DESIGN, ENGINEERING AND INNOVATION
The Design, Engineering and Innovation team is the primary provider of engineering services to Etihad Airways and the focal point of technical innovation for Etihad Airways and its equity partners.
Etihad Airways Engineering, a wholly-owned subsidiary of the global Etihad Aviation Group, is the largest commercial aircraft maintenance, repair and overhaul (MRO) services provider in the Middle East.

Formerly known as Abu Dhabi Aircraft Technologies, Etihad Airways Engineering enjoys a rich legacy of MRO experience and expertise, having served more than 100 airlines and aviation operators from around the world over the last 25 years. Being part of an organisation operating one of the world’s fastest growing airlines, we have built a reputation for the reliability of our services, and for ensuring that our customers’ aircraft are delivered on-time.

Based at our state-of-the-art facility at Abu Dhabi International Airport, we offer an extensive maintenance capability for both Airbus and Boeing aircraft through our around-the-clock, line maintenance facilities, including advanced composite repair, cabin refurbishment, component services, and design, engineering and innovation.

Situated at the very heart of one of the world’s most prolific aviation growth markets, Etihad Airways Engineering plays a key role in supporting Abu Dhabi’s vision of being a global aerospace hub, and makes a significant contribution to the economic growth and diversification in the United Arab Emirates.
WHERE WE ADD VALUE:

Part 21 design and engineering services
- Layout of passenger accommodation (LOPA)
- In-flight entertainment (IFE)
- Cabin monuments
- Cabin systems
- Program management
- Kitting and logistics management
- Design certification services

Part 21 repair services
- Cabin structures
- Aerostructures
- Systems
- Avionics
- Engine
- APU

Technical services
- Technical program management
- Vendor contract development and planning
- Part 145 technical services
- Fleet documentation management
- Pre-purchase technical consulting
- AOG desk and AOG consulting
- Maintenance Control Centre (MCC) services

Innovation and simulation
- Innovation realisation with tangible benefits
- Technical development programs with vendor partners
- Cross-pollination of ideas and a cooperative forum across UAE industries
- Future-proofing the UAE’s scientific intellectual infrastructure with research scholarships and fellowships
- Dedicated in-flight test and simulation bench

Etihad Airways Engineering’s Design, Engineering and Innovation team specialises in:
- Part 21 design and engineering services
- Technical services
- Innovation and simulation
### The Benefits of Selecting Etihad Airways Engineering’s Design, Engineering and Innovation Team

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Description</th>
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<tbody>
<tr>
<td>Supported by the equity partners of Etihad Airways (total fleet currently 656 aircraft)</td>
<td>New generation aircraft capability and experience (A380/787) (EIS/repair/mod)</td>
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<td>Unrivalled modification management experience on all major aircraft types</td>
<td>Significant OEM leverage (IP and materials)</td>
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<tr>
<td>Access to cutting edge Tier 1 technology</td>
<td>Building on the world’s best First Class cabin experience</td>
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<td>Young, dynamic engineering team with strong, experienced leadership</td>
<td>EASA and GCCA Part 21D approved for cabin, structures, systems, avionics, engine and APU</td>
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<td>Global reach through the equity partners of Etihad Airways</td>
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<td>Tailored preferential pricing model</td>
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<td>Innovation leader in the Middle East</td>
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<td>Part 145 capability on major aircraft types</td>
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LEADING THE EVOLUTION OF GLOBAL TRAVEL

Etihad Airways’ aim is to be the best airline in the world and our unrivalled Global Innovation Network headquarters in Abu Dhabi is the nucleus of our product evolution.

Only through continual research into human and industrial global behaviours and the subsequent development of advanced products and services will we maintain our competitive advantage and lead the evolution of global travel.
FOUR PILLARS OF INNOVATION

Innovation and Simulation
Realising innovation and delivering tangible benefits through:
- Inception - idea generation compatible with fleet and operation
- Realisation - from mind-mapping to cohesive planning
- Simulation - prototype simulation and test onboard our dedicated test aircraft
- Rollout across the fleet - embodiment and lifecycle management
- Technology transfer - migrating Tier 1 technologies to partner airlines

Vendor Alliance
Development programs with vendor partners:
- Nurturing and co-sponsoring the development of new technologies
- Managing joint test and production programs
- Developing supply chain partnerships
- Developing vendor specifications
- Coordinated POA capability development
- Building long term value for Etihad Airways and its equity partners

Cross Pollination
Cross pollination of ideas and a cooperative forum across the following platforms:
- Air
- Sea
- Space
- Road
- Rail
- Infrastructure
- Education
- Utilities
- Medical
- Pharmaceutical
- Nutrition
- Farming

Education Foundation
Future-proofing the UAE’s scientific intellectual infrastructure and feeding the idea generation machine with:
- Research scholarships
- Technical internships
- Apprenticeships
- International academic alliances
- Academic projects

Maintaining our vision requires evolution in all areas of the airline business. All elements are continually interacting and developing, affecting day-to-day operations, sustainable business performance and ultimately, customer satisfaction.

The pursuit of creative excellence across Etihad Airways Engineering is built on four key research and service pillars:
360 X 360...
THE CONTINUAL SEARCH FOR INSPIRATION IN....

Knowledge, capability, quality and flexibility are the hallmarks of our offering, underpinning our mission to develop the world’s leading sustainable, responsible and profitable aerospace solutions.
OPTIMISING GROUND TIME

MAINTENANCE AND MODIFICATION PACKAGES
We optimise ground time by combining modification packages with scheduled maintenance, additional Service Bulletins (SBs), Airworthiness Directives (ADs) and out of phase checks.

Cabin modification
- Layout of passenger accommodation (LOPA)
- In-flight entertainment (IFE)
- Cabin monuments
- Cabin systems
- Program management
- Kitting and logistics management
- Design certification services

Avionics and electrical
- Airbus ALNA V2 connectivity installation
- Panasonic Global Communication Systems (GCS)
- Electronic flight bag
- E-enabling for new generation aircraft
- Wireless quick access recorder (WQAR)
- Traffic collision avoidance system (TCAS v7.1)

Scheduled and unscheduled maintenance
- Line maintenance
- Light maintenance
- Heavy maintenance
- Out of phase checks
- Complex repairs
- Painting and livery
- Component repair cycle management

Aerostructures packages
- Winglet installation
- Nacelle composite repairs
- Thrust reverser composite repairs
- Aircraft recovery and rebuild
- Skin replacement
- Corrosion repairs
- Fuel tank inerting
- VIP interior installation

We optimise ground time by combining modification packages with scheduled maintenance, additional Service Bulletins (SBs), Airworthiness Directives (ADs) and out of phase checks.
1. Gate 1 - Main entrance
2. Gate 3 - Delivery gate
3. Etihad Airways Training Centre
4. Executive offices
5. Wheels and Brakes Shop
6. Logistics and main stores
7. Technical Services - CAMO
8. Staff and visitor cafeteria
9. Facilities
10. Customer Support and Key Account Management
11. Hangar 6, 3-bay A380 hangar and repair shops
12. Etihad Airways Design, Engineering and Innovation group
13. Advanced Composite Repair Shop
14. Hangar 1, 2-bay widebody hangar
15. Maintenance Control Centre (MCC)
16. Vendor Centre
17. Hangar 2A
18. Hangar 2B
19. Hangar 2C
20. Hangar 3A, single bay aircraft paint hangar
21. Hangar 5, 2-bay aircraft paint hangar
22. Hangar 4, A380 hangar
23. Light maintenance Bay 6
24. Light maintenance Bay 5
25. Hangar 5 widebody light maintenance hangar