



Rolls-Royce is recognised around the world for pioneering cutting-edge technology that meets the planet’s vital power needs. Its systems deliver safe, reliable power solutions that are predominantly used in the Civil Aerospace, Defence, and Power Systems markets. A key focus is now being placed on electrification and digitalisation

**Market**

Rolls-Royce operates across markets that have highly complex power needs and require very long development cycles – usually measured in decades. Growth in these markets is linked with growth in the overall global economy, or in the case of the defence markets, growth in global security and defence budgets. Rolls-Royce has customers in more than 150 countries, with over 400 airlines and leasing customers, 160 armed forces, 4,000 marine customers including 70 navies, and more than 5,000 power and nuclear customers. The company’s annual revenues in 2017 were more than £15bn, half of which came from services.

**Product**

As the second largest manufacturer of widebody aircraft engines in the world, Rolls-Royce is best known for its jet engines. In Civil Aerospace, with a fleet of over 13,600 engines in service, it is the leading supplier for large passenger aircraft and high-end corporate jets. Its Trent engines are in service on the Airbus A330, A340, A350 and A380, alongside the Boeing 777 and 787 Dreamliner.



In Defence, Rolls-Royce is a market leader in aero engines for military transport and patrol aircraft with strong positions in combat and helicopter applications. In total there are more than 16,000 Rolls-Royce aero engines in service with more than 160 military customers. It has significant scale in naval markets across the world and provides the nuclear power plant for the Royal Navy’s submarine fleet. It has been the industry leader in Short Take-Off and Vertical Landing (STOVL) technology for more than 60 years, with its latest technology on the F-35B Lightning II fighter.



**DID YOU KNOW?**

Rolls-Royce is building the world’s fastest all-electric aeroplane. The zero-emissions aircraft, named ‘Spirit of Adventure’, will be able to travel over 300mph

Since 2016, Rolls-Royce has also had full ownership of German high-speed diesel engine manufacturing brand MTU, whose engines are used across a wide range of applications from trains, super-yachts and ferries to mining trucks, tractors and for power generation.

Rolls-Royce also has vast experience in developing nuclear energy power solutions. As one of the largest employers of nuclear designers, engineers and scientists in the UK, it has been the sole provider and technical authority for nuclear power to the Royal Navy for more than 50 years. Using this experience, it is now bringing its technical expertise to the civil nuclear market, through the development of small modular reactors. In addition, it provides nuclear Instrumentation and Controls safety systems to around half of the world’s operational reactors.

**Achievements**

Rolls-Royce has been recognised with Industry Leader, Industry Mover and Gold Class awards for the Aerospace and Defence sector in the Dow Jones Sustainability Index. It is also listed in both the DJSI World and DJSI Europe indices.

**Recent Developments**

To support the growing demand for cleaner, safer and more efficient power, Rolls-Royce is continuously developing new technologies for its core markets. In Civil Aerospace, the UltraFan® design will deliver more thrust, more efficiency and more reliability than ever before, providing further refinements of the highly successful Trent XWB engine. With industrial technology markets striving for cleaner, more sustainable power, Rolls-Royce is continuing its pioneering tradition with a focus on ‘championing electrification’. The company is already developing micro-grids and hybrid electric power technologies. It has challenged itself to build the world’s fastest all-electric small aircraft and last year unveiled an electric vertical take-off and landing (EVTOL) concept.

Digitalisation is another major element of Rolls-Royce’s strategy, with the company already deploying the latest digital technologies to enable its own transformation and



deliver improved performance for customers. Rolls-Royce has been at the forefront of performance data analytics for nearly 30 years, providing equipment for health monitoring as part of its TotalCare® aircraft engine maintenance programme. Now, using the latest digital technologies, Rolls-Royce is developing new opportunities to improve its capability and services. Most recently, Rolls-Royce launched IntelligentEngine, its vision for the future of aircraft power. In addition to designing, testing and maintaining engines in the digital realm, this vision sets out a future where an engine will be increasingly connected, contextually aware and comprehending, helping to deliver even greater reliability and efficiency.

**Promotion**

The company vision is to ‘pioneer the power that matters’. In 2017, Rolls-Royce invested £1.4bn into research and development, and had more than 700 technology patents approved for filing. Through a global network of 31 University Technology Centres, Rolls-Royce is at the forefront of scientific research, delivering leading-edge technologies that reduce fuel burn, emissions and noise across all its platforms.

Rolls-Royce is going through an exciting time of change. Technology is driving core products to ever-higher levels of performance, while electrification and digitalisation are continuing

**Brand History**

- 1904** Henry Royce meets Charles Rolls, whose company sells high-quality cars in London.
- 1914** At the start of World War I, Royce designs his first aero engine, the Eagle, which goes on to provide half of the total horsepower used in the air by the Allies.
- 1940** Royce’s Merlin powers the Hawker Hurricane and Supermarine Spitfire in the Battle of Britain.
- 1953** Rolls-Royce enters the civil aviation market with the Dart.
- 1976** Concorde, powered by the Rolls-Royce Snecma Olympus 593, becomes the first and only supersonic airliner to enter service.
- 1987** Rolls-Royce returns to the private sector, becoming the only company in Britain capable of delivering power to use in the air, at sea and on land.
- 1999** Rolls-Royce acquires Vickers for £576m, transforming Rolls-Royce into the global leader in marine power systems.
- 2003** BMW takes over responsibility for Rolls-Royce cars.
- 2011** Trent 1000 engines power the new Boeing 787 Dreamliner into service.
- 2012** Rolls-Royce opens a new 154,000m<sup>2</sup> aero engine build facility in Singapore.
- 2015** The two Rolls-Royce marine gas turbine engines that power the Royal Navy’s new aircraft carrier, HMS Queen Elizabeth, go into operation for the first time.
- 2017** Rolls-Royce launches R<sup>2</sup> Data Labs, a development hub for new data-led services.
- 2018** Rolls-Royce launches the IntelligentEngine.
- 2019** Rolls-Royce collaborates with Sunseeker International to build its first production yacht with hybrid power.

its long-held tradition of creating new, market-shifting opportunities – for both its customers and itself.

**Brand Values**

Rolls-Royce exists to be the ‘Pioneers of Power’. The company vision is to pioneer cutting-edge technologies that deliver clean, safe and competitive solutions to meet the planet’s vital power needs.

