



Aerospace Precision Engineering & Coatings

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From prototype to production prepared at
capricorn AUTOMOTIVE Limited



A true machining experience.....

Capricorn Automotive Ltd specialises in the design, manufacture, and supply of high-precision components and advanced coating solutions for the aerospace sector. Our commitment to quality, safety, and reliability ensures every component meets the most stringent aerospace requirements.

Our AS9100 certification reflects our dedication to maintaining the highest standards of aerospace quality management. This accreditation guarantees that our processes are optimised for consistency, traceability, and continuous improvement, with a strong emphasis on safety, risk mitigation, and operational excellence.

Operating from a 21,000 sq. ft. facility, we utilise a comprehensive range of machining technologies, including 5-axis vertical CNC machines, large-format horizontal machining equipment, and specialist CNC turning and milling stations. This capability enables us to manufacture even the most complex aerospace components with exceptional accuracy and repeatability.

Our proprietary capricorn Ceramic 2000 nickel-ceramic coating, commonly known as Nikasil, is applied electrolytically using a nickel and silicon-carbide matrix. This high-performance coating delivers superior wear resistance, extended component life, and enhanced operational efficiency. All coating and machining processes are monitored using Statistical Process Control (SPC) to ensure consistent quality and optimal performance characteristics. We verify 100% substrate bonding through regular destructive cut-tests, all carried out in accordance with AS9100 quality standards.

In addition to our nickel ceramic coating, we offer a range of other high-performance surface treatments, including electroless nickel-PTFE, hard anodising, and SurTec 650, allowing us to support a wide variety of aerospace material and performance requirements.

We understand the importance of deadlines in the aerospace industry. Our production processes and commitment to efficient project management ensure that we deliver your components on time, every time.

Finally, many of our customers have found that our in-house forging, heat treatment, nickel ceramic plating and comprehensive machining services can generate significant benefits in cost and lead-times. The addition of an aluminium sand-casting foundry within the capricorn Group allows us to offer customers a truly one-stop shop for casting and full machining all carried out to AS9100 Rev D standards.

