



CYIENT

ENGINEERING SOLUTIONS FOR THE AEROSPACE & DEFENSE INDUSTRIES

We deliver aerospace engineering solutions from concept to qualification, with system-level ownership for engines, avionics systems, structures, aero systems, and interiors. And we manage aftermarket value streams such as repair engineering, reliability engineering, technical documentation and performance monitoring on behalf of original equipment manufacturers worldwide.

At Cyient, we use a collaborative engineering approach that combines domain expertise, process rigor, design automation, and program management skills to deliver large system-level designs – on time and within budgets.

Engines

From concept design to aftermarket services for aircraft engines, we can provide a complete solution across the product life cycle. We have helped engine OEMs develop innovative technology solutions to increase the efficiency of their engines.

We provide system level design solutions on internal flow, lube, thermal management systems, and rotor dynamics from concept to certification. Similarly, our team has delivered designs with complete ownership on actuation systems, compressor cases, bladed discs, rotors, and airfoils. Through our multidisciplinary design optimization approach to value engineering, we have delivered solutions that achieve weight and cost goals at the prototype stage. We have developed processes, tools and technologies to shorten engine design and development cycle time with improved analysis predictability.

Fast Facts:

- 12+ million hours delivered
- 20 Patents co-created along with the client
- Integrated Product development Team (IPT) level engagement with many engine components
- Worked Flexible Business Models including Outcome based models, Risk sharing partnership
- Multi-million dollar productivity savings realized

Key Offerings:

- End-to-end product ownership
- Design and analysis
- Manufacturing
- Verification and validation
- Technical publications
- Software and IT services
- Engine aftermarket Support

Aerostructures

We provide innovative wing and fuselage subassembly design solutions from preliminary design to certification in collaboration with leading aircraft OEMs and Tier 1 suppliers. We combine client-specific design processes with our extensive metallic and composite structures knowledge and design automation expertise to design next-generation aerostructures.

We have delivered lighter structures from conceptual designs, managed programs from preliminary design to drawing release, of schedule, performed check stress analysis, and delivered reports for certification.

On design release, we manage manufacturing non-conformance, stress justifications, and design office dispositions after signatory approvals. To enable higher services revenue for our customers, we manage their aftermarket value streams such as structural repair engineering, technical publications, reliability engineering, and retrofit engineering.

Fast Facts:

- 3+ million hours delivered covering all aerostructures parts
- Complete design cycle support from concept design to aftermarket services
- Worked with leading OEMs and Tier 1 aerostructure suppliers

Key Offerings:

- Complete design cycle support
- Design and analysis
- Concessions/ELR
- Durability and damage tolerance
- Manufacturing drawings creation
- Certification support
- Repair justifications.





Interiors

We partner with clients to design tomorrow's clean, spacious, and efficient cabin interiors. We deliver aesthetic and light-weight interior designs for commercial and business jets.

Our teams have extensive experience in floor-to-floor cabin structures; monuments such as galleys, overhead stowage, lavatory, business, and economy seats; and custom monuments for VIP completions.

Integrating our composite design, stress, tubing design, electrical schematic, and harness routing expertise, we deliver innovative and cost-efficient solutions to help our clients solve interior design challenges.

Fast Facts:

- 1.2+ million hours delivered covering all aircraft interior parts
- Experience of working with major aircraft programs and Tier 1 interiors suppliers

Key Offerings:

- Full design ownership
- Design and analysis
- Electrical wire harness and routing
- Production drawings
- Manufacturing
- Technical publications

Avionics

We collaborate with avionics OEMs worldwide to develop innovative next-generation avionics products by delivering complete product engineering solutions from requirement definition to certification in a shorter lead time.

Our integrated product engineering process efficiently integrates software, hardware, enclosure design, and test engineering competencies to deliver avionics products starting from DAL level A. We provide civil and military avionics solutions compliant with D0-178B and D0-254 in electrical systems, flight navigation and displays, flight control, control and diagnostics, cabin and cargo management systems.

Fast Facts:

- 3+ million hours delivered on various avionics products
- End to end LRU development compliant with RTCA/DO178B/254/160

Key Offerings:

- End-to-end LRU development
- Software and hardware engineering
- Systems integration
- Test engineering
- Flight trial support
- FPGA
- Obsolescence management
- Reliability, maintainability and safety

Systems

We provides sub-system level engineering solution support covering a range of aircraft systems like air management system, engine controls & APU, electrical system, and fuel & hydraulics systems.

Our systems knowledge – combined with our expertise in design, structure, thermal, and CFD analysis – allows us to provide innovative design solutions optimized for weight and cost.

We enhance aerospace system reliability by implementing technology upgrades and eliminating the root cause of field failures. We manage aftermarket value streams such as repair engineering, technical publication and reliability engineering to generate higher services revenue for our clients.

Fast Facts:

- 2.4+ million hours delivered on major aircraft systems
- Process innovation, design automation tools, in-house developed tools, macros enabling productivity savings and reduction in development cycle time

Key Offerings:

- Design and build product ownership
- Mechanical design and analysis
- Piping, tubing and ducting
- Manufacturing
- Test Engineering and documentation
- Technical publications
- Reliability and safety
- Ground support engineering

Electronics Manufacturing

Rangsons Electronics (A Cyient company) is a leading electronics system design and manufacturing company having world class production facilities delivering Electronics Manufacturing Services (EMS) and System Integration requirements for clients across the globe.

Rangsons electronics assembles avionics LRU, aircraft interiors and cabin lighting components, mechanical parts, fuel pumps, flow analysers and facility complaint with AS 9100, ISO9001, ISO14001 and OSHSAS 18001.

Key Offerings:

- SMD and leaded PWB assembly
- RF/Microwave PWB assembly
- Advanced testing
- Conformal coating
- Product assembly
- Low and high volume manufacturing
- Cable harness
- Box build

Precision Machining

Techno Tools (A Cyient company) is a high-precision manufacturer specializes in some of the very complex mechanical parts and assemblies. Specializes in precision machining for aerospace and defense, commercial, business & general aviation and high technology sensor markets. Techno Tools manufactures 300K+ varieties of parts. Facilities are complaint with ISO9100:2008, AS9100C.

Precision machining for:

- Engine components
- Avionics packages
- Space components
- Structural components

Defense

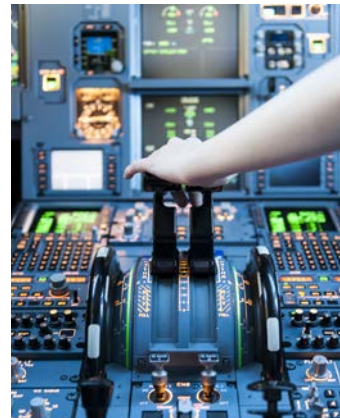
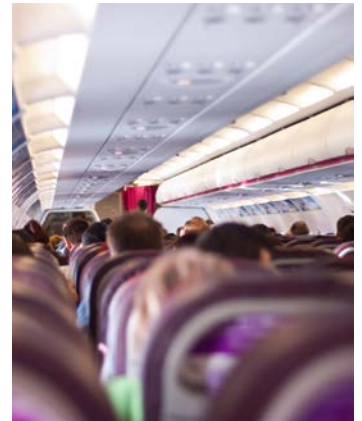
As a leader in providing end-to-end aerospace engineering solutions, we understand the needs of the defense industry. We currently execute export controlled projects through our ITAR (International Traffic in Arms Regulations)-compliant engineering centers in the US and India. Whether you need to reduce engineering cost or increase flexibility in capacity, We are the preferred Indian offset partner to deliver innovative engineering solutions.

Our Solutions:

- Meet civil and defense obligations
- Access emerging markets
- Reduce total cost of engineering
- Increase flexibility in capacity
- Enable end-to-end shared innovation
- Facilitate compliance with ITAR/EAR

Key Highlight:

- Registered ITAR exporter in US
- Our export control and compliance initiatives are fully compliant with major military export and regulatory regimes across the globe
- World-class technology control plan
- Robust oversight and accountability mechanisms
- Experienced with Indian export controls



About Cyient

Cyient (Estd: 1991, NSE: CYIENT) provides engineering, manufacturing, geospatial, network and operations management services to global industry leaders. We leverage the power of digital technology and advanced analytics capabilities, along with our domain knowledge and technical expertise, to help our clients solve complex business problems. As a Design-Build-Maintain partner that takes solution ownership across the value chain, we empower our clients to focus on their core, innovate, and stay ahead of the curve.

Relationships lie at the heart of how we work. We partner with organizations in ways that best suit their culture and requirements. With nearly 14,000 employees in 21 countries, we combine global delivery with proximity to our clients, functioning as their extended team. Our industry focus spans aerospace and defense, medical, telecommunications, rail transportation, semiconductor, utilities, industrial, energy and natural resources.

Follow news about the company at www.twitter.com/cyient

Contact Us

NAM Headquarters

Cyient, Inc.
99 East River Drive
5th Floor
East Hartford, CT 06108
USA
T: +1 860 528 5430
F: +1 860 528 5873

EMEA Headquarters

Cyient Europe Ltd.
High Holborn House
52-54 High Holborn
London WC1V 6RL
UK
T: +44 20 7404 0640
F: +44 20 7404 0664

APAC Headquarters

Cyient Limited
Level 1, 350 Collins Street
Melbourne, Victoria, 3000
Australia
T: +61 3 8605 4815
F: +61 3 8601 1180

Global Headquarters

Cyient Limited
Plot No. 11
Software Units Layout
Infocity, Madhapur
Hyderabad - 500081
India
T: +91 40 6764 1000
F: +91 40 2311 0352

cyient.com
connect@cyient.com