

A350 XWB Family. The A350 XWB is a family of wide-body aircraft, designed to accommodate between 325 and 400 passengers. The A350 XWB features a wider fuselage than that of competing new generation aircraft, Rolls-Royce Trent XWB engines, A380 systems technology and over 50% composite material. The A350 XWB's main competitors are the Boeing 787 and 777 aircraft series.

With the Ultra-Long Range (ULR) version of the A350-900 launched in 2015, the A350 XWB demonstrates its versatility by offering the capability to perform flights of up to 19 hours. The first

A350-900 ULR was delivered in September 2018 to Singapore Airlines. Highlighting the type flexibility, Airbus delivered the first A350-900 Domestic to Japan Airlines during 2019.

Airbus has also developed the larger A350-1000, which is now certified by EASA and the FAA and was delivered to its first customer in February 2018.

In 2019, Airbus received 113 gross orders for the A350 XWB Family (32 net), and delivered 112 aircraft, achieving the target rate of about 10 aircraft per month by the end of the year.

A350 XWB FAMILY TECHNICAL FEATURES

Model	Entry-into-service	Passenger capacity ⁽¹⁾	Maximum range (km)	Length (metres)	Wingspan (metres)
A350-900	2014	325	15,000	66.8	64.8
A350-1000	2018	366	15,557	73.8	64.8

(1) Three-class layout.

A380. The double-deck A380 is the world's largest commercial aircraft flying today. Its cross-section provides flexible and innovative cabin space, allowing passengers to benefit from wider seats, wider aisles and more floor space, tailored to the needs of each airline. Carrying 575 passengers in a comfortable four-class configuration and with a range of 8,000 nm / 14,800 km, the A380 offers superior economic performance, lower fuel consumption, less noise and reduced emissions.

In 2019, Airbus Commercial Aircraft delivered 8 aircraft.

In February 2019, following a review of its operations, and in light of developments in aircraft and engine technologies, Emirates announced the intention to reduce its A380 orderbook from 162 to 123 aircraft. As a consequence and given the lack of order backlog with other airlines, Airbus will cease deliveries of the A380 in 2022.

A380 TECHNICAL FEATURES

Model	Entry-into-service	Passenger capacity ⁽¹⁾	Maximum range (km)	Length (metres)	Wingspan (metres)
A380-800	2007	575	14,800	72.7	79.8

(1) Four-class layout.

Customer Services

Airbus targets to remain at the forefront of the industry by expanding its customer services offering to meet customers' evolving needs. As a result, Airbus is developing a wide range of customer centric and value-added services. This approach provides Airbus operators with solutions to significantly reduce their operating costs, increase aircraft availability, enhance the quality of their operations and passenger experience.

Customer Services' primary role is to support its customers in operating their Airbus fleet safely and profitably and to the satisfaction of passengers all around the world. As a result of its continued growth, Airbus' customer base has increased consistently over the past years reaching more than 11,000 aircraft in operation by the end of 2019 operated by more than 450 operators. The fleet is maintained by more than 200 Maintenance and Repair Organisations (internal and external to Airbus).

A worldwide network of more than 7,250 people (including subsidiaries) cover all areas of support from technical engineering / operational assistance and spare parts supply to crew and maintenance training. Hundreds of technical specialists provide Airbus customers with advice and assistance 24 hours a day, 7 days a week. There are 151 field service stations available worldwide for on-site assistance to 180 of our operators, 189

operators are covered by 17 Hubs. Airbus worldwide support is also based on an international network of 69 locations all around the world, including 18 training locations, 6 FHS (Flight Hour Services) pools and 10 spares warehouses.

As the worldwide fleet is growing (to an estimated 15,000 aircraft by 2025), so is the demand in the services market. At the same time customers expect an increased service level. Airbus offers optimised aircraft operational availability, streamlined flight operations and enhanced passenger experience by covering the full aircraft lifecycle and focusing on adding value to its customers. Growing fast on the market with organic growth, JVs, co-developments and acquisitions in recent years, here are some examples:

- in 2016, full acquisition of Navtech, now re-named Navblue, offering products in the Flight Operations area and Air Traffic Management area;
- in 2017, full acquisition of Sepang Aircraft Engineering (SAE), an MRO centre based in Kuala Lumpur, Malaysia, that had been partially owned by Airbus since 2011;
- launch of Airbus Interiors Services (2017) specialised in timely and flexible solutions for cabin equipment;
- the Airbus MRO alliance was launched in 2017 and now counts 6 affiliated members with a specific focus on the Asia Pacific Region to accompany the strong market growth in this region;

- the Airbus Training network currently counts 18 training network locations around the world; the latest acquisition being a flight training center in Santiago de Chile (December 2019) with SKY (a Chilean-based low-cost carrier) as launch customer for the new Airbus Chile Training Centre;
- in December 2018, Airbus and the French Civil Aviation University, ENAC, have obtained EASA certification for a co-developed Ab-initio Pilot Cadet Training Programme. The first cadets are now trained according to this programme in ab-initio flight schools Escuela de Aviacion Mexico (EAM) in Mexico City and more recently the Airbus Flight Academy Europe (in Angoulême, France), thus contributing to meeting the need for new pilots in the next 20 years;
- acquisition of a start-up - VRnam - to boost innovation for flight training through virtual reality.

Airbus' worldwide support is also based on an international network of support centres, training centres and spares warehouses all around the world, offering customers the solutions they need close to their operational base. To ensure this proximity Airbus empowered local teams and developed hubs in the regions, most recently in Asia, China, Africa and Middle East.

Since the launch of Skywise at Le Bourget in 2017, Airbus has accelerated with its digital transformation. In October 2018, Airbus created the Skywise campus – “a place to foster internal and external collaboration” – and developing new ways of working, with customers at the heart of each service, to offer the best value proposition across the full lifecycle, securing and optimising their operations end-to-end, providing tailored solutions that deliver impactful outcomes and enhancing the user's experience all along the way.

Skywise brings all the ecosystem data to a single platform. More than 100 airlines are now connected to the Skywise platform, representing a potential of over 9,000 aircraft of which approximately one third are not Airbus aircraft.

Leveraging on Skywise digital capabilities, Airbus' Customer Services portfolio offer is evolving to provide the best and most efficient solutions available on the market:

- launch of Skywise Reliability Services (October 2018);
- launch of Skywise Predictive Maintenance (October 2018);
- launch of “FHS (Flight Hour Services) powered by Skywise” enhancing the existing FHS offering to improve aircraft availability while optimising resources utilisation and components inventory (June 2019);
- launch of Skywise Digital Alliance (October 2019): Airbus will form an alliance with Delta Airlines to experiment, develop and market new predictive maintenance cross-fleet solutions. The Alliance is open to receive other members from airlines and systems OEMs.

Preparing the future, Airbus Services is on a continuing growth pattern and on track to achieve the US\$ 10 billion revenues ambition announced at the Farnborough 2018 Airshow.

Customer Finance

Airbus favours cash sales, and does not envisage customer financing as an area of business development. However, Airbus recognises the commercial need for manufacturers to assist customers in arranging financing of new aircraft purchases, and in certain cases to participate in financing those aircraft for the airline.

Extension of credit or assumption of exposure is subject to corporate oversight and monitoring, and follows strict standards of discipline and caution. Airbus' dedicated customer finance team has accumulated decades of expertise in aircraft finance. When Airbus finances a customer, the financed aircraft generally serves as collateral, with the engine manufacturer participating in the financing. These elements assist in reducing the risk borne by Airbus. The difference between the gross exposure resulting from the financing and the collateral value is fully provisioned for (for further information, please refer to the “— Notes to the IFRS Consolidated Financial Statements — Note 27: Sales Financing Transactions”). Airbus' customer financing transactions are designed to facilitate subsequent sell-down of the exposure to the financial markets, third-party lenders or lessors.

In 2019, Airbus continued to benefit from market appetite for both aircraft financing and sale and leaseback lessor opportunities, supported by a high level of liquidity available in the market at good rates for Airbus aircraft. Airbus customer financing exposure remained limited in 2019 and decreased compared to 2018. Airbus will continue to provide direct aircraft financing support as it deems necessary. Management believes, in light of its experience, that the level of provisioning protecting Airbus from default costs is adequate and consistent with standards and practice in the aircraft financing industry. See “— Risk Factors – Financial Market Risks – Sales Financing Arrangements”.

Asset Management

The Asset Management department was established in 1994 to manage and re-market used aircraft acquired by Airbus, originally as a result of customer bankruptcies, and subsequently in the context of certain buy-back commitments. The department operates with a dedicated staff and manages a fleet comprised of used aircraft across a wide range of models. Through its activities, the Asset Management department helps Airbus to respond more efficiently to the medium- and long-term fleet requirements of its customers.

Its key roles comprise commercial, technical and financial risk management of its used aircraft portfolio, as well as the enhancement of all Airbus products' residual value.

It also provides a full range of remarketing services, including assistance with entry-into-service, interior reconfiguration and maintenance checks. Most of the aircraft are available to customers for cash sale, while some can also be offered on operating lease. In the latter, the Airbus Asset Management team aims at eventually selling down the aircraft with lease attached to further reduce its portfolio exposure.

Operations

Industrial Organisation

Airbus' industrial organisation reflects the end-to-end industrial flow in single-aisle and widebody value streams respectively. Production flows from the supply chain, through constituent and major component (wing, forward and aft fuselage, and nose and centre fuselage) assembly through to final assembly in Toulouse, Hamburg, Tianjin and Mobile. Aircraft are then handed over to programme management for delivery to customers. The industrial flow is secured by Quality and enabled by Procurement as well as four transverse functions responsible

to provide the skills, standards and services necessary for (1) smooth industrial planning, logistics and transport, (2) integrated manufacturing engineering, (3) eradication of non-quality, and (4) highest operational excellence and sound performance management.

The Procurement organisation is responsible for both the contractual and operational relationship with the supplier base. Its aim is to ensure that purchased parts and services are delivered at the most competitive conditions, on time, cost and quality. A dedicated Procurement Operations team manages the delivery stream from the supply chain in accordance with the agreed conditions to enable the production flow.

In 2019 all new aircraft developments and major modifications benefited from the largely deployed Advanced Production Quality Planning (APQP) method across Airbus and at suppliers. The Quality First initiative launched in the second half of 2019 in Hamburg, with a strong focus on standards and quality gate adherence will be further deployed along the value streams in 2020. The Quality function ensured the granting in 2019 of all necessary EASA certification, POA, DOA, MOA and EN9100 accreditations through compliance to our internal standards and processes and associated audits.

This way of working along end-to-end value streams promotes a strong sense of collaboration in the service of customers with the highest safety and quality standards.

2019 delivery performance and rate evolution:

- A220 family: 48 A220 delivered. Ramp-up to a maximum target rate of 14 A220 per month by mid-decade;
- A320 family: record deliveries of 642. Rate 63 per month targeted in 2021;
- A330: 53 deliveries achieved;
- A350: record deliveries of 112, production ramp-up accomplished in 2019;
- A380: 8 deliveries achieved, preparation for end of production.

Engineering

Airbus Engineering is a global organisation that develops civil aircraft and aircraft components, and that conducts innovative research applicable to the next generation of aircraft. Airbus Engineering operates transnationally, with most engineers employed in France, Germany, the UK and Spain. A growing population of experienced aerospace engineers is also employed worldwide at five other engineering centres in Wichita (Kansas, US), Mobile (Alabama, US), Moscow (Russia), Bangalore (India) and Beijing (China).

A key part of the Airbus engineering organisation is the architect and integration centre, which ensures, together with a team of senior aircraft architects and the programme chief engineers, that a consistent and multi-disciplinary approach is applied during aircraft development.

Research & Technology activities continue to deliver incremental innovations for existing aircraft, matured breakthrough technologies, with reinforced focus on industrial aspects. Airbus Engineering is a major contributor to numerous international initiatives dedicated to the preservation of the environment and the reduction of noise and CO₂ emissions. Fully integrated change projects are also implemented to continuously implement innovative and efficient ways of working.

Regional Aircraft, Aerostructures, Seats, Aircraft Conversion and Airbus Canada

ATR

ATR (*Avions de Transport Régional*) is a world leader in the market for regional aircraft up to 90 seats. Its aircraft has over 200 operators in more than 100 countries. ATR is an equal partnership between Airbus and Leonardo, with Airbus' 50% share managed by Airbus. Headquartered in Toulouse, ATR employs more than 1,400 people. Since the start of the programme in 1981, ATR has registered net orders for 1,765 aircraft (507 ATR 42s and 1,258 ATR 72s).

In 2019, ATR delivered 68 new aircraft (compared to 76 in 2018) and recorded net firm orders for 48 new aircraft (compared to 46 in 2018), including orders from Nordic Aviation Capital (NAC). As of 31 December 2019, ATR had a backlog of 185 aircraft (compared to 205 in 2018).

By the end of 2019, ATR had delivered 1,580 aircraft.

Products and Services

ATR 42 and ATR 72. ATR has developed a family of high-wing, twin turboprop aircraft in the 30- to 78-seat market which comprises the ATR 42 and ATR 72, designed for optimal efficiency, operational flexibility and comfort. Like Airbus, the ATR range is based on the family concept, which provides for savings in training, maintenance operations, spare parts supply and cross-crew qualification. The ATR 72-600 is the lowest seat per mile cost aircraft on the 70 seat segment.

ATR is entering the cargo market by launching the ATR 72-600F (Freighter) with a brand new windowless fuselage, a forward Large Cargo Door (LCD) and a rear upper hinged cargo door. The ATR 72-600F will enter into service in 2020. The Company's aircraft family is also being extended with the brand new addition of the 42-600S. With the "S" representing Short Take-Off and Landing (STOL), this new version of the ATR 42-600 offers take-off and landing capabilities on runways as short as 800m with 40 passengers on board in standard flight conditions. Its entry into service is scheduled for 2022.

Customer service. ATR has established a worldwide customer support organisation committed to supporting aircraft over their service life. Service and training centres and spare parts stocks are located in Toulouse, Paris, Miami, Singapore, Bangalore, Auckland, Sao Paulo and Johannesburg. ATR worldwide presence also includes representative offices in Beijing and Tokyo.

ATR Asset Management addresses the market for second-hand aircraft by assisting in the placement and financing of used and end-of-lease aircraft.

Production

The ATR fuselage is produced in Naples, Italy, and ATR wings are manufactured in Merignac near Bordeaux, France. Final assembly takes place in Saint Martin near Toulouse on the Airbus commercial aircraft production site. Flight-testing, certification and deliveries also occur in Toulouse. ATR outsources certain areas of responsibility to Airbus, such as wing design and manufacturing, flight-testing and information technology.

STELIA Aerospace

STELIA Aerospace is a wholly-owned subsidiary of Airbus and offers global solutions for aeronautical manufacturers and airlines supported by its aerostructure, tubes and ducts, cabin interior and pilot seat branches.

As one of the world leading tier-1 aerostructure suppliers, STELIA Aerospace designs, develops, manufactures and industrialises workpackages and fully equipped and tested aircraft sections for civil and military programmes.

STELIA Aerospace is a global partner for major aeronautical players worldwide, such as Airbus, ATR, or Bombardier Aerospace.

With more than 7,000 employees worldwide based mainly in France, Canada, Morocco and Tunisia, STELIA Aerospace has a wide range of capabilities, from Build-to-Print to Design & Build solutions, including mechanical milling of rolled and stretched panels.

STELIA Aerospace designs, develops and manufactures bended and welded tubes and ducts covering all ATA systems.

Through its cabin interior specialty, STELIA Aerospace designs and manufactures luxury First Class and Business Seats for key partners in the world including Etihad Airways, Singapore Airlines or Thai Airways.

By combining innovative materials and technology with a drive to improve the passenger experience, STELIA Aerospace has created an outstanding range of seats used in civil aircraft globally.

STELIA Aerospace – a joint world leader Pilot seats manufacturer – provides cockpit and pilot seats for all kinds of aircraft, and offers support from design to production, including after-sales service.

As part of its development strategy, STELIA Aerospace has established a new subsidiary in Portugal. STELIA Portugal was founded end of 2019 and should start operations in 2020, enabling STELIA Aerospace to continue to support its customers ramp-up needs with additional production capacity.

Premium AEROTEC

Premium AEROTEC, a wholly owned subsidiary of the Company, is one of the world's leading tier-1 suppliers of commercial and military aircraft structures and is a partner in the major European international aerospace programmes.

Its core business is the development and production of large aircraft components from aluminum, titanium and carbon fiber composites (CFRP). Premium AEROTEC is Europe's no. 1 in this segment with roughly 9,000 employees at various sites in Germany and Romania. Premium AEROTEC is represented by its products in all Airbus commercial aircraft programmes. The current military programmes include the Eurofighter "Typhoon" and the military transport aircraft A400M.

Besides main customer Airbus, Premium AEROTEC will further intensify business with other customers and actively approach other aircraft or structural manufacturers. Premium AEROTEC is also striving to expand its maintenance, repair and spare parts business.

In order to contribute successfully to the shaping of the future of aviation, the engineers and developers at Premium AEROTEC are continuously working on the new and further development of lightweight and highly durable aircraft structures. They cooperate closely with universities and research institutes in the process. Premium AEROTEC plays a significant role in the design of new concepts in such fields as carbon composite technologies (including thermoplastic processes) or 3D-printing of aircraft components made of titanium or aluminum.

Elbe Flugzeugwerke GmbH – EFW

EFW combines various aviation and technology activities under a single roof: development and manufacturing of flat fibre-reinforced composite components for structures and interiors, the conversion of passenger aircraft into freighter configuration, maintenance and repair of Airbus commercial aircraft as well as engineering services in the context of certification and approval.

On 17 June 2015, Airbus signed an agreement with Singapore-based ST Aerospace Ltd. (STA) to offer passenger-to-freighter (P2F) conversion solutions for its A320 and A321 aircraft. STA acquired an additional 20% of the shares of EFW, Dresden (Germany) by way of a contribution in kind and a capital increase to EFW. The transaction closed on 4 January 2016. Consequently, 45% of the shares of EFW were retained and Airbus effectively lost its control over EFW (previously reported in Airbus).

Airbus Canada Limited Partnership

Airbus Canada Limited Partnership ("Airbus Canada") has been established on 1 July 2018 following the transaction between Airbus, Bombardier and Investment Quebec. At the end of 2019, Airbus Canada shareholding structure was 50.26% Airbus, 33.72% Bombardier and 16.02% Investment in Quebec. At the end of 2019, Airbus Canada had over 2,700 employees. For the latest update, see section 1.3 below.

In 2019, Airbus Canada has delivered 48 aircraft, compared to 20 aircraft in 2018 (from 1 July 2018). Airbus Canada has a backlog of 495 aircraft (600 orders – 105 deliveries in total as of December 2019).

Airbus Canada Products

Airbus Canada has developed a family of all-new design efficient aircraft with two products: the A220-100 and the A220-300, launched by Bombardier before the establishment of Airbus Canada. The A220-100 is a solution for opening new routes with urban and challenging operations. The A220-100 has a capacity between 100 and 135 passengers and a range of 6,300 km. The A220-300 is well suited to be one of the best network feeder. The A220-300 has a capacity between 130 and 160 passengers and a range of 6,200 km. From the creation of Airbus Canada until the end of December 2019, 68 A220 were delivered.

Airbus Canada Industrial Footprint

A220 final assembly line is in Mirabel. In 2019, the A220 has also begun to be manufactured in a new final assembly line in Mobile, for delivering to our American customers. The first A220 delivery from Mobile is expected in Q3 2020.