



does not cost the earth

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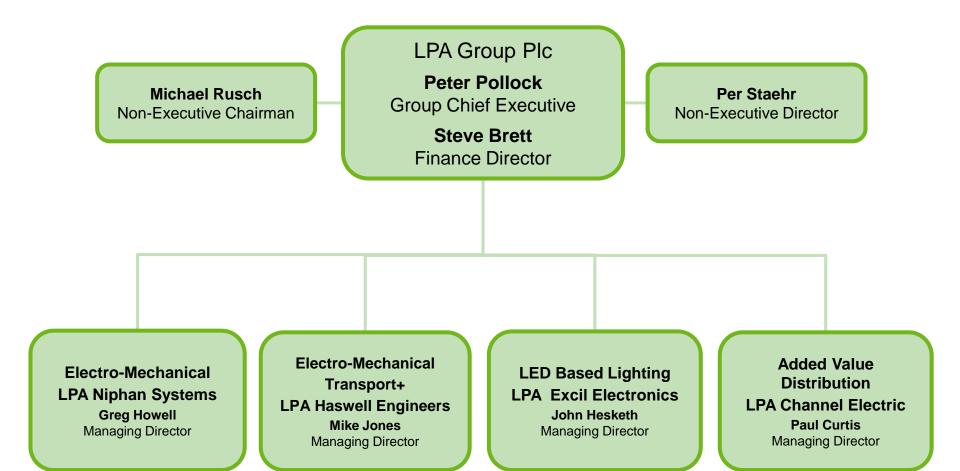
## Recovery underway, 2013 a year of transition, growth ahead

Presentation to analysts and investors
11 October 2012



## LPA Group Structure





### Who We Are



- Light & Power Accessories founded 1908, origins in 19th Century
- Designed and manufactured first weatherproof electrical connector c.1860
- Market leading designer, manufacturer and supplier of LED based lighting and electro-mechanical systems; added value component distributor
- UK based,170 employees, AIM listed, exporting to 50 countries
- Focussed on Transport Sector
- Approximately 33% of sales are exported
- Please visit our website www.lpa-group.com

## **Major Customers**



Rail

Alstom UK, France, Italy, Spain

Bombardier UK, Belgium, France, Sweden, Australia

Downer EDI Rail Australia
Hitachi Japan
Kinki Sharyo Japan
Nippon Sharyo Japan
London Underground UK

MTRC Hong Kong
SMRT Singapore
Erapse

SNCF France

Siemens UK, Germany

TRSC Taiwan

Wabtec UK

Aerospace and Infrastructure

Airports Worldwide

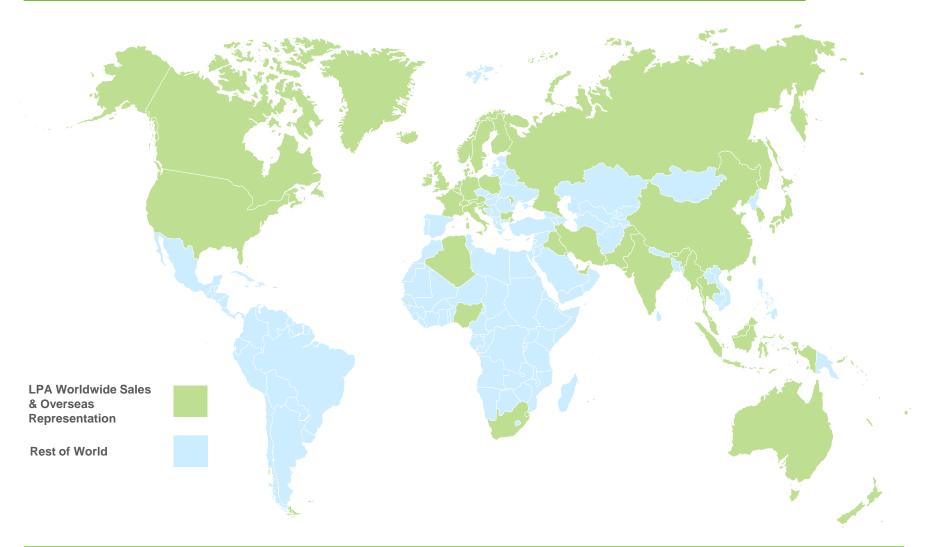
BAE Systems UK
Bombardier UK
BAA UK

A-Belco UK Australia

Westland Helicopters UK

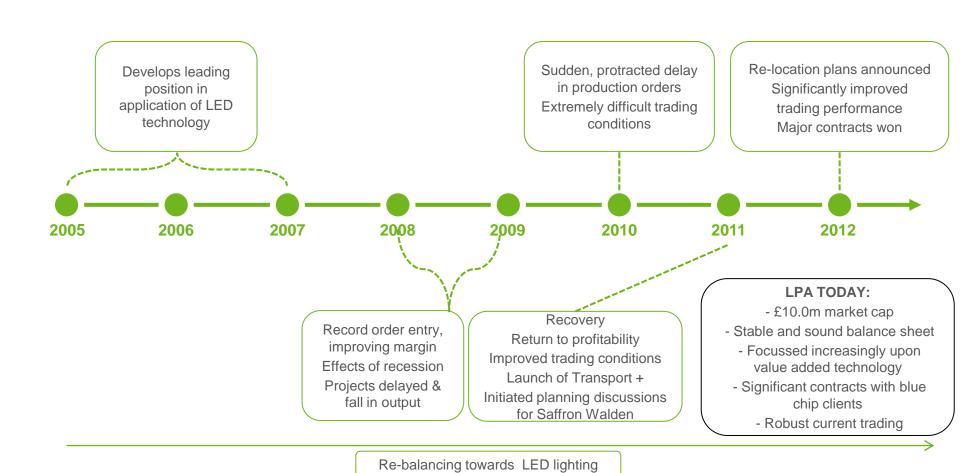
## Worldwide sales presence





### Where We Have Been





## The LPA Recovery Story



- Year ended 30 September 2011: recovery underway
  - Revenue up 17.7% to £17.3m (2010: £14.7m)
  - Profit before tax £400,000 (2010: loss of £458,000)
  - Diluted earnings per share 2.92p (2010: loss per share of 3.35p)
  - Final dividend increased 25% to 0.50p (2010: 0.40p), total for the year 0.90p (2010: 0.40p)
- Six months to 31 March 2012: improving performance
  - Revenue up 5.7% to £8.9m (2011: £8.4m)
  - Profit before tax up 107% to £312,000 (2011: £151,000)
  - Diluted earnings per share up 83% to 2.22p (2011: 1.21p)
  - Interim dividend up 25% to 0.50p (2011: 0.40p)
- August 2012: expect to significantly exceed expectations for full year
  - Very strong Q3 and Q4
  - Strong order book for 2013
  - Orders placed in June produced and delivered promptly
  - Improved trading performance expected to continue into next financial year
- October 2012: further announcement confirming progress.

## Our marketplaces offer opportunities



- UK Rail vehicle market set for growth
  - Thameslink, CrossRail, 500+ additional vehicles in Cost Period 5\*(2014-19), Cascade Refurbishments, Vehicle Life Extensions, Vehicle Upgrades, Vehicle Compliance, European Rail Traffic Management System (ERTMS), Few vehicle retirements
- Global rail transport market expanding rapidly
  - Global demand for rail equipment and services expected to jump by a fifth to €170bn pa over next five years\*\*
- Global growth in demand for aircraft
  - Boeing reports \$2.4 billion order and projects huge increase in demand for pilots\*\*\*
  - Airbus' latest Global Market Forecast (GMF) identifies a need for some 28,200 passenger and freighter aircraft (of 100 seats or more) between 2012 and 2031 worth nearly US\$4.0 trillion, reconfirming an upward trend in the pace of new aircraft deliveries. Of these over 27,350 will be passenger aircraft valued at US\$ 3.7 trillion\*\*\*\*
- Global growth in airport capacity
  - With demand for air travel set to double by 2030, airport capacity is one of the most pressing issues facing European mobility today\*\*\*\*\*

<sup>\*</sup> ATOC/RIA studies, \*\* Unife biennial report, quoted Financial Times September 2012, \*\*\* Boeing announcement 21 September 2012, \*\*\*\* Airbus announcement 4<sup>th</sup> September 2012, \*\*\*\* Airports Council International

### **UK Rail Market**



#### UK Rail market is growing significantly

- More than 45% growth in passenger journeys in the last decade
- 8% in the last year
- 16000+ railway vehicles in the UK, > £600M maintenance spend per annum
- New vehicles being sourced
- Reliability, Functionality and Performance are key to Train Operators
- Demand for Modifications, Enhancements and Refurbishments is growing

#### LPA is well placed to take advantage

- LPA's existing product mix and breadth of capabilities means we can be involved in most modifications and enhancements
  - LPA has an installed base on most of these 16000 vehicles and a good name for reliability
  - Our capabilities include Electronic, Electrical and Mechanical design, procurement, manufacturing, installation and project management- critical for this market place.

## **Property**



- Tudor Works Saffron Walden is at the end of its useful life
  - Promoted re-designation in draft local plan as development site for 20+ houses
  - Outline Planning Application for up to 24 houses submitted in June 2012
  - Application due to be considered by Planning Committee in November 2012
  - Potential purchaser identified
  - Proceeds of sale dependent on Outline Planning Permission outcome.
- Shire Hill Saffron Walden
  - Acquired existing 44,000 sq ft factory on 1.4 acre site July 2012
  - Gross consideration of £1.3m, satisfied from long term loan facility
  - Completion of refurbishment, at significant cost, expected mid-2013
- All 65 Tudor Works employees to transfer to Shire Hill
- Shire Hill will become main centre for electro-mechanical manufacture

## Strategy for growth



- Further develop LED based lighting opportunities, in addition to Rail vehicles, in Infrastructure, Hazardous Areas and Commercial Markets in UK, Europe and Worldwide.
- Further develop Transport+ market in UK in response to growing demand.
- Continue to focus Electro-mechanical activities on Rail Passenger Vehicles, Airports and Marine Markets in UK, Europe, Asia and Australasia.
- Continue to develop our Added Value distribution activities in UK.
- Strengthen engineering, commercial, sales and marketing teams to further penetrate existing and new markets
- Eliminate dependency on low added value subcontracting in electronics and metal fabrication.

## 2013 - a year of transition



- Objectives for 2013
  - Obtain Satisfactory Outline Planning Permission (SOPP) for Tudor Works, Saffron Walden
  - Based on SOPP, enter into conditional contract for sale of Tudor Works to house builder
  - Refurbish and upgrade Shire Hill facility
  - Relocate Tudor Works activities to Shire Hill facility
  - Complete sale of Tudor Works to house builder
  - Build an extension to LED lighting manufacturing facility at Normanton West Yorkshire
  - Invest to grow our businesses



		2009 Actual	2010 Actual	2011 Actual	2012 Broker*	2013 Broker*
Sales	£m	13.72	14.72	17.32	18.79	20.02
Op profit	£m	0.21	(0.37)	0.43	0.80	0.92
PBT	£m	0.19	(0.46)	0.40	0.78	0.80
EPS	Р	1.24	(3.35)	2.93	5.9	5.9
Tax rate	%	24.1	16.4	16.3	12.0	14.0
Dividend	Р	0.9	0.4	0.9	1.0	1.1
EBITDA	£m	0.53	(0.04)	0.75		
Capex	£m	0.31	0.13	0.18		

<sup>\*</sup> Xcap - LPA broker estimate



Balance sheet		2009 Actual	2010 Actual	2011 Actual
Working capital	£m	2.63	2.83	2.42
Fixed assets	£m	2.03	1.79	1.66
Net debt	£m	(1.40)	(1.88)	(1.16)
Deferred tax	£m	0.02	0.09	0.05
		3.28	2.83	2.97
Intangibles	£m	1.29	1.33	1.32
Pension liability	£m	(0.10)	(0.20)	-
Net assets	£m	4.47	3.96	4.29
Gearing	%	31.3	47.5	27.1



Sales split by division		2009 Actual	2010 Actual	2011 Actual
Electro-Mechanical	£m	6.6	7.1	9.0
		48%	48%	52%
Lighting	£m	2.7	3.8	4.7
		20%	26%	27%
Distribution	£m	4.4	3.8	3.6
		32%	26%	21%
LEDs included within Lighting	£m	1.2	1.6	2.4
Transport+ included within Electro-Mech	£m	-	-	0.2



Sales split by market		2009 Actual	2010 Actual	2011 Actual
Rail	£m	6.5	8.0	10.6
		47%	54%	62%
Non-rail lighting	£m	0.2	0.1	0.4
		2%	1%	2%
Aerospace and defence	£m	2.2	1.9	1.8
		16%	13%	10%
Ground support	£m	1.1	1.1	1.1
		8%	8%	6%
Other	£m	3.7	3.6	3.4
		27%	24%	20%

## Sector presentation: Value Added Distribution





Serving the Rail, Aerospace and Defence markets

45 Years of service and experience

Rail and Aerospace specific quality accreditations

Direct accounts with OEM and 1<sup>st</sup> tier customers including Airbus, BAe Systems, Bombardier, Augusta Westland, Thales and Ultra

Providing consultancy, engineered designed-in solutions, product support and supply management for customers

Detailed knowledge of markets

World respected principals

# Sector presentation: Value Added Distribution Suppliers



#### Existing

Amphenol Air-LB Connectors, Pipe Clamps and Cable Clamps

STPI Group Hermetic Relays and Relay systems

LMB
 Fans

Mors Smit Railway Relays

CBI Circuit Breakers

Schaltbau Contactors and Switches

Additions This Year

Amphenol UK
 Mil Spec Circular Connectors

Amphenol Socapex
 Mil Spec PCB Connectors

Amphenol PCD Relay Bases, Clamps, and Connectors

Amphenol India Rail Circular Connectors

## Sector presentation: Value Added Distribution 2013 Objectives



- Maintain existing applications and business
- Add new suppliers & new technology
- Grow and strengthen sales force
- Add services to customers
- Introduce final assembly of some product lines to increase added value

#### Aircraft Support



- Ground Power Connectors harnesses, plugs
  - Dominant market position in following markets UK (90%),
     France (90%), Australia (90%) £2.0M
  - Original Equipment manufacturers (£650k) & replacement (£1.3M)
  - Targeting new countries by partnering with new agents -Russia, Spain, and Germany.
- Cable Management Systems (Crocodiles)
  - Increasing number of countries use Crocodiles
  - Major developments at Heathrow Airport :
     BA's A380 c.£800k (order received),
     Future opportunity Heathrow new Terminal 2013
  - Partnership with AXA
    - opportunities in New Zealand and UAE





### Metal Plugs and Sockets



- Niche, high added value product
- High fire performance low smoke & toxicity
- Hostile environments
- Applications
  - London Underground station refurbishments
  - Crossrail stations
  - Maritime cranes ships & docks
  - Boat harnesses RNLI Shannon class lifeboat
  - Industrial









#### Rail Passenger Vehicles



- New Build Projects UK and global markets
  - Large values
  - Sydney 66 train sets (£2.8M), Taiwan EMU800 & Tilting Train 2 (£2.2M)
  - Generates Installed base and legacy opportunities
  - Significant Opportunities to be bid:
    - Thameslink 1200 cars
    - Crossrail 600 cars
    - West Coast Mainline additional 66 EMU
    - Sydney Phase 2, 20 Train sets
    - Taiwan EMU900 and Tilting Train 3
    - New Zealand 70 cars
- Legacy equipment replacement, repairs and upgrade
  - Mini-projects
    - Lower overheads- Sales and Technical support
    - High added value and increased margins
  - Transport +, contributing new business





High quality, vertically integrated manufacturing



- Highly Flexible manufacturing resource
- Flexible procurement locally and from low cost countries
- Highly Automated CNC Machine Shop ensures repeatability, quality and low minimum order quantities
- Automatic cable cutting, and cable identification printing, machine
- Highly trained and skilled workforce
- Continuous Improvement ethos
- Automatic Test Equipment provides 100% End of Line testing









- Rail Vehicle Maintenance Depots have limited resources, focussed on routine maintenance.
- The growing requirement for Modifications, Upgrades and Solution Provision is frequently subcontracted
- New business offering Transport+® identified and initiated in 2011
- Transport+® offers Turnkey Solution Provision for Minor Modification and Upgrades
  - Takes LPA's products and capabilities and offers
    - Design
    - Procurement
    - Manufacture
    - Installation
    - Third party verification.
    - Turnkey project management



- Transport+<sup>®</sup> for the customer
  - Is competitive compared with larger players
  - Minimises risk for the Train Operator or Owner
  - Shortens timelines
  - Eliminates
    - cost and risk of multiple single discipline suppliers
    - project management
- Transport+<sup>®</sup> for LPA's business case
  - Moves LPA up the supply chain
  - Gives LPA Multi-Tier participation in the Transportation Industry
  - Increases revenues
  - Enhances margins
  - Minimal additional fixed investment

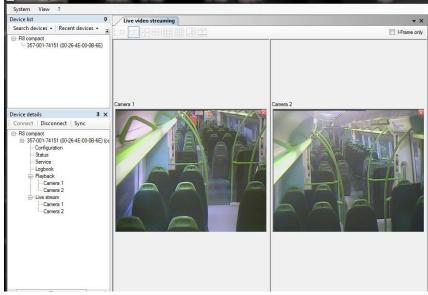


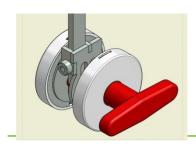
#### Significant repeatable projects completed

- 172 Cab desk upgrade modules
- 184 CCTV, ethernet backbone and Jumper installations
- 600 Door Threshold Tread plates delivered
- Toilet door locks designed











#### Customers

- say LPA are innovative and good to work with
- say LPA has demonstrated competence across a broad spectrum
- Relationships with key players established TOCs and ROSCOS

#### Market potential

- Core focus is 12000 vehicles stabled in Depots in the South East of England
- Vehicles built in 1990's and early 2000's nearing half life upgrade and potential refurbishment
- Systems performance, reliability and system upgrade becoming a priority
  - Long Life Lighting and LED based lighting
  - Jumper replacement and upgrade Ethernet backbone.
  - ERTMS
- Estimated 5 year expenditure (minor works say per vehicle Lighting £3000, Jumpers £3000, ERTMS £3000, other £24000, Total £33,000, say half fleet 6000 vehicles) c.£200m.

### Why the move into LED?



- LED lighting is 'the next big thing'
  - Fragmented market with enormous growth potential
  - Adoption rates accelerating sharply driven partly by regulation
  - The global LED lighting market is growing rapidly

(from EUR 7 billion in 2010 to EUR 40 billion in 2016 – a compound annual growth rate (CAGR) of 34%. Subsequently, growth is expected to slow down, with a CAGR of 13% from 2016 to 2020. The LED lighting market will amount to almost EUR 65 billion (\$94 billion) by 2020, representing close to 60% of the total lighting market, according to a report from McKinsey & Company (Munich, Germany). (LED's Magazine article))

- Growing demand amongst customers
  - Converts more power into light- energy saving
  - Longer life reduced maintenance costs
  - Solid state, able to withstand harsh environments
- Key target markets: Rail Passenger Vehicles, Infrastructure, Hazardous Areas, Industrial and Commercial
- Competition fragmented with exception of Dialight.

#### The LPA Proposition



- LPA is a designer and manufacturer of technology leading LED based lighting solutions.
- Our expertise includes design and manufacture of LED light engines, drive electronics and control systems, and complete lighting solutions.
- LPA LED Lighting has a reputation for long life and reliability.
- LPA integrates LED's with power supplies into light engines and complete light sources for transport, infrastructure, industrial and commercial markets
- 95% of products are proprietary and designed in-house
- Strong new product pipeline
- LPA provides clients with a total solution, from development to on-site installation and maintenance

#### The LPA Proposition



- The LED lighting business originated in the passenger rail vehicle interior lighting sector.
- Target growth in high added value market sectors including:
  - Europe and other high added value export markets
  - Transport Infrastructure.
  - Tunnels and underpasses.
  - Hazardous area lighting via OEM's
  - Selected commercial lighting.
  - Industrial
- Strong current order book, with a large value of outstanding tenders
- The dedicated LED sales team of four includes a German speaking French national and two commercial lighting specialists
- The LPA Group field sales team covers the UK rail market.
- We have agents in Europe, Asia and Australasia

#### New product development



- Our product range is constantly expanding.
- R&D spend is £0.5m per annum and rising.
- Our engineers have a wide range of expertise including LED, electronics, mechanical, materials engineering and project management.
- We have specialists focussed on product development for new market sectors.
- Further expansion of our R&D team is planned this financial year.
- Our product range includes a comprehensive range of
  - down lights, spot lights and reading lights which replace halogen lamps.
  - LED based light engines and luminaires which replace the complete fluorescent light fittings
  - LED based light engines which replace fluorescent and other light sourced work lights.

#### The Technology



- The LED is a solid state electronic device, there are no fragile filaments or gas discharge processes to fail.
- LPA's In-house expertise in the fields of drive electronics, thermal management and light capture has resulted in LED based products achieving 100,000 hours of service life before degrading to 70% initial light output.
- This compares to 15,000 hours for standard fluorescent lamps and 3,000 hours for halogen lamps.
- The high reliability and long life properties attained result in lighting systems with significantly reduced whole life cost.
- High system efficiency levels results in typically 40% power savings compared to fluorescent and 80% savings compared to halogen, more if the lamps are used in air conditioned environments.



Power LED





#### **LED Lighting**

Summary

- Large and fast growing market
- Major opportunity to leverage our existing rail based offer into selected target sectors
- Significant orders won from Siemens for Munich and Warsaw Metros in 2012
- Significant orders won for hazardous area lighting applications in 2012
- Initial orders won for infrastructure applications in underground stations, passenger walkways and vehicle underpasses.

# LPA Group Major Factors in 2013



- Investing in people for growth
- Growing LED Lighting and Transport+® rapidly
- Extending Normanton LED Lighting Facility
- Refurbishing Shire Hill
- Relocating electro-mechanical activities from Tudor Works to Shire Hill to increase operational efficiency
- Selling Tudor Works generating significant surplus over book value
- Looking to the future with confidence



# Thank you for listening Q&A





# Appendix



# Sector presentation: Value Added Distribution Aerospace, Defence, Naval Markets



### **PROJECT REFERENCES**

#### **Aerospace Civil**

- Concorde
- Global Express
- Airbus Family inc A380
- Boeing 777
- Falcon
- Lear Jet
- Global Express
- Jet Stream
- RJ Family
- ATP
- C Series

#### **Aerospace Military**

- Typhoon,
- Tornado,
- Hawk,
- Nimrod MRA4
- JSF
- A400M
- Tucano Trainer
- Hercules
  - Jaguar
- Harrier
- Lynx
- Sea King
- EH101 Merlin
- US101
- Firefly
- AW101
- WILDCAT

#### **Land Systems**

- AS 90
- Challenger 2
- CRAAV
- Trojan (ETS)
- Titan (ETS)
- Combat Vehicle
- Reconnaissance Tracked CVR (T)
- Stormer
- Scorpion
- Warrior
- Terrier
- Piranha
- Panther
- Reacher
- Soothsayer
- BOWMAN
- Rapier Missile
- Starstreak HVM

#### Naval

- Type 45 Destroyer
- Mk 8 Gun
- Astute Class Submarine
- Trafalgar Class
   Submarine
- Trident Class Submarine
- Spearfish Torpedoes
- Stingray Torpedoes

# Sector presentation: Value Added Distribution Rail Market



#### PROJECT REFERENCES

- Diesel Multiple Units
  - Classes: 142, 144, 150, 153, 158, 159, 168,170, 172
- Electric Multiple Units
  - Classes: 313, 315, 317, 319, 377, 379, 455, 475, 476, 442, 456
- London Underground Limited
  - Lines: Bakerloo, Central, Circle, District, Hammersmith & City, Jubilee,
     Metropolitan, Northern, Piccadilly, Victoria, Waterloo & City

## Sector presentation: Electro-Mechanical

## High Reliability Rail Vehicle Products



- 40 years experience in Rail market
- Designed, simulated and type tested to meet UK and International Standards
- Battery Rafts and Under frame electrical enclosures
- Connectors
  - Robust
  - High density
  - Function and conductor matched contacts, single,
     co-ax, twisted pairs, tri-ax, Ethernet.
- Jumpers
  - Conduited harnesses
  - Function matched conductors
  - Spare capacity built in









## Sector presentation: Electro-Mechanical

Long Life Reliability



## Class 390, Pendolino Heavy Level 3 overhaul -

2.5M miles, No Jumper replacement required





## Class 465, heavy overhaul -

First fleet after 20 years service; Jumper replacement programme

Class 334, Juniper 7 year inspection

Pristine - good for another seven years!





## Current customers include:



- Siemens, UK, Austria and Germany.
- Alstom, UK, France and Italy.
- Bombardier Worldwide.
- Hitachi UK and Japan.
- Downer EDI Australia.
- Kinki Sharyo, Japan.
- SNCF, France.
- South West Trains UK.
- A-Belco Group UK.
- Transport for London, UK.
- London Underground

## Halogen replacement applications













- Downlights
- Ship Balcony Lights
- Reading Lights















## LumiPanel





- Features
  - 20 mm thick
  - Vandal resistant (IK10 rated-5Kg from 400mm).
  - Connects directly to power source (AC or DC).
  - Typically 17 years service life.
  - Up to 40% energy saving.
  - Fire compliant (BS6853 1a)
- Applications
  - London Underground Central Line
  - Blackfriars Underpass

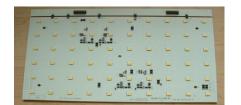




## LumiMatrix











- Features
- Uses Power LEDs in light engines for industrial applications.
- Uses hundreds of chip LEDs achieving extremely high levels of uniformity in a Luminaire just 30 mm thick
- Flexible LED pitch and form.
- Connects direct to the available power source.
- Typically 15 years service life.
- Up to 40% energy saving.
- Emergency versions available.
- Applications
- Underground stations
- Passenger Rail Vehicle Interiors
- Hostile Environment Work lights









## LumiTile



- Features
- Uses Matrix technology in a 600mm x 600mm or 600mm x 1200mm standard ceiling tile format.
- Uses hundreds of chip LEDs to create a homogenous light source.
- Equivalent output to a 4 x 18W T8 fluorescent fitting.
- 30% energy saving compared to fluorescent.
   70,000 hours Service life to 70% initial lumen output.
- Emergency and Dali compatible variants available.
- Connects directly to the AC mains power source.
- Applications
- High Added Value Offices, Airports, Stations, High Bays.





## **LumiStrip**





- Features
- Retrofit or new installation
- Connects direct to the power source.
- Fixes directly to the luminaire gear tray.
- Typically 17 years service life.
- 25% energy saving compared to fluorescent.
- DC and AC versions available.
- Applications
- Passenger Rail Vehicles, 26km being supplied.
- Underground Walkways
- Membrane Ceiling Backlight





