An innovative world leader in high performance polymer solutions
A STRONG TRACK RECORD

- #1 PEEK experts & balanced portfolio
- Proven record of creating new markets
- Differentiated strategy: Polymer & Parts
- Strong & innovative growth pipeline
- Highly cash generative & sector leading returns

INVESTMENT CASE

£300m+ sales
25%+ ROCE (10 year average)
900+ employees serving over 40 countries
UK & US manufacturing (polymer & parts)
Operating in growth markets
A WORLD LEADER IN VALUE CREATION THROUGH HIGH PERFORMANCE PEEK & PAEK POLYMER SOLUTIONS

‘POLYMER & PARTS’

POLYMER MANUFACTURING
Delivering the key PEEK & PAEK materials with No.1 manufacturing capacity of 7,150 tonnes

DIFFERENTIATE THROUGH INNOVATION TO CREATE NEW MARKETS

POLYMER
Producing new grades including for Additive Manufacturing (3D Printing)

PARTS & COMPONENTS
Developing new applications for PEEK, PAEK and Thermoplastic Composites

PRODUCT FORMS
Manufacturing product forms: Pipes, Films, Fibres and Composite Tapes

GLOBAL CAPABILITY

900+
Employees

40+
Countries served by Victrex across our markets

£2.5bn
Market Value
• FTSE 250 Company
• £300m+ Revenue

40+ YEARS SHAPING FUTURE PERFORMANCE
Enabling customers to overcome complex design & engineering challenges across 6 key markets

INVESTMENT IN INNOVATION

£200m+
Invested in manufacturing facilities in the last 5 years

NEW CAPABILITIES
• Partnerships
• Strategic Alliances
• Polymer Innovation Centre
• Acquisitions
• Composites Manufacturing

First to commercialise PEEK, with unmatched knowledge and experience

POLYMER & PARTS

ELECTRONICS
AEROSPACE
AUTOMOTIVE
ENERGY
MEDICAL

Manufacturing product forms: Pipes, Films, Fibres and Composite Tapes

Market Value

£2.5bn

5%

of annual sales invested in R&D
Differentiation and value creation...

POLYMER & PARTS

VALUE CREATION

PRODUCT FORMS

POLYMER

- PEEK & PAEK Polymers

Compounds
Pipe
UD Tape
APTIV Film
Vicote Coatings

PARTS

- Composites
- Gears
- Loaded Brackets
- Magma M-Pipes
- Trauma Plates
- Dental Discs
- Knees
AEROSPACE
20,000+ aircraft have VICTREX solutions on-board

AUTOMOTIVE
500 million VICTREX™ PEEK based applications on the road today

ENERGY
75+ million VICTREX™ PEEK seals in use today

MEDICAL
Every 35 seconds a patient is treated using Invibio PEEK OPTIMA™ solutions
9 million+ implanted devices

ELECTRONICS
Over 4 billion mobile devices use APTIV™ Film technology

INDUSTRIAL AND MANUFACTURING & ENGINEERING
100+ million machines using Victrex solutions

OUR MARKETS & OUR PRODUCTS

Over 900 people waking up every day focused on making, selling and developing the market for PEEK and PAEK polymers...
Polyetheretherketone (PEEK) is part of the PAEK family of polymers. Developed by ICI in the late 1970s, PEEK has a unique combination of properties and is typically used to replace metal across critical applications.
VICTREX™ PEEK: A UNIQUE COMBINATION OF PROPERTIES

- Extreme Temperature
- Wear Property
- Chemical Resistance
- Easy Processing
- Recyclable
- Electrical Property
- Mechanical Strengths
- Hydrolysis
- High Purity
- Bio inert

High Purity
METAL REPLACEMENT: A SIGNIFICANT OPPORTUNITY

 Ranked by Weight (Lightest to Heaviest)

- VICTREX® PEKK
- Magnesium
- Aluminum
- Titanium
- Steel
- Brass

![Diagram showing the comparison of operating temperature and specific gravity for different materials.](image-url)
WEIGHT REDUCTION: A SIGNIFICANT OPPORTUNITY

<table>
<thead>
<tr>
<th>Material</th>
<th>Weight</th>
<th>Thickness</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>1000gr</td>
<td>2,00mm</td>
<td>+77%</td>
</tr>
<tr>
<td>Cast Iron</td>
<td>1130gr</td>
<td>2,48mm</td>
<td></td>
</tr>
<tr>
<td>Titanium</td>
<td>710gr</td>
<td>2,48mm</td>
<td></td>
</tr>
<tr>
<td>Aluminium</td>
<td>490gr</td>
<td>2,88mm</td>
<td></td>
</tr>
<tr>
<td>Magnesium</td>
<td>380gr</td>
<td>3,44mm</td>
<td></td>
</tr>
<tr>
<td>Victrex Polymer</td>
<td>320gr</td>
<td>3,54mm</td>
<td>-68%</td>
</tr>
</tbody>
</table>

$c70\%$ lighter than traditional aerospace materials

$\text{\$M}\text{ saving and improved fleet efficiency}$
UK & US MANUFACTURING

Monomer (UK assets and external sourcing)

Polymer (UK)

Product forms (UK & US)

Parts (UK & US)

Parts (UK & US)

Parts (UK & US)
GLOBAL TECHNICAL EXCELLENCE

- c5% of sales invested in R&D
- Prototype development: Polymer Innovation Centre

Polymer Innovation Centre (UK)

Partnering with academia

US
Grantsburg

UK
Hillhouse

China
Shanghai

Japan
Tokyo
DIFFERENTIATION VS COMPETITORS

POLYMER

NEW POLYMERS, COMPOUNDS & NEW GRADES

PRODUCT FORMS

SELECTED PARTS

Make polymer

Make markets

VICTREX
POLYMER & PARTS: INCREASE VALUE SHARE

- Move downstream:
  - Increase value share of each application
  - Increase differentiation vs competitors
# SIGNIFICANT GROWTH OPPORTUNITIES

Supportive megatrends across our markets

<table>
<thead>
<tr>
<th>TRENDS</th>
<th>OPPORTUNITIES</th>
</tr>
</thead>
</table>
| - Light-weighting, faster processing  
  - 2x current global fleet by 2035 | - Average order backlog ~9 years  
  - Faster processing through PAEK composites |
| - Efficiency, safety, noise reduction  
  - CO2/NOx regulations, electrification | - Increase 8g PEEK/car average to 12g  
  - Electric vehicle potential  c100g PEEK |
| - Global energy demand up 30% by 2040*  
  - Cost-out focus in Oil & Gas | - Metal replacement in core applications  
  - Double differentiated products, drive Magma |
| - Thinner, functionality, heat and power  
  - Data/storage needs, “Internet of things” | - Differentiated solutions and Consumer devices  
  - Chip processability: yield and output |
| - Ageing population & healthcare costs  
  - Metal deficiency, evidence based solutions | - Proven clinical benefit in PEEK, 9m+ implants  
  - Vision to treat a patient every 15-20 seconds |

* Source: IEA
NEW PRODUCT PIPELINE

Mega-programmes

Size of bubble = potential annual revenue in peak year:
- <£20m
- £20-50m
- >£50m (all bubbles are indicative only)

Position and colour of bubble = time to meaningful revenue:
- Horizon 1 (0-2 years)
- Horizon 2 (2-5 years)
- Horizon 3 (5 years +)

Meaningful revenue delivered

Time to meaningful revenue of £1m-£2m (indicative)
## PIPELINE MILESTONES

<table>
<thead>
<tr>
<th>PROGRAMMES</th>
<th>REVENUE STATUS</th>
<th>FY18 MILESTONES</th>
<th>FY19 FOCUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAGMA</td>
<td>Meaningful (£1m+)</td>
<td>• OEM deployment • Technip opportunity</td>
<td>• Tullow &amp; Equinor opportunities</td>
</tr>
<tr>
<td>HA-ENHANCED</td>
<td>Meaningful (£1m+)</td>
<td>• &gt;10,000 patient implants • 42 devices cleared</td>
<td>• Secure commitment from top 10 device company</td>
</tr>
<tr>
<td>DENTAL</td>
<td>&lt; £1m</td>
<td>• Straumann agreement • 2 large European supply agreements</td>
<td>• Supply agreement in US • Focus on delivering meaningful revenue</td>
</tr>
<tr>
<td>GEARS</td>
<td>&lt; £1m</td>
<td>• PEEK Gears on the road</td>
<td>• Closing in on additional supply agreements • Focus on delivering meaningful revenue</td>
</tr>
<tr>
<td>TRAUMA</td>
<td>Prototype revenue</td>
<td>• Top 5 collaboration • 7 development projects initiated under contract</td>
<td>• 5 projects agreed for launch • Develop additional capacity</td>
</tr>
<tr>
<td>AERO BRACKETS</td>
<td>Prototype revenue</td>
<td>• TxV facility in commissioning (produce composite parts)</td>
<td>• Drive growth in AE™250 composites • Advanced discussions on new alliances</td>
</tr>
<tr>
<td>KNEE</td>
<td>n/a</td>
<td>• Lead investigator appointed • Clinical trial submitted • Ethics approval</td>
<td>• Move forward with patient recruitment • Safely progress clinical trial</td>
</tr>
</tbody>
</table>
DELIVER THE “BURDEN OF PROOF”

PUSH
(concept & capability)

APPLICATION DEVELOPMENT

BUILD SUPPLY CHAIN & MANUFACTURING CAPABILITY

PROTOTYPEING, EVIDENCE & VALIDATION

PULL
(evidence & validation)

INNOVATORS, PARTNERS & OPINION LEADERS

"Burden of proof"
<table>
<thead>
<tr>
<th>STRATEGIC KPIs</th>
<th>2018</th>
<th>FUTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>REVENUE GROWTH</td>
<td>+12%</td>
<td></td>
</tr>
<tr>
<td>RETURN ON SALES</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>R&amp;D INVESTMENT</td>
<td>5% of sales</td>
<td>4% of sales</td>
</tr>
<tr>
<td>SALES FROM NEW PRODUCTS</td>
<td>5% of sales</td>
<td>4% of sales</td>
</tr>
<tr>
<td>STRONG PIPELINE</td>
<td>6 MEGA-PROGRAMMES</td>
<td></td>
</tr>
<tr>
<td>EARNINGS PER SHARE</td>
<td>128.8 pence</td>
<td></td>
</tr>
</tbody>
</table>

**DRIVE** core business

**Differentiate** through innovation

**CREATE** future value

**POLYMER & PARTS**
USE OF CASH FY14 TO FY18

CAPEX (£m)

- Maintenance capex c5-6% of revenue
- Periodic investment in capacity & innovation

REGULAR DIVIDENDS (£m)*

- Average growth c8%
- Grow in line with EPS

SPECIAL DIVIDENDS (£m)*

- Policy retained at c50% of net cash
- 50p/share minimum

* Regular & special dividends shown are based on the financial year those dividends are declared (rather than paid)

DOWNSTREAM ACQUISITIONS/INVESTMENTS (£m)

- ‘Enablers’ to support mega-programmes
- Develop further downstream capability
**FUTURE USE OF CASH PRIORITIES**

**CAPEX**
- Maintenance capex c5-6% of sales
- Periodic investment in capacity & innovation

**M&A / INVESTMENT**
- Developing capability
- Further investments to support mega-programmes & growth

**REGULAR DIVIDENDS**
- Average growth c8% over last 5 years
- Grow in line with EPS

**SPECIAL DIVIDENDS**
- Policy retained at c50% of net cash >£85m threshold
- 50p/share minimum

*Investment for growth remains the priority*
### Strong core growth

- **FY 2018 sales volumes up 10% to 4,407 tonnes**
- **Mix reflects Medical & Consumer Electronics**

### ‘Front end’ investment & additional bonus/LTIP accrual

- **Overheads up 5% ex-bonus, LTIP, acquisitions**

### INCOME STATEMENT 2018

<table>
<thead>
<tr>
<th></th>
<th>FY 2018 £m</th>
<th>FY 2017 £m</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>326.0</td>
<td>290.2</td>
<td>+12%</td>
</tr>
<tr>
<td>Gross profit</td>
<td>208.0</td>
<td>183.8</td>
<td>+13%</td>
</tr>
<tr>
<td>Gross margin %</td>
<td>63.8%</td>
<td>63.3%</td>
<td>+50bps</td>
</tr>
<tr>
<td>Overheads</td>
<td>(81.1)</td>
<td>(72.7)</td>
<td>+12%</td>
</tr>
<tr>
<td>Interest</td>
<td>0.6</td>
<td>(0.1)</td>
<td></td>
</tr>
<tr>
<td>Profit before tax</td>
<td>127.5</td>
<td>111.0</td>
<td>+15%</td>
</tr>
<tr>
<td>Earnings per share</td>
<td>128.8p</td>
<td>116.4p</td>
<td>+11%</td>
</tr>
<tr>
<td>Dividend per share</td>
<td>142.24p</td>
<td>121.80p</td>
<td>+17%</td>
</tr>
</tbody>
</table>

**Full year ended 30 September**
FY 2018 ASP £74/kg
- Currency offsetting weaker sales mix
- Stable underlying pricing

FY 2018 GM 63.8%
- Stable underlying margin
FY 2018: 4,407 tonnes
FY 2017: 3,992 tonnes

**Volume by Region**

- Asia-Pacific: 835 t (19%)
- EMEA: 1,264 t (29%)
- Americas: 2,308 t (52%)

**Volume by Industry**

- Medical: 1,035 t (24%)
- Transport (Auto & Aero): 180 t (4%)
- Electronics: 680 t (15%)
- Energy & Other Industrial: 746 t (17%)

* Medical volume reflects both non-implantable and implantable volumes
# Includes Manufacturing & Engineering volumes
FY 2018: £55.6m
FY 2017: £53.9m

Revenue by Region

Asia-Pacific
5.6m
10%
+27%

Americas
34.5m
62%
+4%

EMEA
15.5m
28%
-5%

Revenue by Market

Other markets
£19.3m
35%
+8%

£36.3m
65%
Spine
+0%
## BUSINESS UNIT INCOME STATEMENTS

<table>
<thead>
<tr>
<th></th>
<th>Industrial</th>
<th>Medical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year ended 30 September</td>
<td>2018  2017  Change</td>
<td>2018  2017  Change</td>
</tr>
<tr>
<td>Revenue</td>
<td>£m  £m   %</td>
<td>£m  £m   %</td>
</tr>
<tr>
<td></td>
<td>270.4  236.3  +14%</td>
<td>55.6  53.9  +3%</td>
</tr>
<tr>
<td>Gross profit</td>
<td>£m  £m   %</td>
<td>£m  £m   %</td>
</tr>
<tr>
<td></td>
<td>158.6  135.5  +17%</td>
<td>49.4  48.3  +2%</td>
</tr>
<tr>
<td>Gross margin</td>
<td>%  %   %</td>
<td>%  %   %</td>
</tr>
<tr>
<td></td>
<td>58.7%  57.3%  +140bps</td>
<td>88.8%  89.6%  -80bps</td>
</tr>
</tbody>
</table>
### BALANCE SHEET

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>£m</strong></td>
<td><strong>£m</strong></td>
<td></td>
</tr>
<tr>
<td>PPE and intangible assets</td>
<td>281.0</td>
<td>289.2</td>
</tr>
<tr>
<td>Investments</td>
<td>4.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Inventories</td>
<td>69.3</td>
<td>61.5</td>
</tr>
<tr>
<td>Cash (available*)</td>
<td>144.4</td>
<td>120.1</td>
</tr>
<tr>
<td>Trade receivables and other assets</td>
<td>51.1</td>
<td>53.5</td>
</tr>
<tr>
<td>Retirement benefit asset</td>
<td>13.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Trade payables and other liabilities</td>
<td>(73.9)</td>
<td>(59.7)</td>
</tr>
<tr>
<td>Equity shareholders' funds</td>
<td>489.9</td>
<td>478.4</td>
</tr>
</tbody>
</table>

* Available cash includes cash held on deposit. Excluding cash held on deposit, cash was £71.2m
MEGA-PROGRAMME UPDATE: GEARS

- 50% lower noise vibration & harshness vs metal
- Potential 20g+ PEEK per application
- Up to 70% lighter than metal gears
- First PEEK Gears on the road (Europe)
- Closing in on multiple agreements
- Develop manufacturing partnerships (retain IP)

MULTIPLE APPLICATIONS ACROSS ICE & EVs

ICE

Hybrid/PHEV

EV
MEGA-PROGRAMME UPDATE: MAGMA

INCREASING INDUSTRY ADOPTION & VALIDATION

- Growth in FY18; new long-term opportunities
- Industry qualifications: 3” m-pipe® qualified to DNV standard
- Tullow West Africa deployment & Technip Brazil opportunity
MEGA-PROGRAMME UPDATE
AEROSPACE
LOADED BRACKETS

• Commissioning of new US composites manufacturing facility
• Prototype orders in place: differentiated solutions
• Increased pull for PEEK and new AETM250 composites grade

Differentiated solutions:
>70% weight saving
>20% cost saving
A strong proposition:

- Quality of life: long term bone & gum health
- Lower infection rates & device failure
- Manufacturing efficiencies
- 5 year clinical data; regulatory approvals

0 patients 2013 - 2017 21,000 patients 2025 - 2028 Potential for >500,000 patients
TRAUMA: A CLINICALLY PROVEN SOLUTION

- Tailored stiffness and similar mechanical strength (vs metal)
- 50x greater fatigue resistance (vs metal) and radiolucent
- Improved imaging aiding surgical techniques and follow up

PROGRESS AND OPPORTUNITIES
- Initial manufacturing capability in place
- Collaboration with top 5 player
KNEE

- **Demand for change**
- **A $6bn global market**

---

KNEE SOCIAL MEDIA COMMENTS:

“…..knees feeling heavy .....”
“.....cold in the winter..... ”
“...creaking, popping, rattling, feeling loose”

---

Despite Advancements

1 in 5

Knee Replacement Patients are not happy with the result

Manufacturing capability
Manufacturing product forms: Pipes, Films, Fibres and Composite Tapes

Polymers Manufacturing
Delivering the key PEEK & PAEK materials with No.1 manufacturing capacity of 7,150 tonnes

Differentiate through Innovation to Create New Markets
Enabling customers to overcome complex design & engineering challenges across 6 key markets

Global Capability
900+ Employees
40+ Countries served by Victrex across our markets

£2.5bn Market Value
• FTSE 250 Company
• £300m+ Revenue

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INVESTMENT IN INNOVATION
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New Capabilities
• Partnerships
• Strategic Alliances
• Polymer Innovation Centre
• Acquisitions
• Composites Manufacturing

£200m+ of annual sales invested in R&D

First to commercialise PEEK, with unmatched knowledge and experience

Product Forms
Manufacturing product forms: Pipes, Films, Fibres and Composite Tapes

Polymer Manufacturing
Producing new grades including for Additive Manufacturing (3D Printing)

Parts & Components
Developing new applications for PEEK, PAEK and Thermoplastic Composites

Electronics
Aerospace
Automotive
Energy
Medical
Manufacturing & Engineering

40+ years shaping future performance

Enabling customers to overcome complex design & engineering challenges across 6 key markets

PEEK Experts
Delivering the key PEEK & PAEK materials with No.1 manufacturing capacity of 7,150 tonnes...