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Presentation to Institutions

31 January 2017



Agenda

- Carclo Overview
- Technical Plastics (CTP)
 - LED
 - Aerospace
- Group Balance Sheet



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Carclo Overview

Carclo is a leading global manufacturer of fine tolerance parts for the Medical, Industrial, Aerospace and Luxury and Supercar Lighting markets

Global contract manufacturer to medical market

Leading designer and manufacturer of luxury and supercar LED Lighting

Leading supplier of aviation control cables in Europe

● Manufacturing locations

Strategy to expand manufacturing capabilities to further drive value



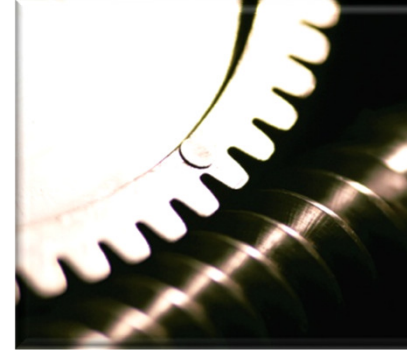
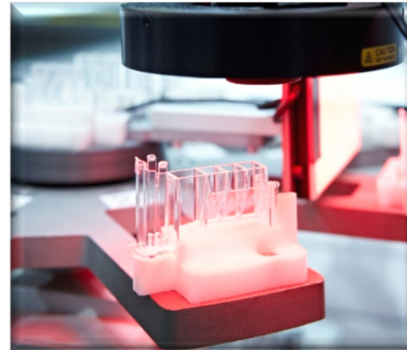
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Technical Plastics

Contents

- Scale and strategy
- Capabilities
- Success factors
- Medical focus
- PTD acquisition
- Future direction



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Technical Plastics - Strategy

- Continue to develop medical focused global business
- Leverage existing customer base for growth
- Improve customer perceptions via:
 - increase in scale and capabilities
 - addition of value add services
 - improvement in site aesthetics
- Focus on automation development to improve:
 - efficiency
 - customer data capture and product conformance
 - business 'retention'
- Expand the business whilst leveraging infrastructure, management and technical teams
- Retain profitable and sustainable non-medical business



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Technical Plastics - Scale

Location	USA	UK	India	Czech Republic	China
Production sites	4	1	2	1	1
Sales (31 March 2016 ye)	£35.1m	£17.5m	£6.3m	£8.6m	£3m
Employees	356	191	268	204	83
Medical %	96%	97%	0%	11%	62%
No. of moulding machines	106	65	25 (+ other Manufactu ring equip)	71	20



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Technical Plastics – Success factors

- Market size
 - Global injection moulding market - \$200 billion (CAGR - 5.1%)
 - Medical represents \$25 billion (CAGR - 10%)
- Leading global competitors typical profile
 - Over \$0.5 billion in revenues
 - Global / Multi-site
 - Integrated offerings including design and toolmaking (plus assembly and contract manufacture in many cases)
 - Technical focus (including high automation)
- CTP increasingly meeting this profile
- CTP USP's
 - more nimble
 - more pro-active
 - focusses on using single points of contact in customer interface
 - perceived as more willing partner
 - customers perceive CTP is bigger than it is



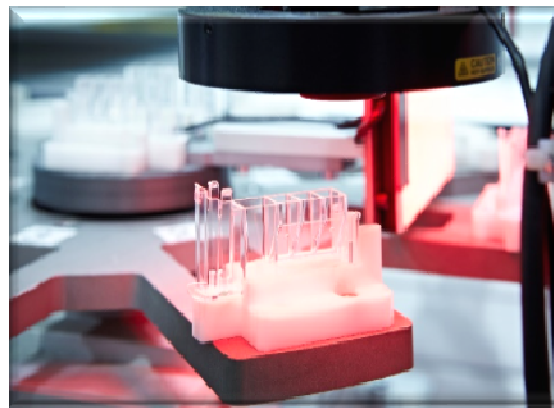
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Technical Plastics – Medical focus

Medical moulding emphasis

- Good growth and extremely stable demand (high future visibility-usually single sourced supplier)
- High investment from CTP and customers for product validation
- Expensive and complex for customers to move work
- Continuous new product pipeline
- Large global profitable customers
- Typically tendering for complex automation projects, with tooling designed and procured/ built by CTP



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Technical Plastics – PTD Acquisition

- Acquisition of Precision Tool & Die (“PTD”) was completed in October 2016
- Initial consideration of \$5.5 million (approximately £4.5 million) in cash plus further deferred consideration of up to \$1.0 million (approximately £0.8 million) in cash
- Located near Boston, in Derry, New Hampshire in the US
- PTD provides high precision mould tooling, injection moulding and assembly for the medical device industry
- For the year ended 31 December 2015, PTD reported unaudited turnover of US\$6.9 million (approximately £5.7 million), unaudited profit before tax of US\$1.6 million (approximately £1.3 million) and unaudited net assets of US\$2.2 million (approximately £1.8 million)

Key benefits of the acquisition:

- PTD has very strong technical relationships with several major medical OEMs
- Addition of prototyping and toolmaking capabilities
- More integrated offering to customers
- Leverage wider customer base



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Technical Plastics - Future direction

- Integration of PTD and look to implement the prototyping model outside USA within in medium term
- Develop Global customers within Chinese market from existing seeds
- Develop further medical capabilities in Czech Republic
- Utilise facility capacity in China, Czech Republic and India over longer term (heavy lifting capex for facilities will reduce from 2018/19)
- Vision is to develop a £200 million revenue CTP business in the medium term with an operating margin >10% - mainly through organic growth



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LED



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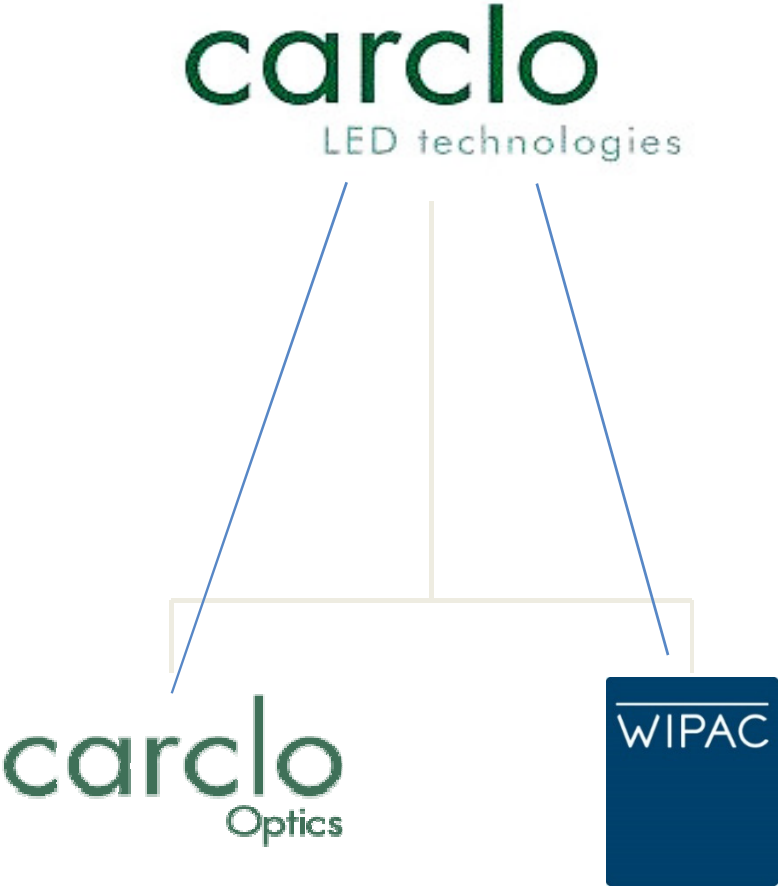
- Division Structure
- Carclo Optics – summary of business
- Wipac
 - Capabilities
 - Products
 - Example projects
 - Success Factors
 - Market Sectors
 - Typical Contracts
 - 3 year Strategy



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LED Technologies - structure



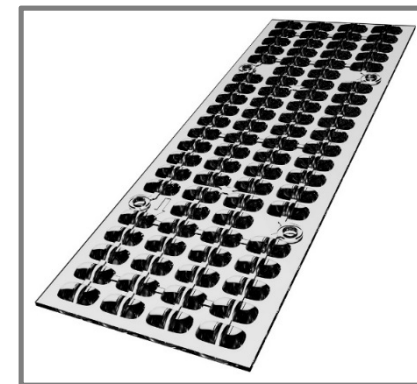
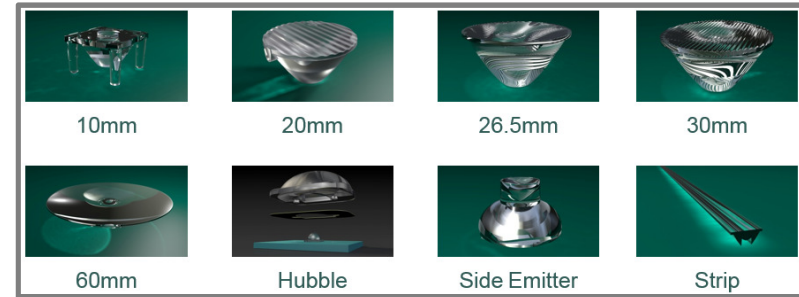
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Carclo Optics – Summary of business



- Design and manufacture of LED secondary optics, light guides, clusters
- Primarily used in Industrial/Commercial lighting products
- Largest customers are Philips, Thorn, Trilux, Nordeon
- Carclo have their own 'catalogue' range of optics but have increasingly moved over to custom optics designed for OEM's
- Design/warehousing in Aylesbury, manufacturing in UK, Czech, USA, China, India
- Revenues c15% of LED Technologies total. Growth >10% PA



Wipac - today



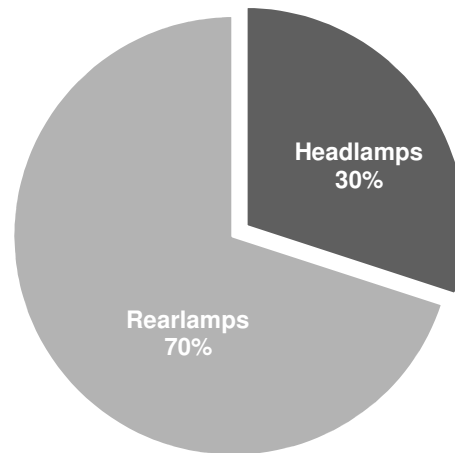
Facility



- Based in Buckingham, 50km north of London
- 10,000 sq.m site, 300+ employees
- Vertically integrated
 - Design
 - Manufacturing
 - Testing
 - Distribution & Logistics

Market/Products

The only 1st Tier supplier **dedicated** to the design & manufacture of prestige vehicle LED lighting



Customers



PORSCHE



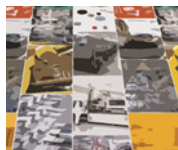
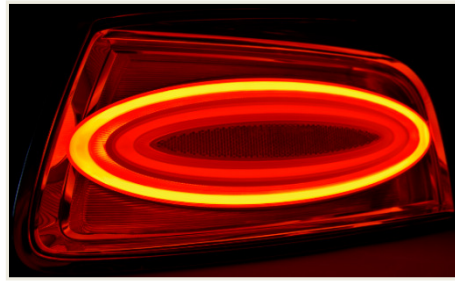
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Wipac - Our products



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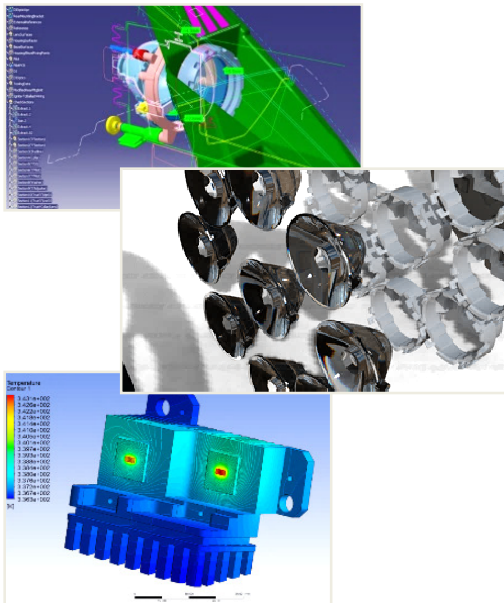


Wipac - Design capabilities



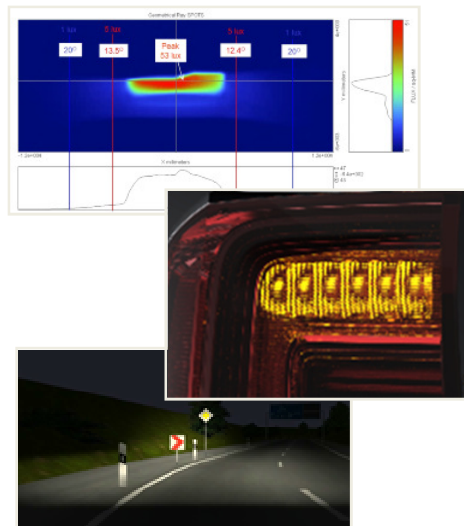
Mechanical & FEA

- 2D/3D CAD - CATIA V5
- Thermal/CFD - Ansys



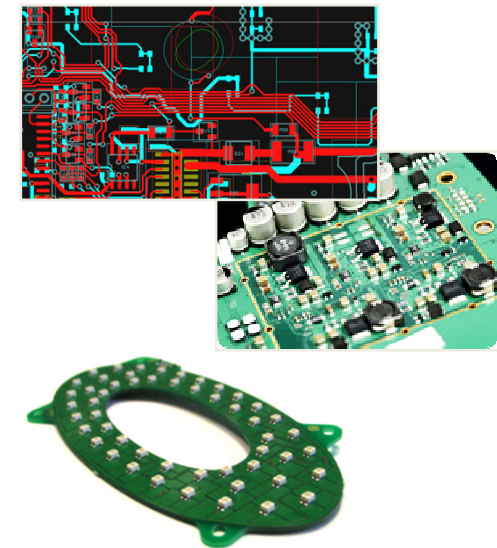
Optical & photometric

- Ray tracing - Breault ASAP
- Road simulation - Lucidshape
- 30m Photometric laboratory
- Drive-in lighting laboratory

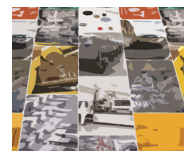


Electronics

- Schematic/layout - Pulsonix
- SPICE simulation
- Electronics lab/EMC chamber



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Wipac - Manufacturing capabilities



Injection moulding

- 20 presses
- 80T-800T
- 2K/3K capability
- 6 axis robots
- Flame polishing



Finishing

- Vacuum metallising (Kolzer & Balzer)
- UV Hardcoating
- Anti-fog coating
- Spray painting



Assembly

- 6 axis robot gluing
- Hot plate welding
- IR non-contact welding
- Vibration welding
- Ultrasonic welding
- Plasma treatment
- Clean room assy



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Wipac - Quality capabilities



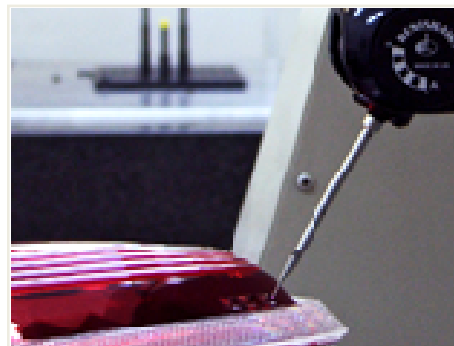
Certification

- ISO/TS 16949
- ISO 14001
- VW 'A' rated



Metrology

- Climate controlled facility
- 6 x CMM's
- 3D laser scanner



Testing

- Full climate controlled environmental test laboratory
- Full 25m Photometric laboratory with LMT Goniometer & reflex cell
- Drive-in forward lighting development laboratory



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Wipac - Example project - Bentley Mulsanne 17MY



All exterior lighting

- Headlamps, full LED with AFS
- Rear lamps
- Signal lamps



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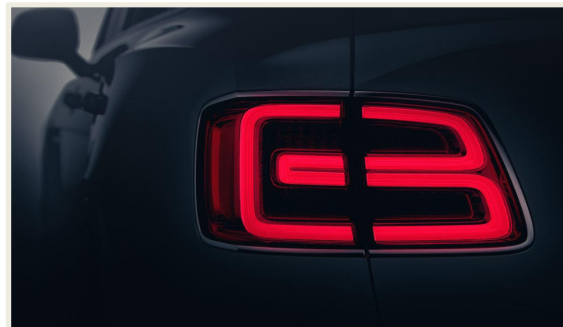


Wipac - Example project - Bentley Bentayga



All rear lighting

- LED rear lamps with homogenous 'B' signature



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Example project - McLaren 570s



All exterior lighting

- Headlamps, full LED with Hyperlite system
- Rear lamps
- Signal lamps



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Example project - Aston Martin DB11



All exterior lighting

- Headlamps, full LED with hyperlite system and low speed cornering
- Rear lamps
- Signal lamps



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Wipac - Success Factors



- Wipac are the only remaining OEM lighting designer/manufacturer in the UK
- Focus is exclusively premium vehicles/high technology products
- Facilities are well invested and aligned with customer/product focus
- Design team now c50 people, reputation within industry for delivering challenging solutions
- Track record of supply and quality excellence with all customers



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Low Volume (Supercar/luxury car)



- Main market segment for Wipac to date
- Volumes <10k PA, can be as low as 100 PA
- Dominant position with Bentley, Aston Martin, McLaren, Rolls Royce
- Contract Values for Design/Tooling range from £1M to £4M
- Contract Values for Production range from £0.5M to £15M (5 year life)
- Wipac have c70% market share for rear lamps
- Growth from 2009 to 2016 c500%
- Market still growing >10% PA but Wipac growth inevitably slowing
- Investment needs tend to be for common facilities rather than project specific

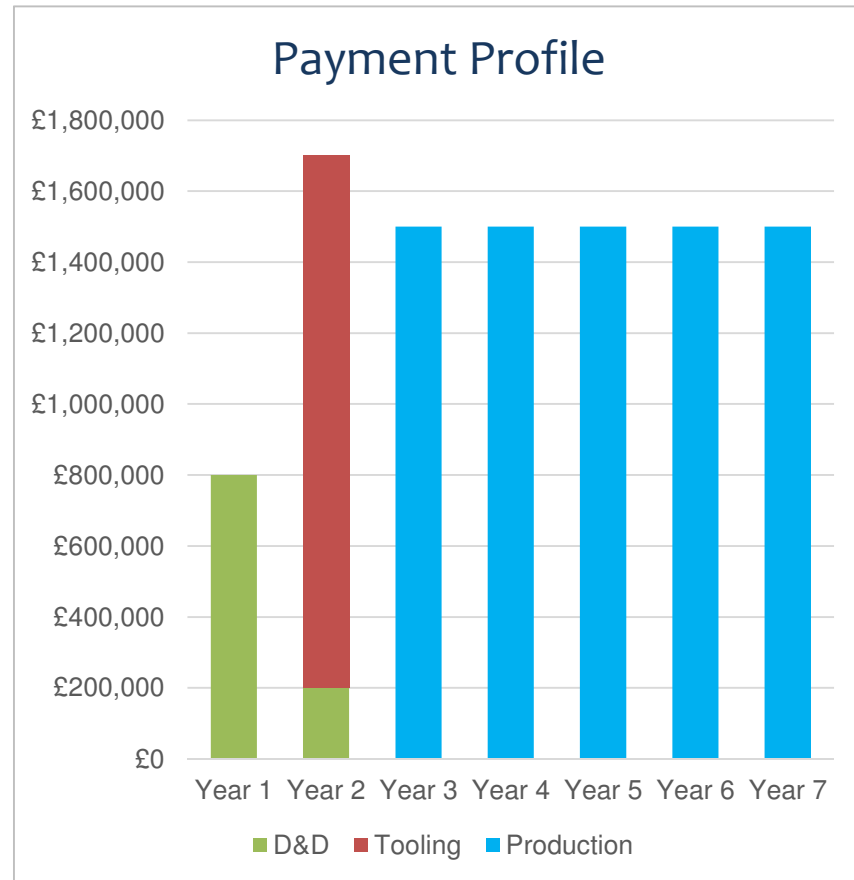
Medium Volume (Premium/Sports car)



- Market targeted since 2015
- Volumes 10k to 50k PA
- VW Phaeton 2010 was first medium volume contract (although planned to be low volume)
- Contract Values for Design/Tooling range from £3M to £9M
- Contract Values for Production range from £10M to £45M (5 year life)
- Total accessible market size c£600M and growing >5% PA
- Customers are encouraging us to enter, large lighting suppliers prefer higher volumes
- Technology levels still high
- Investment needs are project specific £1M to £2M per project



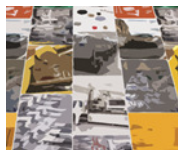
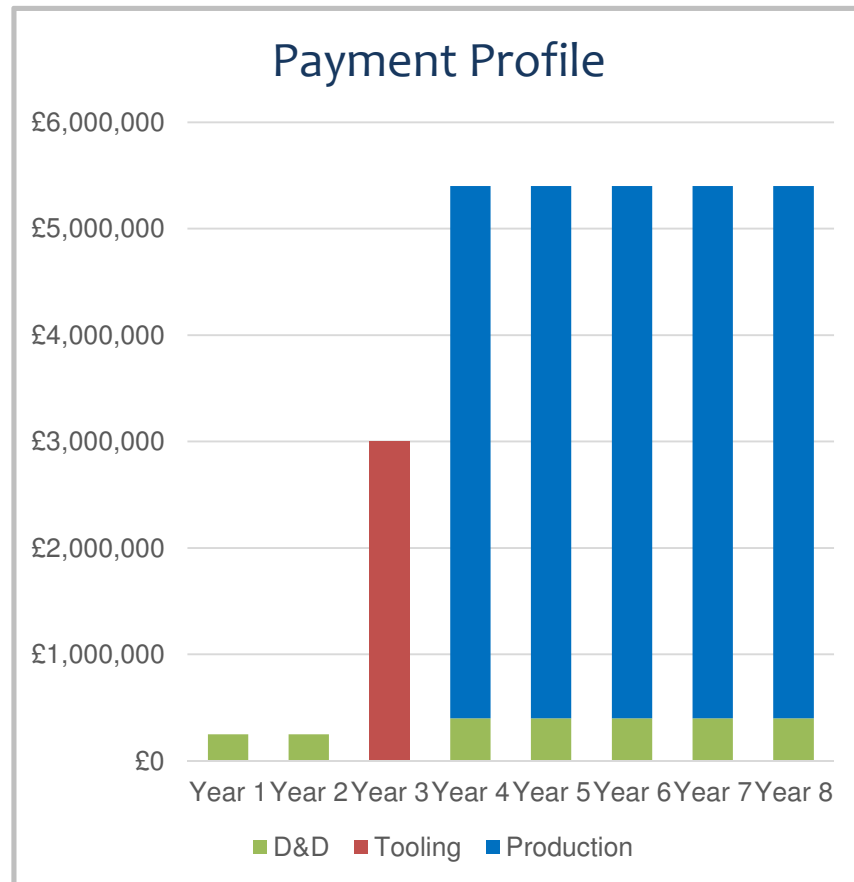
Typical Contract – Low Volume



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Typical Contract – Medium Volume



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Low Volume (Supercar/luxury car)



- Continue as the market leader in the sector
- Work together with key customers to align technology to future vehicle platforms
- Target all replacement models

Medium Volume (Premium/Sports car)



- Target one medium volume project win per year
- Products predominantly rear lamps, increase value through signal lamps/DRL's etc
- Factory expansion required to accommodate production facilities



Wipac - Factory Extension



- Wipac own the land to the side of the building
- Maximum extension can increase space by 1/3 of current (likely to be constructed in 2 phases)
- Timescales :
 - Planning submission – Feb 2017
 - Start build – Jan 2018
 - Completion – Jan 2019



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Aerospace - Strategy

- Maintain business profitability and cash flows with minimum capital investment
- Continue to secure replacement machine component work (new-build and spare parts) to offset decline in cable demand
- Continue to use cash generation to offset group pension payments



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Group balance sheet - debt

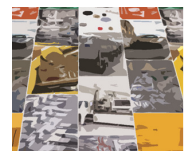
- Group debt forecast to be around £25 million at 31 March 2017 post placing last year which raised cash of £3 million over and above the PTD acquisition cost
- This equates to a net debt to EBITDA ratio of 1.45x
- Our medium term net debt to EBITDA target was 1.5x
- Debt to remain at similar levels in 2017/18 but starts to reduce thereafter



- Main driver is high capex for facility expansions in 2017/18 and 2018/19
- Group forecast to be cash positive in 2020/21
- Group has £30 million of committed facility which expires in March 2020 and £10 million overdraft facility
- Comfortable level of headroom on main banking covenants



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Group balance sheet - pensions

- Net IAS19 pension deficit at 30 September 2016 was £42.6 million
- The significant increase since 31 March 2016 related to the post EU referendum collapse in corporate bond yields



- This material increase in the deficit extinguished the PLC's distributable reserves thus preventing the payment of the final dividend
- The cash cost of the pension has remained at similar levels – annual recovery plan payment of £1.2 million and scheme admin costs of £0.7 million
- The Group's next triennial valuation is at 31 March 2018



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End

Forward looking statements - Certain statements made in this presentation are forward looking statements. Such statements are based on current expectations and are subject to a number of risks and uncertainties that could cause actual events to differ materially from any expected future events or results referred to in these forward looking statements.



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