

## PERFORMANCE PRODUCTS

Performance Products (PP) is responsible for the manufacture and assembly of niche high-quality products, including engines, transmissions and other performance-critical driveline and powertrain products. We also provide industrial engineering services for clients around the globe to enable designs to successfully move from concept to series production.



Engineering specialists in transmission design and niche-volume manufacturing.

### HIGHLIGHTS\*

**+54%**  
Order intake

2022/23	£115.3m
2021/22 (CC)	£75.1m
2021/22	£75.1m

**+58%**  
Order book

2022/23	£81.3m
2021/22 (CC)	£51.3m
2021/22	£51.3m

**+15%**  
Revenue

2022/23	£84.7m
2021/22 (CC)	£73.7m
2021/22	£73.7m

**+2%**  
Underlying operating profit

2022/23	£9.0m
2021/22 (CC)	£8.8m
2021/22	£8.8m

**-1.3pp**  
Underlying operating profit margin

2022/23	10.6%
2021/22 (CC)	11.9%
2021/22	11.9%

**+8%**  
Headcount

2022/23	355
2021/22	330

\* Prior period results have been restated to reflect the fact that a share of central plc costs are no longer included in the operating profit measure for operating segments. See [Note 5](#) to the Group Financial Statements.

### Recognised for our global expertise in industrial engineering and niche production

We are a trusted engineering partner for our clients across the motorsports, high-performance vehicles, aerospace and defence sectors. We provide expert design, engineering, manufacturing, assembly and test capabilities for engines and transmissions. With decades of experience, our technical experts support our clients in bringing their cutting-edge innovations to market.

- **Industrial engineering** – From start-ups to established multi-nationals, we apply our range of industrialisation consultancy services to help clients navigate all manner of niche volume production challenges
- **Powertrain systems production** – Our full-service solutions are tailored to the requirements of our clients, enabling us to deliver proven, cost-effective powertrain solutions for the world's most demanding niche applications, from series engine supply to niche volume assembly programmes
- **Driveline production** – We develop and deliver quality, cost-effective driveline and transmission solutions for the world's most demanding high-performance and specialised applications, providing our clients with a complete end-to-end service tailored to their requirements. Ricardo accommodates niche volume programmes of any size, from single prototype builds through to automated production lines

### Accelerated adoption of green propulsion

Operators are presented with the challenge of decarbonising their product portfolios while meeting the expected performance specifications and volume requirements associated with these platforms. Our green propulsion solutions support the next generation of specialist vehicles with the development and production of zero emissions technologies, including fully integrated electric drive units (EDU) and battery solutions.

We are helping our clients decarbonise their portfolios without compromising on performance or quality by utilising our significant expertise in high performance automotive, combined with our experience in developing solutions for Formula E and electric vehicle (EV) demonstrators.

### Our performance in FY 2022/23

PP has had a record year for order intake. This reflects a number of significant contract extensions as well as new clients attracted to the business. The most significant of these contract awards was the extension of engine supply to McLaren until 2030, the extension of transmission supply to the Porsche Cup programme until 2028, the continuation of transmission supply to Bugatti and a new multi year transmission supply programme to Singer Vehicles, based in California.

Revenue from continuing operations in FY 2022/23 was £84.7m. McLaren engine volumes continued to increase in the year with the launch of the new hybrid V6 Artura. Transmission volumes and revenue also remained strong, with continuing deliveries to Bugatti, Porsche, Aston Martin and several top tier motorsport programmes. In addition, the expected recovery of the aerospace sector was evident over the year, along with continued success in supplying industrial engineering consultancy services.

Underlying operating profit from continuing operations was £9.0m, improving marginally on last year's result despite a number of significant cost increases that impacted the business during the year, including materials, energy and purchased parts. Underlying operating profit margin was 10.6% compared to 11.9% in the prior period.

We continue to develop our portfolio of existing powertrain (engine) and drivetrain (transmission) products during the year as well as new projects in the zero emission propulsion space, including electric drive units, industrial engineering services in EV production and concept work around battery systems and electric machines.

The after-effects of COVID-19, and subsequently the conflict in Ukraine, remained a source of some disruption in the supply chain. However, our rigorous process management and tools ensured that client deliveries were protected.

### CASE STUDY

## SUPPORTING EFFECTIVE PRODUCTION RAMP-UP FOR MANUFACTURER OF PEM ELECTROLYSERS

Ricardo supported an established manufacturer of proton exchange membrane (PEM) electrolyzers that was facing the challenges associated with transitioning to producing higher manufacturing volumes.

Ricardo performed a manufacturing-site audit to rapidly measure and assess the manufacturer's operation. A benchmarking exercise was performed to identify areas of improvement in its production processes. This assessment was used to prioritise actions to support production ramp-up and increase both control and yield from critical processes.

Several key areas for improvement were identified that could be delivered immediately and in the longer term to enable the manufacturer to continue to deliver a quality product at increased volumes.

