



# L U X F E R

Innovative solutions in material technology

#### KeyBanc Industrials Conference Boston • May 2017



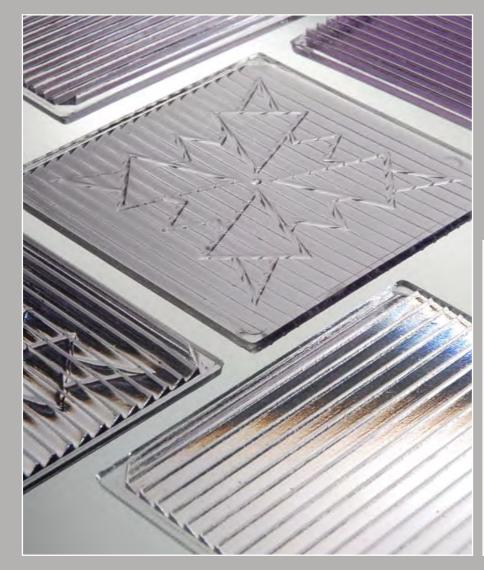




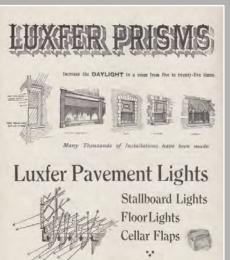


This presentation contains forward-looking statements. Examples of such forward-looking statements include, but are not limited to: (i) statements regarding the Group's results of operations and financial condition, (ii) statements of plans, objectives or goals of the Group or its management, including those related to financing, products or services, (iii) statements of future economic performance; and (iv) statements of assumptions underlying such statements. Words such as "believes", "anticipates", "expects", "intends", "forecasts" and "plans" and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that the predictions, forecasts, projections and other forward-looking statements will not be achieved. The Group cautions that a number of important factors could cause actual results to differ materially from the plans, objectives, expectations, estimates and intentions expressed in such forward-looking statements. These factors include, but are not limited to: (i) future revenues being lower than expected; (ii) increasing competitive pressures in the industry; (iii) general economic conditions or conditions affecting demand for the services offered by us in the markets in which we operate, both domestically and internationally, including as a result of the Brexit referendum, being less favorable than expected; (iv) worldwide economic and business conditions and conditions in the industries in which we operate; (v) fluctuations in the cost of raw materials and utilities; (vi) currency fluctuations and hedging risks; (vii) our ability to protect our intellectual property; and (viii) the significant amount of indebtedness we have incurred and may incur and the obligations to service such indebtedness and to comply with the covenants contained therein. The Group cautions that the foregoing list of important factors is not exhaustive. These factors are more fully discussed in the sections "Forward-Looking Statements" and "Risk factors" in our Annual Report on Form 20-F for the year ended December 31, 2016, filed with the U.S. Securities and Exchange Commission on March 14, 2017. When relying on forward-looking statements to make decisions with respect to the Group, investors and others should carefully consider the foregoing factors and other uncertainties and events. Such forward-looking statements speak only as of the date on which they are made, and the Group does not undertake any obligation to update or revise any of them, whether as a result of new information, future events or otherwise.





Luxfer was founded by Scottish inventor James Pennycuick in 1897 in Chicago, Illinois, to produce prismatic glass products to illuminate architectural interiors in North American and Europe. The name Luxfer comes from Latin *lux* (light) and *ferre* (to carry), so it literally means "light carrier."



Cal Larver Ca. Manufacture all combustions through which "Danight is unlessed into a Building Dose Laborand Celling Labor. Rooft Light: Labora Light: Schlicht, Lacadi Light: Meal Cammunda Primate, Fore-seming, Ornanceal and Roof Glaringe THE BRITISH LUXFER PRISM SYND., LTD., myTelLing 16 HILL STREET, FINSBURY, LONDON, ECC. June Viewen

British advertisement, circa 1900.

The company established its first subsidiary in England in 1898, followed by plants in France, Belgium and Germany in 1899. The British company is the main ancestor of today's **Luxfer Group**.



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Many of the companies that now comprise **Luxfer Group** were owned by British Alcan until 1996, when Alcan sold these businesses—and several others to a group of investors, including a number of former Alcan managers.

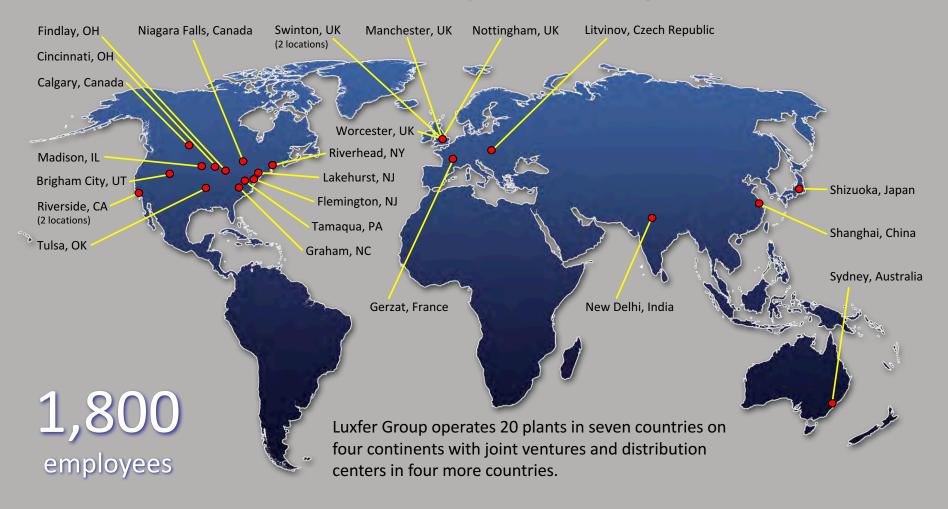
In 2000, the new owners sold aluminum plate, sheet and extrusion operations, as well as several distribution businesses, to Alcoa.

The remaining four businesses—Luxfer Gas Cylinders, Superform, Magnesium Elektron and MEL Chemicals—were the core operations of Luxfer Group when the company listed on the New York Stock Exchange on October 3, 2012.

LUXFER GROUP



#### USA • Canada • UK • France • Czech Republic • China • Japan • Australia • India







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#### **Elektron Division**:

**Magnesium Elektron** 

SERVICE & INNOVATION IN MAGNESIUM

\* **ELChemicals** 

Luxfer Holdings PLC (Luxfer Group) is a global materials technology company focused on sustained value creation using its broad array of proprietary materials technologies and technical know-how.

Organized into **two divisions** with **four global brands**, the company specializes in highperformance materials, components and high-pressure gas-containment devices.









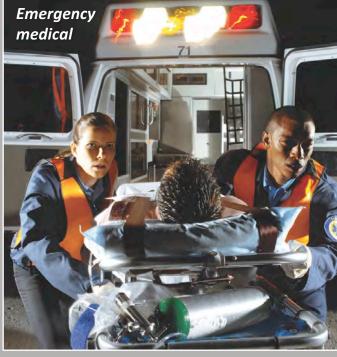
Luxfer Gas Cylinders is the world's largest manufacturer of high-pressure aluminum cylinders. We introduced the first commercial high-pressure, hot-extruded aluminum cylinder in 1941 and invented the cold-extruded aluminum cylinder in 1958. We have a long history of cylinder innovation, including using our own patented and proprietary alloys.



# **Aluminum cylinder markets**











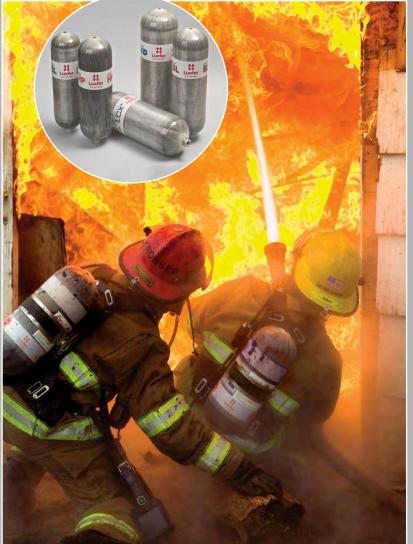












**Luxfer** is also the world's largest manufacturer of carbon composite cylinders, including small, portable cylinders for firefighter **life support** and large cylinders for **alternative fuel** (AF) vehicles, as well as transportation and storage.







Luxfer makes both aluminum-lined (Type 3) and polymer-lined (Type 4) composite cylinders.



# Luxfer composite cylinders









Superform manufactures complex, one-piece, lightweight components for railcar exteriors and interiors, including London Metro cars (shown below).









Luxfer invented and remains the global leader in the superforming process for making highvalue-added, complex, sheet-based parts from aluminum, magnesium and titanium for automotive, aerospace, rail, medical and architectural markets. We have recently invested in expanding the metal-forming capabilities of this business.









Magnesium-Elektron is a global leader in magnesium aerospace alloys for both military and civilian applications. Helicopter gearboxes are an important application for our alloys.











Magensium-Elektron is the world leader in bespoke magnesium powders for countermeasure flares that protect aircraft from attack by heat-seeking missiles.









**Magnesium-Elektron** is the only Western supplier of highquality magnesium **photoengraving plate**.

We also make magnesium **sheet**, **extrusions** and ultra-fine **powders** and run a dedicated **recycling** operation.





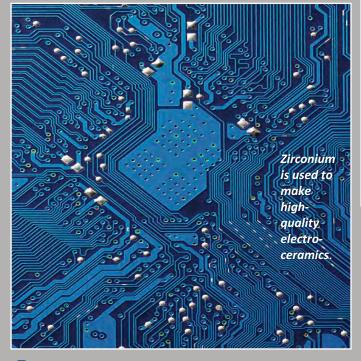
MEL Chemicals produces an extensive, proprietary range of high-quality zirconium-based products used in a wide variety of applications, including automotive and industrial catalysis, ceramics, electronic components, sorption, paint, pigments, printing ink, adhesives, antiperspirants, cosmetics and medical products.













Our **zirconium oxides** are used to create a variety of advanced ceramic products used for circuit boards, filtration of molten metal alloys and as substrates for catalysts requiring large internal surface areas.



#### Luxfer has long-standing relationships with these and other blue-chip customers:





# Global leader in portable SCBA life-support cylinders

**Luxfer Gas Cylinders** is the world's largest manufacturer of portable, carbon composite, self-contained breathing apparatus (SCBA) **life-support cylinders** for firefighters and other firstresponders. We offer the world's highest-pressure SCBA cylinder, as well as the world's lightest-weight SCBA cylinder. We make these products in the USA, France and China.



Luxfer's MEL Chemicals business is a major player in zirconium-cerium washcoats for automotive catalytic converters. We have 'migrated' our know-how into new technology for catalysis and pollution control in refineries, chemical plants and other large industrial manufacturing facilities.



#### Migrating technologies

#### G6 automotive catalysis product

Feedback from customers on laboratory testing of our nextgeneration **G6** product has been very positive, and we are now awaiting results from engine tests.





### Geographic expansion of Luxfer Magtech



**heating pads** for self-heating meals used by the U.S. military and civilian disaster-relief agencies. We recently acquired a European distributor to expand sales of LMI products outside the U.S., and we are now pursuing orders from several large non-U.S. buyers of self-heating meals.







Our **photoengraving plates** are used for special printing effects, such as foil-stamping, embossing and die-cutting for books, stationery, luxury packaging and greeting cards. We have recently expanded our business in the Middle East, India and South America.

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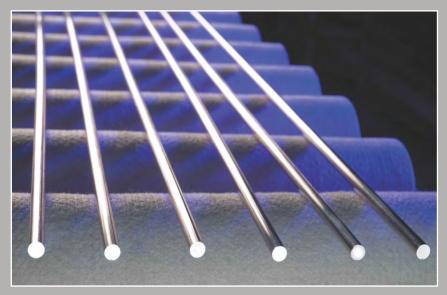
# **Continuous new product pipeline**

- Luxfer has a long corporate heritage of proprietary innovation and a comprehensive material science knowledge bank.
- We stress manufacturing excellence and IP protection.
- We focus on high-growth environmental, healthcare and protection/safety end markets.
- We have multi-year development programs, most often with partners.
- We operate in highly regulated markets, and we're adept at obtaining required approvals and certifications that are often entry barriers to competitors.

Our pipeline of new products supports our end-market and financial focus.



### SynerMag<sup>®</sup> bioresorbable alloy





We produce our exclusive **SynerMag** alloy at a purposebuilt facility in Swinton, England.



Biotronik, our partner in a joint research and development program, has now launched their **Magmaris®** magnesium scaffold in Europe, the Middle East and Australasia—and we are now receiving royalty payments.

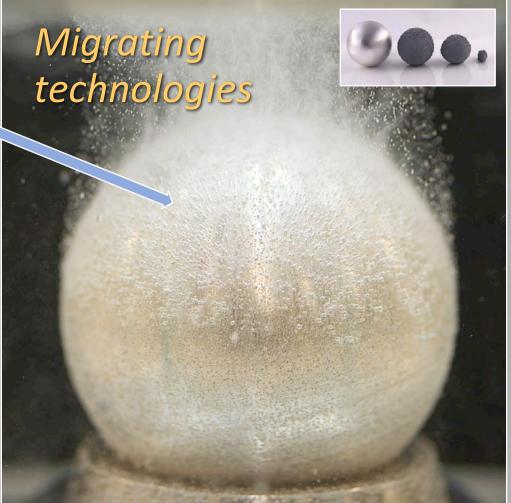




Sales of our new **SoluMag**<sup>®</sup> dissolving alloy for oil and gas wells have been increasing, and we recently introduced new high-ductility, high-strength and fresh-water versions.

SoluMag<sup>®</sup> evolved from our work on our SynerMag<sup>®</sup> bioresorbable medical alloy technology.

### SoluMag<sup>®</sup> dissolving alloy





#### Magnesium alloys for commercial aircraft seats



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## **AOS**<sup>™</sup>medical oxygen delivery system

Our ultra-lightweight system for ambulatory oxygen patients features our patented **SmartFlow™** valueregulator technology, a proprietary high-pressure cylinder and attractive ergonomic design.

> The product recently received **CE approval** and is currently being commercialized in Europe, where patient testing is underway.

> > Advanced Oxygen System



#### Enhanced Superform capabilities

We've invested in expanding **Superform** capabilities, including opening our new **Superform Technology Center** in the U.K., to supply higher-volume contracts for HY2 2017 onwards with Ferrari and another manufacturer of prestige sports cars.

California



### FINANCIAL REVIEW

#### Q1 2017 results released May 8



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	Gas Cylinders Q1 \$M	Elektron Q1 \$M	Group Q1 \$M
2016 Revenue	59.1	49.7	108.8
Changes in period:			
FX translation	(2.0)	(1.7)	(3.7)
Trading movements	(2.7)	1.0	(1.7)
2017 Revenue	54.4	49.0	103.4
Trading variance	(4.7%)	2.1%	(1.6%)



	Gas Cylinders Q1 \$M
2016 Revenue	59.1
Changes in period:	
FX translation	(2.0)
Trading movements	(2.7)
2017 Revenue	54.4
Trading variance	(4.7%)

- Q1 underlying revenue\* down by \$2.7m or 4.7% compared to Q1 2016.
  - SCBA sales showed improvement over the latter quarters of 2016.
  - Higher sales in the European medical sector with our advanced L7X<sup>®</sup> range of cylinders showing improvement.
  - Alternative fuel (AF) sales were down on Q1 2016.
  - Superform revenue was down on Q1 2016 due to the timing of projects.

\* At constant translation exchange rates.



	Elektron Q1 \$M
2016 Revenue	49.7
Changes in period:	
FX translation	(1.7)
Trading movements	1.0
2017 Revenue	49.0
Trading variance	2.1%

#### • Q1 underlying revenue\* up by \$1.0m or 2.1% compared to Q1 2016.

- Large increase in our MRE heater sales following the shortage of orders seen in the latter part of 2016.
- Sales of our proprietary SoluMag<sup>®</sup> alloy are gaining market acceptance.
- Q1 2017 overall catalysis sales impacted by timing of chemical catalysis shipments.

\* At constant translation exchange rates.



#### Revenue by destination

Africa South 1% Africa America 1% 2% UK South UK America 7% 8% 3% Europe Europe (other) (other) 24% 23% North North America America 53% 55% \$108.8m \$103.4m

Q1 2016

Q1 2017



### Trading profit and adjusted EBITDA analysis

Trading profit \$	ŝM	2017 Q1	2016 Q1	2015 Q1
Gas Cylinders	Trading profit \$M	3.3	3.0	1.3
	ROS %	10.2%	5.1%	2.2%
Elektron	Trading profit \$M	7.2	8.8	9.2
	ROS %	18.0%	17.7%	15.7%
GROUP	Trading profit \$M	10.5	11.8	10.5
	ROS %	10.2%	10.8%	9.0%
Trading profit	Gas Cylinders	10.0%		NOTE:
changes for	Elektron	(18.2%)		measur decisio
2017 v 2016	GROUP	(11.0%)		reconci

**IOTE:** Trading profit is Luxfer's IFRS 8 segment profit neasure. Adjusted EBITDA is also used by the chief operating lecision maker. See appendices for non-GAAP econciliations.

Adjusted EBITDA \$M	2017 Q1	2016 Q1	2015 Q1
Gas Cylinders	5.2	5.0	3.2
Elektron	10.1	11.8	12.2
GROUP	15.3	16.8	15.4
GROUP adjusted EBITDA margin %	14.8%	15.4%	13.2%



	Q1	Q1
	2017	2016
Other income statement items:	\$M	\$M
Trading profit	10.5	11.8
Profit on sale of redundant site	0.4	2.1
Restructuring and other expense	(0.2)	(0.1)
Operating profit	10.7	13.8

Net income:	\$M	\$M
Net income	6.6	8.7
Adjusted net income	7.2	8.1
Underlying effective tax rate	24.2%	25.7%
Adjusted basic EPS	\$0.27	\$0.30
Adjusted diluted EPS	\$0.27	\$0.30
Dividend per share	\$0.125	\$0.125

**NOTE:** The calculation of earnings per share is performed separately for each discrete quarterly period, and for the year-to-date period. As a result, the sum of the discrete quarterly earnings per share amounts in any particular year-to-date period may not be equal to the earnings per share amount for the year-to-date period.

**NOTE:** Adjusted net income is used by the chief operating decision maker. See appendices for non-GAAP reconciliations.

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	Q1 2017	Q1 2016
	\$M	\$M
Return on invested capital Invested capital	13% 259.3	13% 261.9
Net debt Net debt : Adjusted EBITDA for LTM (last 12 months)	105.9 2.0	101.9 1.6
Trading working capital	97.2	98.3
Net cash flows from continuing operating activities	9.6	3.0
Net cash flows before financing	6.2	3.7
Funds returned to shareholders (Dividends and share buy-backs)	3.3	9.4

**NOTE:** See appendices for non-GAAP reconciliations.



#### • Guidance:

- The financial result for Q1 2017 represents a significant recovery.
- Performance has been better than previously indicated.
- Revenue, EPS and cash flow all showed strong improvements following Q3 and Q4 of 2016, and our order books have improved.
- In particular, the magnesium operations performed well, and the Gas Cylinders Division improved on Q1 2016.
- We are confident that the guidance remains sound and that on EPS we expect to achieve an improvement of at least 10%.