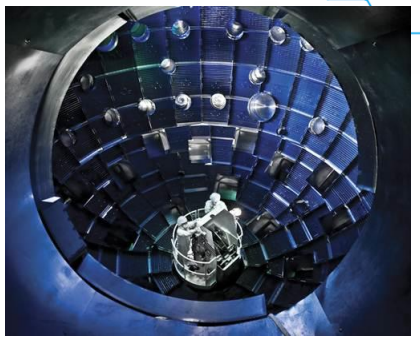
Markets

- **Internal confinement fusion**
- **Scientific instrumentation**

Applications

- National Ignition Facility
- Laser Mega Joule

- Research institutes
- Universities



Year ended 30 September 2016

- In general budgetary pressures suppressing Scientific Instrumentation market, however …
- Strong performance from G&H's internal confinement fusion business in FY16.

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Acquisitions

Two strategic acquisition completed in the year

- **Strategy to create a critical mass in A&D** – this business sector provides opportunities for growth and more scope than industrials to provide **system level** products.

- **Kent Periscopes**
  - UK based supplier of periscopes, vehicle sights and related equipment for land based armoured fighting vehicles.
  - Proven capability in **system level** optical products for harsh environments.
  - Blue chip customer base.
  - Synergy benefits from G&H's greater global reach and complementary technologies.
  - Post acquisition Kent contributed £1.5m in revenue in FY2016.

- **Alfalight**
  - Madison, Wisconsin, based designer and manufacturer of electro-optical systems for defence and security applications.
  - Highly complementary to our Boston, Massachusetts, site and will be absorbed into this business unit.
  - Proven capability in **system level** optical design for key A&D customers.
  - Post acquisition Alfalight contributed £0.9m in revenue in FY2016.

Our Strategy

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

Diversify

Exploit high-growth opportunities for photonics technology across multiple sectors to provide balance and reduce cyclicality. FY2016 demonstrated the value of this policy and the resilience that is built into the business.

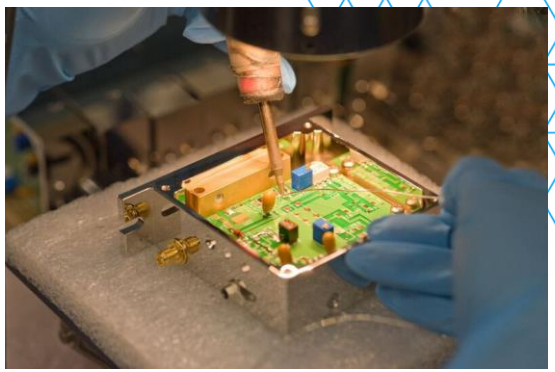
Establish critical mass in the A&D and Life Sciences sectors through a combination of investment in R&D and further acquisitions.

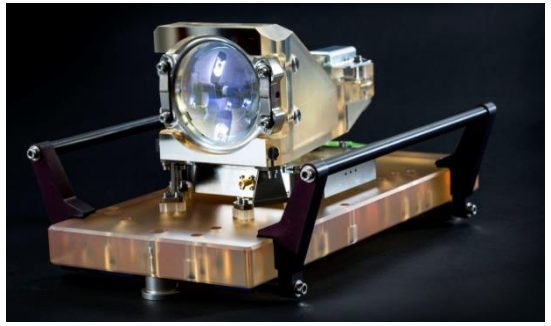
Targeted High Growth areas include:

- Fibre optic lasers
- Fibre optic sensing
- Precision inspection equipment for microelectronic manufacturing
- Laser surgery
- A&D sub-systems
- OCT medical diagnostics
- Space satellite communications

Move up the value chain

- Leverage excellence in components to become a solutions provider.
- Transitioning from component supplier to critical partner.
- Over 30 engineers and scientists in the Systems Technology Group, providing electronic, software and mechanical engineering expertise required for systems development.
- Most notable success in space satellite communications.





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Performance Improvement Plan

Progress to date

- **Operational excellence** - established a number of globally focused teams representing the key manufacturing disciplines. Lean manufacturing principles introduced to all sites with demonstrable benefits in FY2016.

- **Investment in facilities** - Completion of substantial infrastructure investment at our Torquay site enabled us to meet the challenge of exceptional year on year growth of our high reliability fibre couplers for undersea cables.
- Palo Alto facility completed its move across the San Francisco Bay to a purpose built facility in Fremont, with plenty of room for future growth in its core telecom and fibre laser business.
- Cleveland site, which houses our strategically important crystal growth facility, will complete its upgrade during FY 2017.

- **Business Development** - Recently introduced A&D business development executives brought enhanced access to tier 1 companies and helped develop new A&D focused R&D projects. In FY2016 hired first Life Sciences business executive in USA.

- **Targeted R&D approach** - Fewer better resourced projects, selected on basis of highest return on investment, has resulted in a record 21 new products and 5 new patents.

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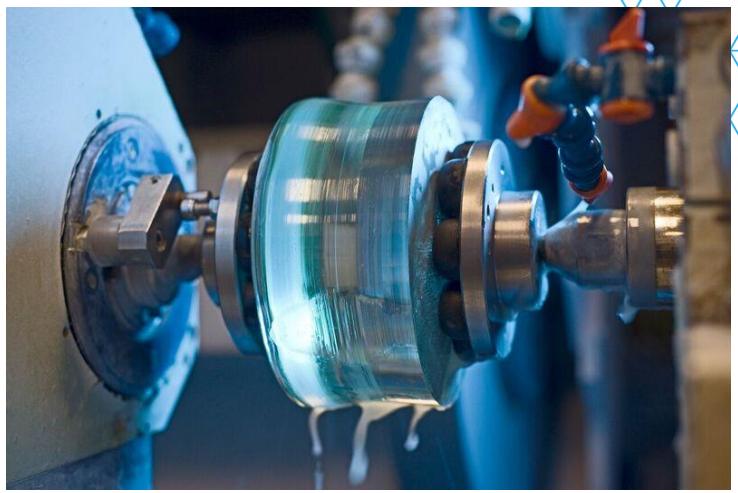
Summary & Outlook

- During FY2016 G&H has:
  - made good progress on strategic goals of further diversification and moving up the value chain;
  - met its financial objectives;
  - made a number of strategically important investments; and
  - acquired two highly complementary companies.
- Committed to further R&D investment in our targeted high growth areas
- We will improve operational efficiency through lean manufacturing: continue to invest in A&D business development, start the same process with Life Sciences business development and focus on fewer, but higher return R&D projects.
- Continue with an active policy of building a more diverse and balanced business by achieving critical mass in A&D and Life Sciences through a mix of R&D investment and acquisitions.



"These strategic initiatives combined with a record year-end order book mean we are confident that G&H will deliver further progress in FY2017 and beyond" Mark Webster, CEO

G&H
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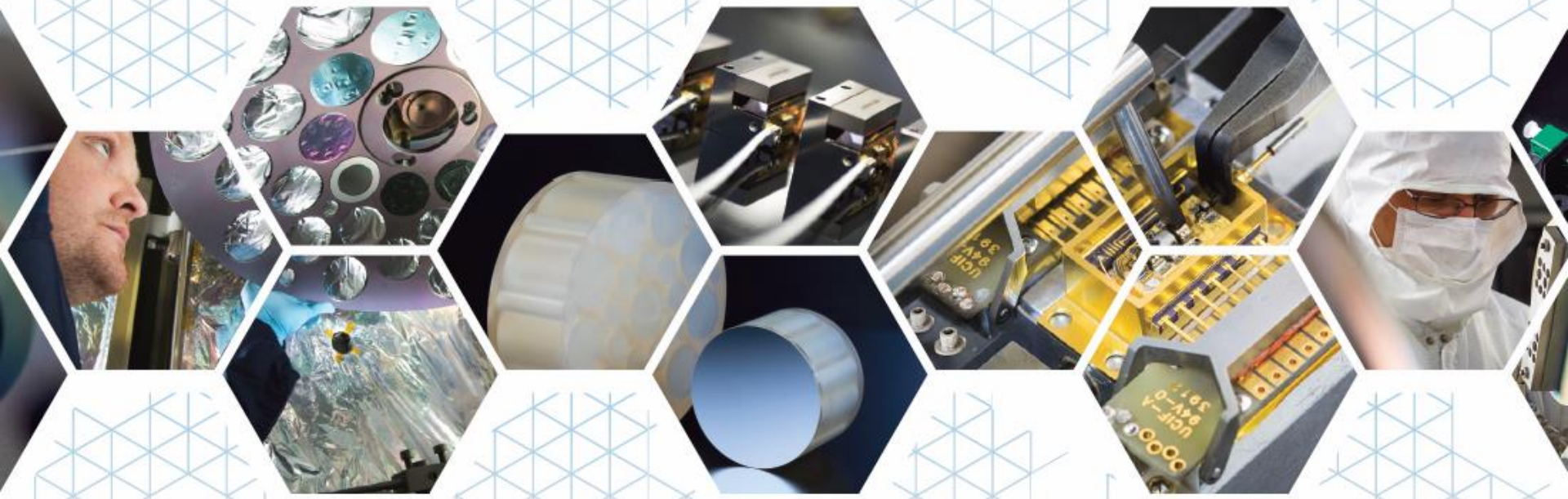

Appendices

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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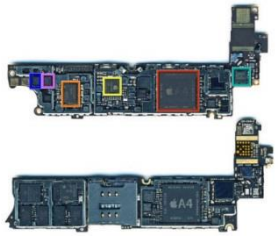
G&H photonics – part of our everyday lives

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

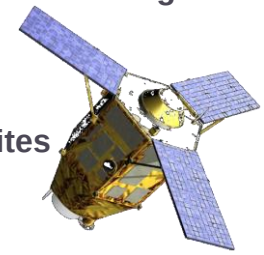
Your smartphone or tablet was manufactured and tested using G&H photonic components:

- 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

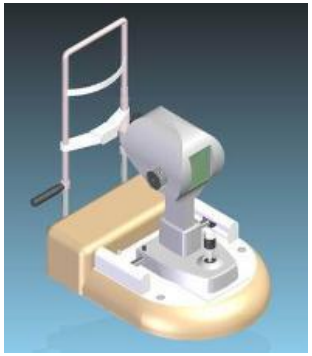


When you travel on holiday or business the airliner you are flying in will be guided by a ring laser gyroscope that probably incorporates G&H optical components

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

G&H
ENABLING PHOTONIC TECHNOLOGIES

Our Vision

Our vision is of a world in which photonics becomes ubiquitous

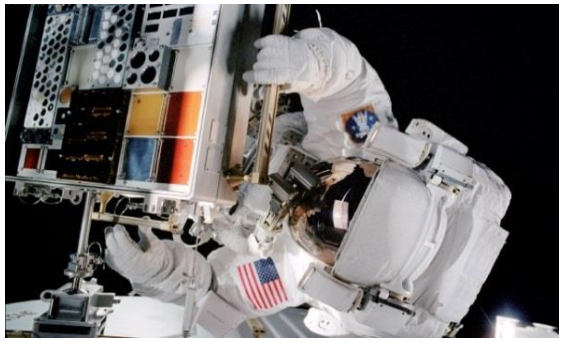
Photonics is already transforming manufacturing, aerospace, communications and medicine

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 2016

Key: 21 New products introduced in FY2016 (2015: 18)	Technology	Precision Optics	Acousto/Electro Optics	Fibre Optics	Systems & Instrumentation
Markets					
Aerospace & Defence		1		2	1
Industrial			6	4	3
Life Sciences			2		2
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 21 product releases in 2016." Murray Reed - CTO

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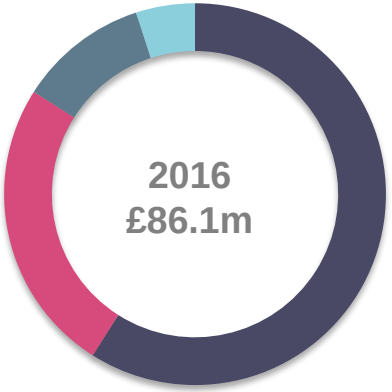
Growth through diversification

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



Seven Year CAGR By Market

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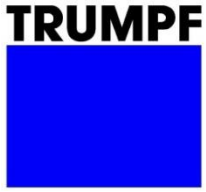
Key Customers