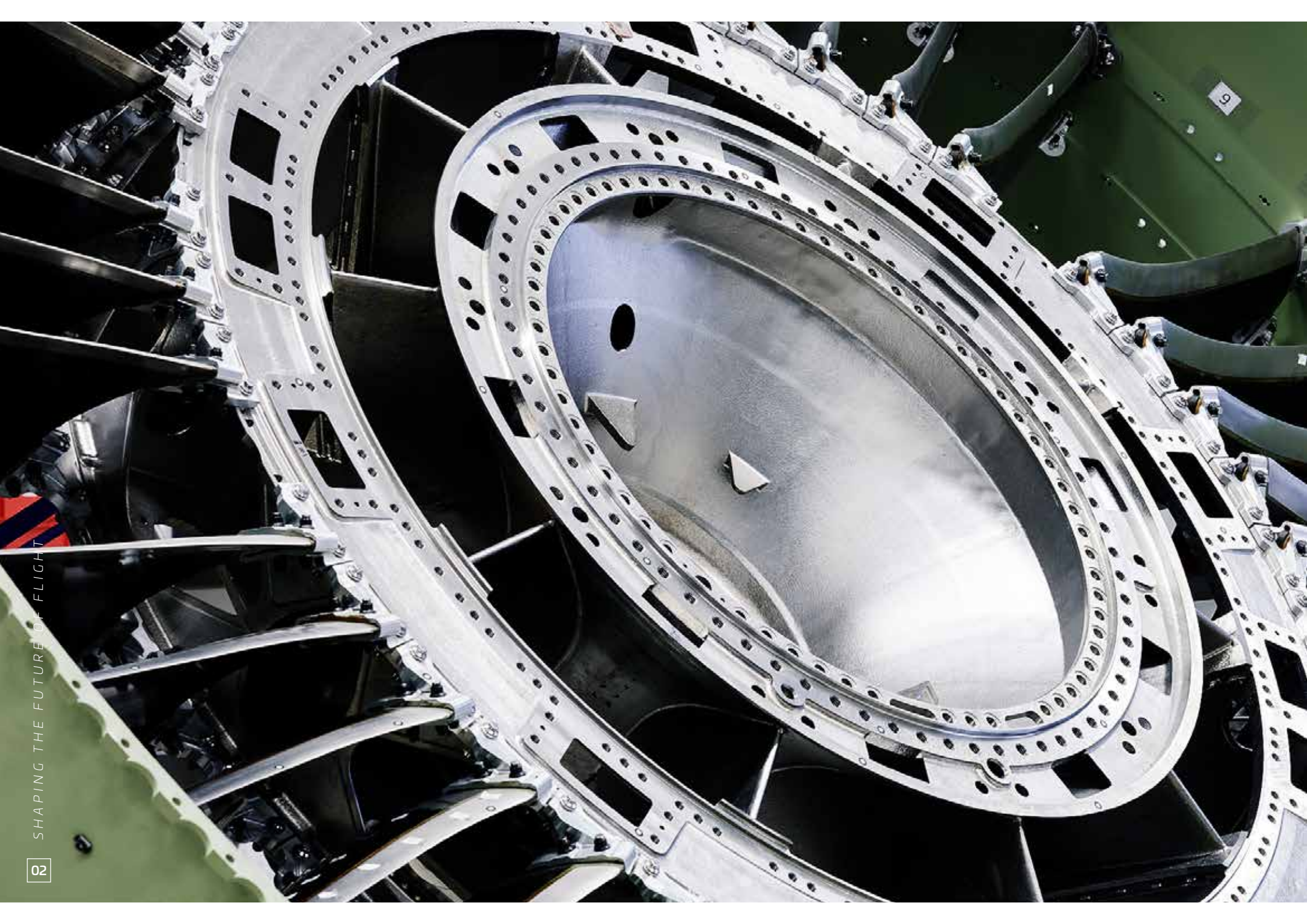


# SHAPING the **FUTURE** of FLIGHT >









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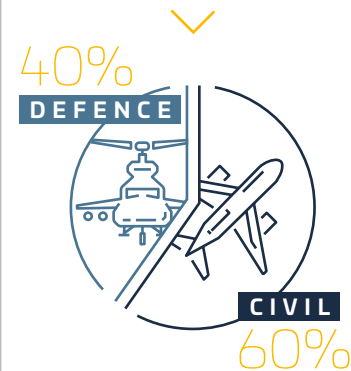
# > GKN Aerospace at a glance

GKN Aerospace is the world's leading multi-technology tier 1 aerospace supplier. For decades, GKN Aerospace technologies have inspired and industrialised the aerospace industry, combining engineering excellence and technology leadership.

Today we are truly global, with 15,000 employees in 12 countries at 38 manufacturing locations around the world. All major aircraft and engine manufacturers rely on our advanced technologies. Our aerostructures, engine systems and special products improve the performance of more than 100,000 flights every day.

GKN Aerospace is putting environmental sustainability at the heart of our business. By working closely together with universities, knowledge institutes, suppliers and customers, we lead the industry in developing technologies that rapidly decarbonise existing aircraft, while innovating to help build a whole new generation of planes producing no emissions at all.

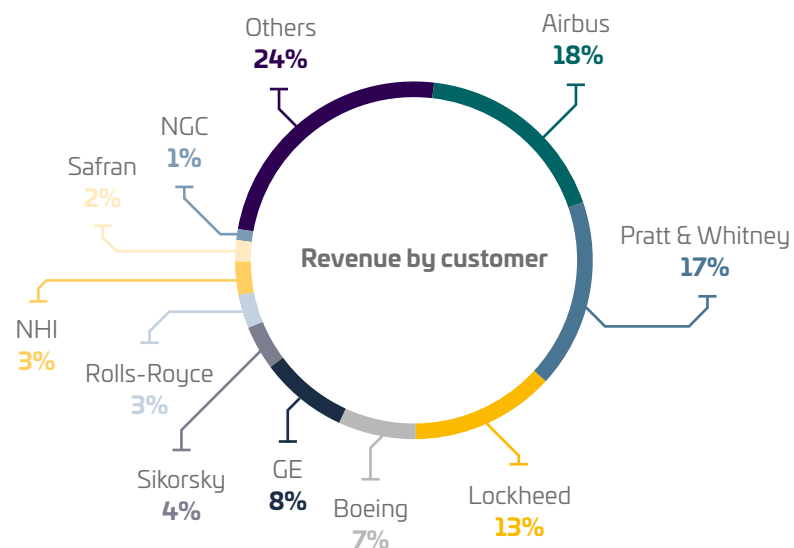
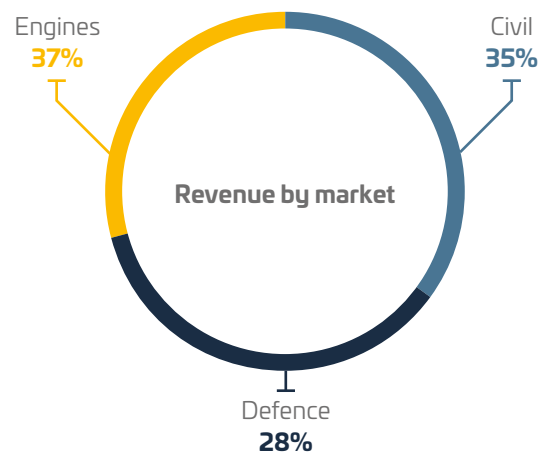
## GKN AEROSPACE IN NUMBERS



£100m+  
Committed to Investment In  
sustainable Technology in 2021



On Board  
90%  
of aircraft  
made today



## WHY GKN AEROSPACE?

- > **Innovative technology**  
Helping to create all-new technology solutions to reduce weight and lower emissions.
- > **Sustainability**  
We take sustainability seriously and are committed to reaching net zero carbon emissions, both through improvements in the way we operate and our technology heralding a new era of zero-emission flight.
- > **Operational excellence**  
Highly automated processes to industrialise aerospace innovations
- > **Global footprint**  
With our unique network across the world we are always close to our customers.
- > **Strong heritage**  
250 years of industrial leadership and 100 years of aviation technology.



# > Technology driving differentiation

GKN Aerospace has strong technology positions to make aircraft fly further, faster and greener. We aim to deliver the best technology today and develop the innovative technologies of tomorrow.

## RESEARCH AND DEVELOPMENT

We are technology leaders in aerostructures, engine systems, transparencies, and wiring systems. Our advanced technologies are on board 90% of today's aircraft. Innovation is a continuous process of taking advanced aerospace technologies to the next technology level. Lightweight composites, electrification, hydrogen propulsion systems, additive manufacturing, innovative engine systems and smart transparencies will all play a key role in the decarbonisation of aviation.

## OPERATIONAL EXCELLENCE

We achieve operational excellence through an inspiring, stimulating, safe and result-oriented environment, with continuous focus on the customer. Teams with highly skilled employees who have the knowledge and expertise to continuously develop and implement ambitious improvement projects operate throughout GKN Aerospace. Each employee knows the flow of value to the customer. Lean manufacturing and automation have been introduced on a large global scale.





## SUSTAINABLE TECHNOLOGIES

- > Lightweight Composite Solutions Including Thermoplastic Expertise
- > Advanced Wiring Solutions
- > Additive Manufacturing
- > Hydrogen Propulsion Systems





Innovation Center Innovatum



US Oak Ridge Laboratory



Global Technology Centre in Bristol



# > Global Technology Centres

## OUR GTCs

Industry-wide collaboration, technical innovation and strong partnerships are key to achieve a truly sustainable future of aerospace. In our GTCs we are bringing the world's leading aerospace ecosystems together, creating innovation hubs where industry, academia, knowledge institutes and SMEs are collaborating on a sustainable future of flight.



Providing support to start-ups and SMEs



An ecosystem of universities, research and technology organisations, catapults, Government organisations and industrial partners



### Four Global Technology Centres

**Trollhättan, Sweden:** Laser Welding and AM techniques, 'smart' aero-engine systems and electric and hydrogen propulsion research

**Bristol, UK:** sustainable aviation research and development, hydrogen propulsion technologies, advanced composite structures for electric aircraft, additive manufacturing, and industry 4.0 processes to enable the high rate production of aircraft structures (Wing of Tomorrow).

**Hoogeveen, the Netherlands:** Thermoplastics & composites, out-of-autoclave processing, multi-functional demonstrator capability, cobots, advanced metal bonding

**Oak Ridge Laboratory, US:** largest Additive Manufacturing Cell

## THE MISSION OF OUR GTCs

- > Investigate the optimum application & insertion of **emerging technologies into products**
- > Develop advanced capabilities for **high rate aerospace manufacturing**
- > Increase **collaboration** within our ecosystems: GKN Aerospace, universities, catapults, research institutes, start-ups & SMEs, customers, suppliers, industrial partners
- > Enable **agile innovation** and exploration of disruptive technologies for future aircraft including **digital manufacturing** capabilities
- > Train and develop the aerospace technical community as well as the next generation of Engineers – **Business & technical support/ advice** to start-ups, SMEs & aerospace supply chain
- > **Showcase GKN Aerospace and its ecosystem capabilities**

Read more about our global technology centres here.







# > Sustainability

## OUR APPROACH

We are putting sustainability at the heart of our business, both in the way we operate and the technology we develop. We know the biggest impact we can make is by developing solutions which reduce in-flight emissions, contributing towards the industry goal of net zero 2050.

That is why GKN Aerospace is developing the technologies that will enhance existing aircraft, as well as innovating to support a new generation of aircraft producing no emissions at all.



*Read more about our commitment to sustainability [here](#).*



## CULTURE OF SUSTAINABILITY

GKN Aerospace is taking action today to ensure that, as a business, we become Greenhouse Gas (GHG) emissions net zero by 2050. Our strategy sets challenging nearer term targets with 5 work streams covering: our products' environmental lifecycle; our facilities' energy use, waste and emissions; our suppliers and sustainable procurement; our new procurement; our new business selection and, finally; how our people live and work.

## COMMITMENT TO NET ZERO

As part of this commitment, GKN Aerospace in the Netherlands and Sweden have been powered by 100% renewable electricity since 2021, helping accelerate our net zero journey.

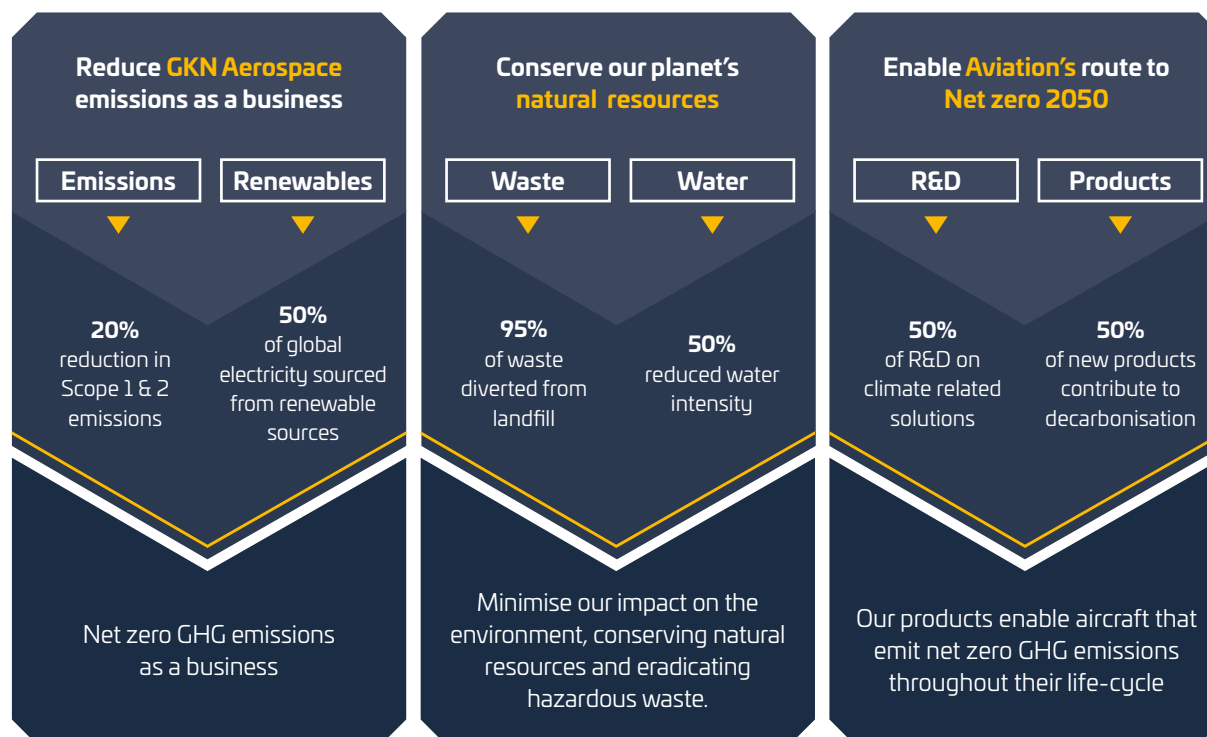
Our Global Technology Centres also represent a major commitment to developing the sustainable aerospace technology of the future.

## OUR STRATEGY

Our Strategic Priorities

Our 2025 Goals

Our 2050 Commitments



# > Sustainability

## ENABLING ALL-ELECTRIC AIRCRAFT

GKN Aerospace led the design and manufacture of the fully integrated wing, tail and electrical wiring interconnection systems for Eviation's all-electric ALICE and the electrical wiring interconnection system and wing for Vertical Aerospace's all-electric VX4.



*Read more about our commitment to sustainability here.*



## WING OF TOMORROW

GKN Aerospace has applied its long-term experience and in-depth knowledge of wing trailing edges and advanced composite technology for Airbus' "Wing of tomorrow" programme and has now delivered composite spar and fixed trailing edge demonstrators. Our technologies are supporting the high-rate, low-cost manufacturing of composite components using large scale Resin Transfer Moulding (RTM) technology. This could result in up to 20% weight savings on large commercial aircraft.

## THERMOPLASTIC COMPOSITES

Sustainable thermoplastic composites save at least 10% weight compared to traditional materials, and are contributing to reduced carbon emissions. Our R&D programmes are focused on the development of new thermoplastic materials and processes for scalable high volume production of lightweight sustainable components. GKN Aerospace's thermoplastic solutions for rudders, elevators and floorboards are flying on Gulfstream's and Dassault's latest business jets.

## HYDROGEN PROPULSION PROGRAMMES

Through H2GEAR and H2JET, GKN Aerospace is exploring ground-breaking sustainable hydrogen propulsion technology.

H2GEAR is a GKN Aerospace led UK collaboration programme, aiming to develop a liquid hydrogen propulsion system for sub-regional aircraft that could be scaled up to larger aircraft. Liquid hydrogen is being converted to electricity within a fuel cell system. This electricity efficiently powers the aircraft, eliminating CO2 emissions.

H2JET is a GKN Aerospace led Swedish collaboration programme, aiming to develop technical solutions for three important engine subsystems for H2-propulsion of medium range civil aircraft. By validating subsystem and component technologies for hydrogen combustion engines, H2JET will speed up the development of vital international engine and aircraft demonstrator programmes.

## ADDITIVE MANUFACTURING

GKN Aerospace is a global leader in Additive Manufacturing (AM) with AM components on seven flying platforms.

AM technology is of vital importance for a sustainable future of the aerospace industry. GKN Aerospace's industry-leading AM technology enables our customers to break new ground with quieter, lighter weight and more cost effective solutions than ever before. AM is adding value by speeding up and customising product design and development, while maintaining the best possible quality.





# > Markets and solutions



GKN Aerospace is the leading global tier one aerospace supplier for the majority of the world's aircraft manufacturers. From lightweight aerostructures to smart engine systems, from wiring systems to landing gear, and from ice protection systems to transparencies, GKN Aerospace is the original aerospace innovator.



CIVIL



DEFENCE



ENGINES



AEROSTRUCTURES

PROPULSION  
SYSTEMSAFTERMARKET  
SERVICES  
AND MROELECTRICAL WIRING  
INTERCONNECTION  
SYSTEMSLANDING  
GEAR

TRANSPARENCIES

FUEL AND  
FLOTATION  
SYSTEMS

# > Engines

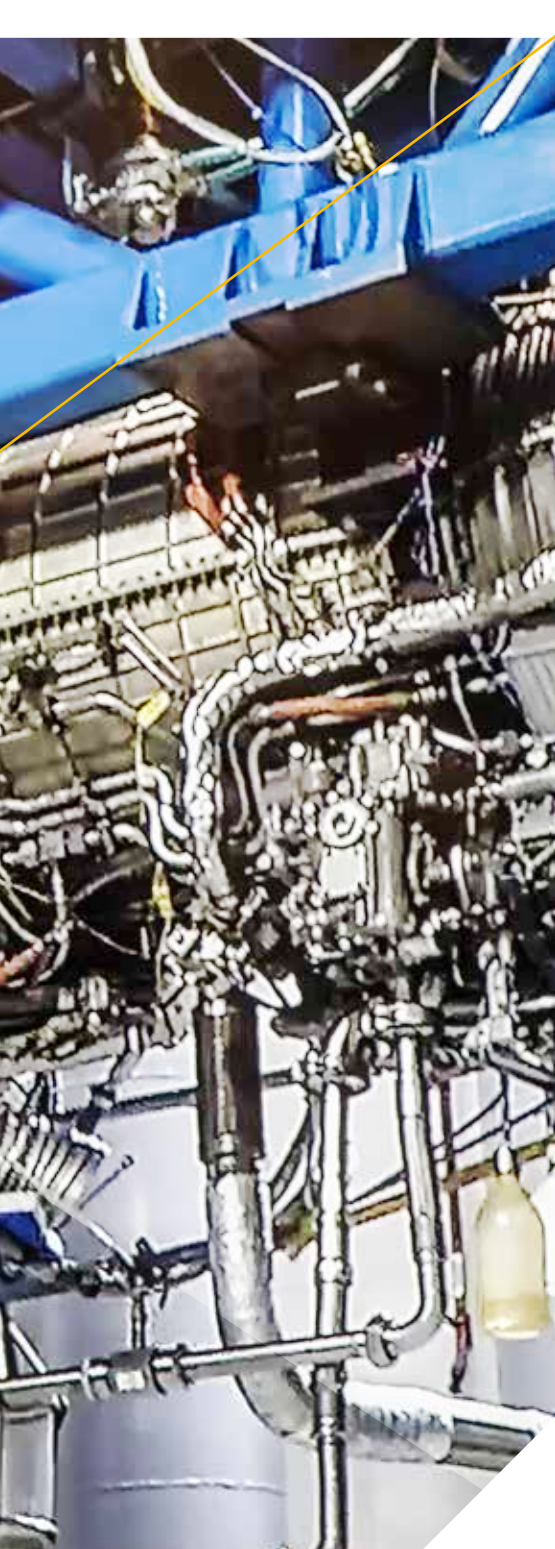
We support our customers in delivering world-leading, sustainable propulsion solutions. Our innovative engine systems offer significant improvements in performance and fuel consumption.

## PRODUCTS AND CAPABILITIES

- > Fan Statics
- > Rotatives
- > Turbine Statics
- > Compressor Statics
- > Military Systems
- > Parts Repair

*Biofuel tests engine*





## CIVIL ENGINES

We are a super tier one provider of high performance structural and rotating engine components. Based on our diverse range of capabilities and close partnerships with major aero-engine OEMs, we lead the industry in fabrication of advanced engine structures, cases and frames. We provide tailored repair and overhaul services, supporting our customers around the world, and also offer electric wiring solutions for propulsion systems.

## DEFENCE ENGINES

We are the OEM and Type Certificate holder of the RM12 engine powering the Gripen C/D fighter. That includes design, development, manufacture, assembly, certification, maintenance, repair, overhaul and technical product support. GKN Aerospace also provides the technical product support and MRO for the Gripen E RM16 engines of the Swedish Air Force. We work closely with our customers to ensure low cost operation and flight safety. We also provide components for a wide range of military fighter engines, such as the F100, F135, F404 and F414.

## LAUNCHER ENGINES

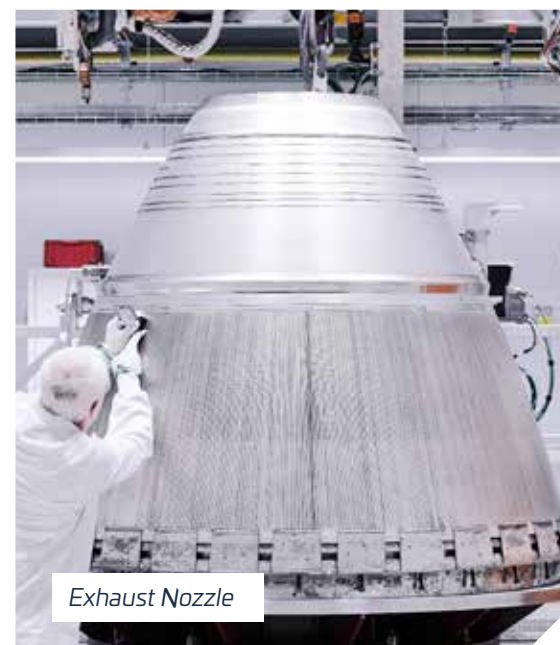
We have participated in the European Ariane launcher program from its outset, with the production of the thrust chambers for the Viking and Vulcain rocket engines. Today GKN Aerospace's involvement is continuing through fuel pump and exhaust nozzle development for the Vulcain 2.1 engine, powering the new generation Ariane 6 rocket.

## INDUSTRIAL GAS TURBINES

We are also experts in industrial gas turbines, where we design and make parts and provide overhaul and repair services.



*Read more about our engine capabilities here.*



Exhaust Nozzle

# > World Leading engine capabilities

GKN Aerospace is a super Tier One provider of both structural and rotating engine components, subsystems and modules with a broad range of capabilities and close strategic partnerships with all the major OEMs and tier one suppliers, including General Electric, Pratt & Whitney, Rolls-Royce, Safran Aircraft Engines and MTU.

Our capabilities have been, and continue to be, developed through constant investment and innovation. We have developed our partnerships taking full design responsibility for both aerodynamic and mechanical design. We offer technology solutions that can reduce the weight of metallic engine parts by up to 15%, thanks to optimised load path design and aerodynamic duct design. Our laser welded fabricated structures replace single piece castings. Our welded concepts also integrate additive manufacturing (AM) and utilise manufacturing process modelling to enable extremely light weight designs.

GKN Aerospace specialises in cold and hot structural parts, and is one of the world's leading independent suppliers of light-weight engine frame structures.

Our offer is focused on four engine modules:

## FAN STATICS

We have developed the compressor structures for engines such as Trent 900 and Trent XWB, the Pratt & Whitney PW1000 geared turbofan and for GEnx.

We lead the market in the design and production of fan containment and non-containment cases in titanium, aluminium, alloy and composites.

## FAN ROTATIVES

GKN Aerospace is a market leader in metallic fan blade manufacture, supplying all the major aero-engine OEMs.

We manufacture a broad range of rotating aero-engine products including both fan hubs and metallic fan blades, composite fan spacers and spinners. We are the world's largest non-OEM provider of fan blade repair services.

## LOW-PRESSURE (LP) COMPRESSOR

We have designed and tested sub-scale LP compressor modules using in-house aerodynamic, aeromechanic and mechanical design tools. We have extensive manufacturing experience in compressor rotors and blisks.

## EXTENDED TURBINE EXHAUST

We have developed the turbine exhaust structures for engines such as the Pratt & Whitney PW1000 Geared Turbofan, Engine Alliance GP7000 and the GEnx. Our optimised welded concepts are 10-15% lighter than other comparable solutions.

## MILITARY ENGINES - WHOLE ENGINE COMPETENCE

We hold the Type Certificate for the RM12 engine for the Gripen fighter. The Gripen was developed for the Swedish Air Force and is used by the air forces of Sweden, South Africa, Thailand, Hungary and the Czech Republic. The engine is a single engine adapted derivative of General Electric's F404-engine.

## SPACE PROPULSION

GKN Aerospace has participated in the European Ariane launcher programme since its launch and produced the thrust chambers for the Viking rocket engines. On the Vulcain 2 rocket engine we manufacture the nozzle extension and turbines.

GKN Aerospace also manufactures the Ariane 5 main engine frame, one of the most complex structural systems of the Ariane 5 launcher.

Today we play a growing role in the development of the world's future space transportation systems, mainly through assignments from the European Space Agency (ESA), such as Ariane 6.



## PRODUCTS AND CAPABILITIES

- > Whole Engine Competence
- > Fan Statics
  - Fan cases (metallic and composite)
  - Fan frames
  - Compressor structures
  - Fan OGVs
  - Core engine ducts
- > Fan Rotatives
  - Fan blades
  - Shafts
- > LP Compressor
  - Compressor blades and vanes
  - Blisks
  - Compressor rotors
- > Extended Exhaust
  - Turbine frame structures
  - Fixed guide vanes
  - Nozzle and plug
- > Space Propulsion
- > Fuel Pump Turbines
- > Rocket Exhaust Nozzles



Read more about our  
Engine Capabilities [here](#).



# > Engine services and MRO

Minimising downtime is vital for every operator of aircraft engines and industrial gas turbines. To meet this demand, we tailor maintenance solutions to fit specific operational needs and we always work in close cooperation with our customers.

Essential ingredients in the GKN Aerospace MRO offer include service teams ready for on-site support, around-the-clock technical support service, troubleshooting and availability of lease and exchange engines when the need arises.

With more than 40 years of experience in engine maintenance, we ensure exceptionally high reliability based on deep engine know-how and technical expertise.

We have a range of airworthiness approvals that allows us to readily accept engines from around the world.

GKN Aerospace is the world's largest non-OEM supplier of fan blade repair services, with a wide range of capabilities and over 30 years of experience in the fan blade and compressor airfoil repair business. We have full in-house capability as a one-stop shop, including protective coatings.

## We provide:

- > All levels of maintenance, up to and including full overhaul and test, for all supported engine types
- > On-site maintenance/field service teams
- > Lease and exchange engines and parts
- > 24 hour AOG service
- > Maintenance planning and trend monitoring
- > Technical support
- > Logistics support
- > Component repairs
- > Fan blade repairs
- > Accessory maintenance
- > OEM warranty administration

## TFE731

Designated Overhaul Facility since 1989 for PW120/A, PW121/A, PW123/B/C/D/E/AF, PW124B, PW125B, PW126/A and PW127/B/C/D/E/F/G/J/M engines  
On-site HSI

## LM1600

Authorised Service Provider since 1992  
Full repair capabilities for the ELM116/2 power turbine  
Field service including Hot Section  
Exchange on site  
Control system and package support  
Site upgrades  
Spare parts supply

## DR990

OEM since 1997  
Control system retrofits and upgrades  
Spare parts supply  
Field service  
Site maintenance and upgrade of existing equipment



*Read more about our engine services and MRO here.*

## PRODUCTS AND CAPABILITIES

- > Component repair
- > Fan blades
- > Compressor blades
- > Fan disks
- > Engine cases



## MARKETS

# > Civil

### PRODUCTS AND CAPABILITIES

- > Composite and metallic aerostructures
- > Machined Parts
- > Wing fixed trailing edge
- > Wing Spar
- > Fuselage panels
- > Empennages
- > Composite winglets
- > Composite flaps
- > Thermoplastic floor panels
- > Electrical wiring interconnection systems
- > Ice protection systems
- > Transparencies





GKN Aerospace develops, builds and supplies an extensive range of advanced aerospace systems, components and technologies– for use in aircraft ranging from leading single-aisles to wide body aircraft, business jets and urban air mobility solutions.

### **NARROW BODY**

As one of the world's leading global tier one suppliers in the Aerospace industry, GKN Aerospace designs and manufactures products and systems for A220, A320 (both neo and xlr) and B737 (and MAX) narrow body aircraft. Main areas of product responsibility are aerostructures, wiring systems, transparencies and ice protection systems.

### **WIDE BODY**

GKN Aerospace has established a strong position in the wide body market supplying a broad base of innovative solutions to A330, A350-900, B777 and B787 platforms.

### **REGIONAL JETS, BUSINESS JETS**

GKN Aerospace uses its world-leading capability in design and manufacture of aerostructures, propulsion systems and wiring systems for business jets and regional jets. This has resulted in long-term relationships with key customers like Cessna, Gulfstream, HondaJet and Dassault.

### **URBAN AIR MOBILITY & SUB-REGIONAL ELECTRIC AIRCRAFT**

The development of urban air mobility and sub-regional all-electric aircraft is a game-changer. In the quest for more environmentally friendly aviation, GKN Aerospace is proud to bring its wealth of experience in design and certification, as well as technology leadership, to shape the next generation of sustainable aircraft with new business models and faster time-to-market. Key customers include Eviation, Deutsche Aircraft and Vertical.

*Read more about our  
civil capabilities here.*



## > Defence

With our innovative technologies and our unique global network, we provide our defence customers across the world with systems and components for the most advanced military aircraft.

### **FIXED WING**

We ensure that customers have our cutting edge solutions available wherever and whenever they need it. Our portfolio ranges from the F-15, F-16 and F-18 combat aircraft to the F-35 and from SAAB Gripen to the world's most advanced six-generation fighters.

### **ROTORCRAFT AND FUTURE VERTICAL LIFT**

GKN Aerospace's position as a global technology leader in aerostructures, EWIS and landing gear, is meeting the needs of medium and heavy lift platforms as well as transport and combat rotorcraft. Our involvement ranges from Chinook and Apache to the NH90. As a consortium partner in the NH90 partnership, we manufacture the composite tail, landing gear and door of the NH90, the most successful European helicopter.

### **SPACE**

Our breakthrough technologies in additive manufacturing, lightweight composites and smart engine systems are used in the manufacturing of engine launch structures and engine components.

Our reliable systems and components range from aerostructures, and electrical wiring systems to engine components. GKN Aerospace is ready to provide solutions for customers and their programmes around the globe.

### **UNMANNED AERIAL VEHICLE**

We are a key supplier for Unmanned Aerial Vehicle (UAV) and Remotely Piloted Aircraft System (RPAS) programmes. The market and technology leadership of GKN Aerospace in advanced aerostructures, EWIS and lightweight technologies has demonstrated to be a strong fit with the requirements of the UAV OEMs. For Market leader GA-ASI we design and build fuel bladders, composite landing gear and the composite tail for the MQ-9B SkyGuardian®.

### **MISSILES**

GKN Aerospace is a leading manufacturer of lightweight re-usable missile canisters, structural components and missile EWIS. Leveraging a long history of manufacturing high-quality components for manufacturers like Raytheon and Lockheed Martin, our lightweight re-useable missile canisters are manufactured through a unique process of filament winding followed by vacuum infusion.



## PRODUCTS AND CAPABILITIES

- > Composite and metallic aerostructures
- > Tails and aft section
- > Electrical wiring and interconnection systems
- > Landing gear
- > Canopy
- > Fuel systems
- > Ice protection systems



*Read more about our defence capabilities here.*

# > Aerostructures

We are market leaders in aerostructures. Our innovative, lightweight technology supports our customers in creating the next-generation of industry-leading aircraft.

We provide empennages, wing structures, fuselages and components for major platforms ranging from helicopters to business jets and from advanced fighter aircraft to the most used single aisle aircraft and the largest passenger planes in the world. With lightweight composites, additive manufacturing and innovative high speed machining technologies we help to reduce emissions and weight on the aircraft and enhance passenger comfort.

## WINGS

We leverage our unique and extensive expertise across primary and secondary structures, components, control surfaces and systems in conjunction with core assembly and integration skills to deliver leading and trailing edge assemblies ready to be plugged into our customers' wing assembly lines.

## FUSELAGES

We are engaged in the design, development, certification, manufacture and assembly of metal and composite fuselage structures for rotary and fixed-wing aircraft including military fighters and transport, commercial and general aviation platforms.

## EMPENNAGES

We are market leader in Gulfstream and Dassault business jets, which all feature GKN Aerospace's optimised, efficient and cost effective empennages. Innovative lightweight thermoplastic composite solutions are included in each of the tails. Our expertise also includes empennages and aft-sections for rotorcraft like the NH90, Chinook and AW169 helicopters.

## NACELLES AND PYLON

We are responsible for the complete design, development, manufacture, assembly and certification of a number of turboprop and turbofan solutions including engine build unit (EBU) and podding.

We work closely with customers such as Boeing, Spirit AeroSystems, and Pratt & Whitney to concurrently engineer lightweight, high temperature exhaust systems with noise attenuating properties. We are the sole supplier of the "spun and machined lipskin". This manufacturing process is superior to traditional manufacturing methods because it delivers a more precise dimensioned and better fitting part than traditional manufacturing methods. Spinning and machining a lipskin reduces the manufacturing time, requires much lower tooling costs and produces a precision machined part that fits every time.



*Read more about our  
aerostructures capabilities here.*





G650 empennage



# > Electrical Wiring Interconnection Systems

GKN Aerospace's wiring business is recognised as a market and technology leader in electrical wiring interconnection systems (EWIS) for commercial and military aircraft and aircraft engines.

We design, manufacture and support EWIS, electrical panels and boxes to all leading aerospace OEMs including Airbus, Boeing, Gulfstream, Honda, Honeywell, Leonardo, Lockheed Martin, Pratt & Whitney, UTAS, Raytheon and Rolls-Royce.

As EWIS systems are affected by almost any configuration change of the aircraft, the efficient management of complex and frequent design changes into production is core to the business. The proprietary wiring design and manufacturing system (WDMS) toolset integrates all aspects of wiring system management, including perfect configuration management and continuous monitoring into one powerful online system. With WDMS, we offer our customers a single process across multiple sites, resulting in a consistent quality product that supports each customer's needs over the entire life cycle of their programmes. The proven system is recognised worldwide as best practice in the industry.

GKN Aerospace is responsible for the design and production of the entire Electrical Wiring Interconnection System of the Lockheed Martin F-35 Lightning II and of the Airbus A220.

The international production in strategic regions including Turkey, China, India, the Netherlands, Canada and the USA enhances affordability, and supports customers with local content, offset and industrial participation.



## SOLUTIONS

# > Transparencies

We are a world leader in the supply of transparencies to the military and civil markets with a global reputation for our technologies, patents and proprietary processes in glass, acrylic, polycarbonate and coatings.

Working with our customers to extend the capabilities of aircraft transparencies across both military and civil markets, we jointly develop requirements using our proprietary design and analysis tools and development, testing and certification processes to deliver a fully qualified product - a key differentiator for our transparency business. Our products are fitted to platforms from supersonic military jets such as the F-35 Lightning II (JSF) and the Eurofighter Typhoon to the latest in commercial aircraft such as the Airbus A350 XWB and Boeing 787 Dreamliner.



Our ballistic resistant glass (BRG) provides increased protection whilst reducing the overall weight of the vehicle, whether civilian or military. The BRG can be flat or curved to suit most vehicle types and we add treatments such as heating, sunshade banding, tinting, custom dot matrix paint banding, solar control and an anti-spall protective layer. Our BRG is also supported by a complete aftermarket service.

GKN Aerospace has developed a new hydrophobic coating for cockpit windows. The permanent surface treatment delivers in-flight / ground operation rain shedding and significantly enhances resistance to surface abrasion

We also provide aftermarket support for a variety of passenger aircraft, business aviation, and special mission aircraft and mature fleets. All our transparency manufacturing sites offer certified repair station services for commercial and military aircraft and provide global support to aircraft operators including offering comprehensive component overhaul and framing services..



## PRODUCTS AND CAPABILITIES

- > Manufacture of passenger cabin windows, windshield/cockpit windows and canopies
- > Superior optics – use of CAD technology to remove optical distortion and increase clarity
- > Bird impact resistance up to 600 knots
- > Shock hazard elimination
- > Framing, repair and overhaul, and refurbishment
- > Egress (MDC) systems
- > OEM licensed
- > Train – locomotive screens
- > Part 145 FAA and EASA approved
- > Ballistic resistant glass



# > Landing gear

GKN Aerospace's landing gear business specialises in the design, development and manufacturing of landing gear systems for small- to mid-size aircraft and helicopters. It has full life-cycle capabilities including MRO and spares support and an outstanding track record in delivering weight- and cost-efficient landing system designs.

GKN Aerospace designs, manufactures and supports landing gear systems for leading aircraft and system integrators, including Boeing, Northrop Grumman, Lockheed Martin, NHIndustries, General Atomics and UTC Aerospace Systems. Supported platforms include the Apache AH 64, Bombardier Dash 8 Q400, NH90 multipurpose helicopter, F-35, and F-16.

GKN Aerospace is shaping the next generation of landing gear systems through its industry-leading technology development in thick-walled polymer matrix composites (PMC) applications for flight critical and primary structural

components. Our fully automated landing gear composite manufacturing plant in the Netherlands enables us to develop affordable and sustainable integrator solutions with optimised and sustainable weight and performance characteristics.

## NH90 IN FOCUS

Developed by Europe's NHIndustries partnership - a combination of Airbus Helicopters, Leonardo (AgustaWestland), and GKN Aerospace - the NH90 was designed to meet NATO's requirement for a modern medium-sized multi-role military helicopter for both land and maritime operations.

The NH90 is a twin-engine aircraft incorporating innovative features such as a full glass cockpit and fly-by-wire control system with four-axis autopilot and advanced mission flight aids, along with on-board monitoring and diagnostics systems.

The tail, cabin door, highly advanced landing gear, sponsons and intermediate gearbox of the NH90 are designed, developed and manufactured at GKN Aerospace. We also provide spare parts for the helicopter.











## SOLUTIONS

# > Ice protection systems, fuel tanks and flotation systems



GKN Aerospace designs, develops, qualifies and manufactures a range of elastomeric products and associated systems for aerospace, military, marine and commercial use.

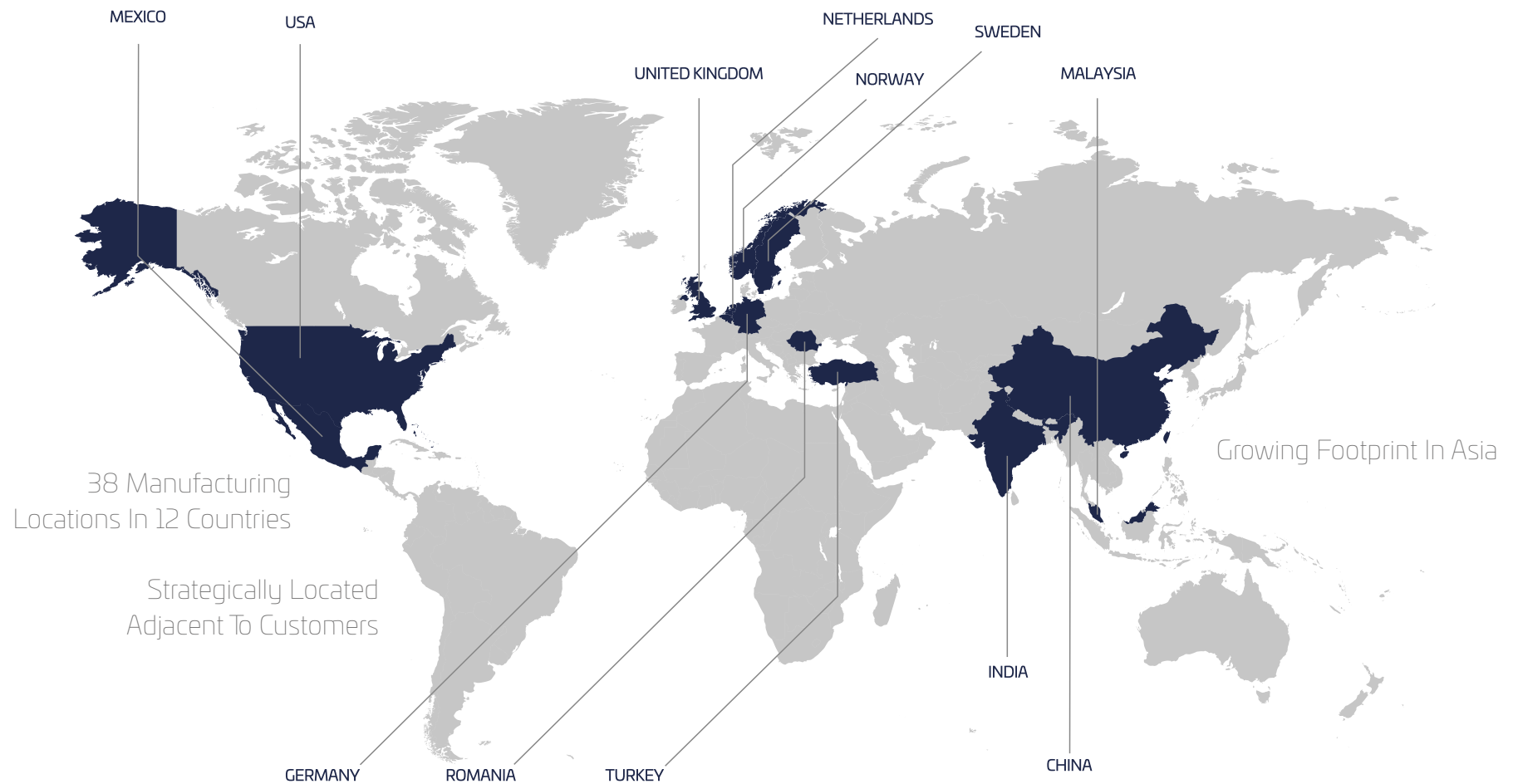
We provide fuel tanks, flotation systems, sea trays, fuel handling systems and silicone seals for global aerospace and defence customers across air, land and sea applications, and offer comprehensive EASA Part 21 approved MRO facilities for all types of flexible fuel tank including self-sealing, crashworthy and explosion suppressing products.

GKN Aerospace is a world leader in electro-thermal ice protection and detection systems. These systems provide controllable surface heating embedded into a leading edge structure, engine inlets and blades, and helicopter rotor blades. This technology can be applied to both military and commercial aircraft.

## PRODUCTS AND CAPABILITIES

- > Flexible fuel tanks
- > Emergency flotation devices
- > Silicone seals
- > Air portable fuel containers
- > Roto-moulded fuel tanks
- > Ballistically tolerant fuel tanks
- > Sea trays
- > Ice protection systems
- > Icing wind tunnel

# > Our global footprint



# > Our Customers

Airbus  
Avio  
Boeing  
CFM & Safran  
Collins Aerospace  
COMAC  
Dassault Aviation  
Deutsche Aircraft

Eviation  
FMV  
GA-ASI General Atomics  
Aeronautical Systems  
General Electric  
Gulfstream  
HondaJet  
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