







# Your way to Airbus

Aircraft Cabin Engineering
Center of Competence
Cabin/Cargo Interior & Payload Systems



# Welcome to Airbus!

Our goal is clear: as a global aircraft manufacturer, we want to lead the market and set standards. If you want to find out more about working at Airbus in the field of Aircraft Cabin Engineering we kindly invite you to browse through the following brochure.

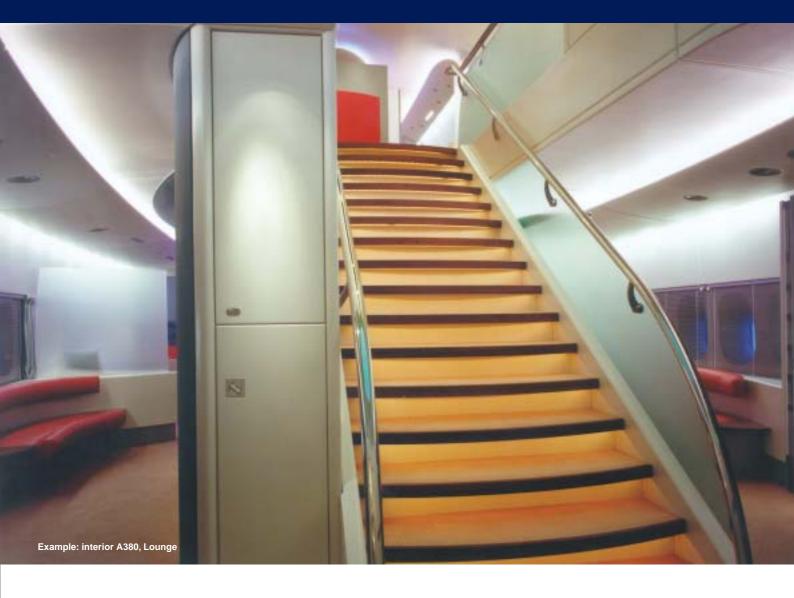
Innovation and Engineering at Airbus is driven by five different Competence Centres, such as Cabin/Cargo Interior & Payload Systems. The Competence Centres operate trans-nationally with engineers located at all Airbus sites in France, Germany, Spain and the United Kingdom, combining the most competent people with the best range of skills and expertise



Airbus cabin engineers design solutions to make sure we remain a market leader. We provide competence and expertise for single customer versions on all Airbus programs and also for new aircraft development, such as the A380. Some of the key activities across the different organisational units include:

- Customising the aircraft cabin and cargo area
- Equipment specification, design, development, test and integration of components such as seats, galleys, lower deck facilities, air distribution, in-flight entertainment, water systems
- Ergonomic studies for comfort on board
- Support in aircraft manufacturing, certification, in-service activities and sales campaigns.





### Airbus aircraft interiors for the future



Nowadays, cabin design is often a decisive factor for travellers when choosing an airline, especially on long-haul flights. At the same time, the demand for airfreight capacities has risen dramatically in recent years. That is why the future commercial success of Airbus depends strongly on the development and implementation of innovative design concepts and the evolution of existing products in cabin and cargo aircraft interiors.

In response to these market expectations, Airbus cabin and cargo engineers have to incorporate state-of-the-art technology, taking strict ergonomic principles into consideration. Our goal is to develop aircraft interiors that offer the highest levels of comfort, reliability and customisation for passengers and freight transportation.

In the context of the A380 development, where aircraft interiors are gaining even more importance in the eyes of our customers, we consider continuous innovation, a multi-national approach and concurrent engineering in many disciplines to be key aspects for securing Airbus market shares and leadership in setting the standards.

# Cabin/Cargo Interior & Payload Systems

#### The center of competence and its domains

The "Cabin / Cargo Interior & Payload Systems" Competence Centre is made up of twelve domains located in Hamburg, Bremen and Toulouse.

#### Cabin & Cargo Definition:

Support in sales campaigns, operation of the marketing mock-up centre. This domain, which is responsible for the cabin and cargo configuration, ensures the delivery of a detailed, customised and certifiable cabin and cargo definition.

#### **Industrial Design:**

Detailed definition of all cabin surfaces and colours for new cabins and interior components. Ergonomic studies for passengers as well as crew comfort.

#### **Cabin Interior:**

Providing engineering proficiency and know-how for various cabin interior components, such as linings, ceilings, bins, cabin monuments, mechanical systems and electrical equipment, including their integration into the fuselage and other aircraft systems.

#### **Cabin Systems:**

Cabin system engineers are specialists for a wide range of systems in the field of cabin communication, in-flight entertainment, cabin supply and safety. Those systems can also be extensively customised.

#### **Cargo Center:**

Responsible for the interior of the freight aircraft and cargo deck of passenger aircraft, from the definition to the design, development and integration. Engineering topics include linings, cargo loading systems, safety systems and in-service support.

#### Validation & Verification:

Defines, develops and deploys test processes, methods and means to ensure state-of-the-art quality standards for test activities on the product "cabin".

#### **Retrofit Engineering:**

Ensures in-service aircraft to meet the evolving requirements of the airlines, provide solutions for in-service problems and repairs.

#### **Policy & Development:**

In addition to research projects, technology management and IT operations, this domain also provides competence in maintainability, processes and methods, as well as engineering quality.

#### **Product Evolution:**

Developing and implementing advanced concepts for the future, this domain brings new and innovative approaches for aircraft cabins in terms of safety, security, comfort, human factors and health policies.

#### **Engineering Project Office:**

Provides appropriate project management across the different domains and ensures punctual delivery of the engineering deliverables to the different Airbus programs.

#### **Business Management & Controlling:**

Center controlling, business and subcontracting management.

#### **College of Experts:**

Technical consultancy and special projects.



### Cabin Interior

- Cabin configuration and arrangements
- Cabin equipment (cable looms, wiring diagrams, ducting and piping)
- Seats, lavatories, galleys, board catering systems
- Lower deck arrangements and Furnishing (lower deck area with galleys, layatories, sleeping places)
- Crew rest compartments
- Cabin evacuation
- Passenger Service Channel (individual light and ventilation)
- Installation cabin furnishing (linings, ceilings, bins etc.)
- DMU management as quality insurance of the engineering

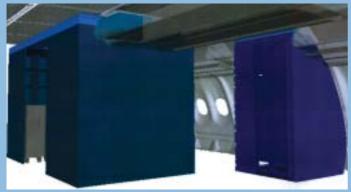
The engineering competence starts from the first product idea with the Future Project Department and continues right up to the aircraft certification.

# Cabin Systems

- Climate control
- Water and waste systems, lavatories
- Cabin power supply
- In-flight entertainment, multimedia data transfer
- In-flight information services
- Galleys, cabin maintenance applications
- Fire protection, oxygen supply
- Doors and slides control systems, lightning
- Electromagnetic compatibility
- Surveillance systems, conveyance systems

The engineering competence includes all cargo and cabin systems, especially systems contribute to passengers safety and comfort.

Examples of cabin interior topics









Examples of cabin systems topics











## Success Stories of Airbus Employees



Henning Meints, 30 years old

I've been at Airbus since 2001. After completing my studies at Hamburg Technical College of Higher Education, I gained my first professional experience working for a South German aircraft manufacturer in the Cabin/Cargo division. Here in Finkenwerder I work in the "Aircraft Security - Cockpit Door" engineering division, a small but very challenging area of responsibility.

Since 11th September 2001, the demands on this component have virtually exploded. Subject areas such as bulletproofness and safety against intruders have been added to the high standards of quality at Airbus.

Each customer has individual requirements, so almost every door is an individual fabrication. The construction and associated processes have to be coordinated with the various international suppliers.

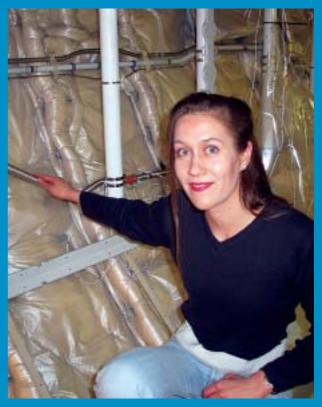
On my journeys I constantly get to know new people and can increase my wealth of experience practically with every new door. Airbus also stimulates me professionally, of course. The company's open environment offers me excellent development opportunities. What's next? Why, the next door, naturally.

I work for the A380 project team in the "Design and Integration of Mechanical Systems" department on the water system installation. The A380 is the second large-capacity aircraft that I've been involved in designing.

When I started at Airbus  $4\frac{1}{2}$  years ago, I did similar work for the A340-500/600. This project meant overcoming very special challenges, not least due to the unusual, up to now unique dimensions. The very high technical standard combined with the international aviation industry environment never ceases to enthral me.

I do a lot of travelling for projects, because as an engineer I am involved right up to the first take-off. I have already assumed initial management assignments, for which I was extremely well-prepared by Airbus.

Julia Gniesmer, 32 years old





Thorsten Leutiger, 29 years old

I joined Airbus straight after completing my studies in mechanical engineering, and have now been working as a development engineer in the "Electrical Installation" department for  $2\frac{1}{2}$  years. It's often an underestimated field. Nowadays the various systems in the Airbus require 200 - 300 km of cable

A clear expansion of our division is to be expected in future as a result of the increasingly more extensive fitting of entertainment systems. Our team takes over the complete development work, from the concept phase right through to the first take-off. Work results can be seen so quickly because each adjustment is immediately put into practice in production.

In order to keep my knowledge "up-to-date", I use the comprehensive supply of further education at Airbus. I am currently completing my MBA with a grant sponsored by Airbus.





#### **Our Recruiting Team:**

Airbus Deutschland GmbH Personalbeschaffung Hamburg Kennwort "Cabin engineering" Kreetslag 10, D-21129 Hamburg Germany

