OVERVIEW

HAECO is a leading Maintenance, Repair and Overhaul (MRO) group, cabin interior product Original Equipment Manufacturer (OEM) and cabin integration service provider. The Group's comprehensive range of services encompasses four main areas: Airframe Services, Cabin Solutions, Engine Services, and Component Services.

HAECO Group has over 60 years' experience of delivering aircraft engineering and maintenance solutions to airline customers from around the world. The joining of HAECO Americas to the HAECO family in 2014 further strengthened and extended its MRO operations from the Asia-Pacific region to the United States, as well as broadening its capabilities in design engineering, cabin integration, and the manufacturing of aircraft seats, monuments and other interior products. The Group provides airlines with dedicated one-stop services and solutions that can support an aircraft throughout its entire life cycle. The HAECO team demonstrate technical expertise, operational excellence and a customer-centric attitude in everything they do, striving to offer services that are above and beyond our customers' expectations.

Publicly quoted on the Hong Kong stock market since 1965, the HAECO Group is 75% owned by Swire Pacific Limited. The Group includes 19 subsidiaries and affiliates, employing around 17,000 staff in Hong Kong, Mainland China, Singapore and the United States.

60+ Years of Excellence in Aircraft Engineering

1950s

Established in November 1950 by the merger of Swire’s Pacific Air Maintenance & Supply Company (PAMAS) and Jardine Air Maintenance Company (JAMCO). In its first decade of operation, HAECO trebled its workforce and its turnover, introduced overhaul capability on turboprop aircraft and built its first engine test bed.

1960s

By 1965, HAECO was fully equipped to handle the Convair 880M jet aircraft introduced by Cathay Pacific Airways. In the same year, HAECO was floated on the Hong Kong stock market. In 1968, the company began construction of Asia’s largest aircraft maintenance hangar.

1970s

During the 1970s, HAECO broadened its capabilities to encompass a range of wide-body aircraft and jet engine types, including L1011 TriStars and Rolls-Royce RB211 engines.

1980s

HAECO’s high standards and rapid turnaround times on major overhaul contracts saw an increasing amount of business from international airlines, including its first aircraft conversion, upgrading a TriStar L1011-1 series to L1011-130.

1990s

The 1990s saw the formation by HAECO of Taikoo (Klamen) Aircraft Engineering Company Limited (TAECO), Hong Kong Aero Engine Services Limited (HAEEL) – a joint venture with Rolls-Royce, and Taikoo (Shandong) Aircraft Engineering Company Limited (SIAECO) in Jinan. In 1998, HAECO transferred its operational headquarters to a brand new HK$1.4 billion facility at the new Hong Kong International Airport at Chek Lap Kok.
AIRFRAME SERVICES

HAECO Group provides airframe maintenance, cabin reconfiguration, and structural modification through 29 hangars at eight locations in Hong Kong, Mainland China, and the United States, with technical capabilities covering all common wide-body, narrow-body, and regional commercial aircraft types. With a strong in-house engineering operation and long-standing relationships with Airbus, Boeing and other OEMs, a full suite of airframe services are offered through the Group’s hangars, back-shops, paint bays and warehouse facilities around the world.

FREIGHTER CONVERSION

Collaborating with OEMs, Supplemental Type Certificate (STC) holders and engineering companies, HAECO Group is a leading MRO for freighter conversions on major commercial aircraft types, including Boeing 747, 737, 757 and 767. Impeccable schedule integrity and rigorous quality assurance ensure excellent service delivery across the Group’s hangars in Xiamen and Jinan in Mainland China, as well as its facilities in the United States.

LINE SERVICES

HAECO Group provides line services to over 140 airlines at its 31 line services stations in Hong Kong, Singapore, Mainland China and the United States, handling more than 207,000 flights annually. Comprehensive line services include transit checks and certification, defect clearance, cabin management, ramp services and round-the-clock AOG support.

HAECO and TAECO further expanded their heavy maintenance capacities in Hong Kong and Xiamen. The Group established a presence in Singapore and Chengdu, and formed strategic joint ventures, including Taikoo (Xiamen) Landing Gear Services Company Limited (TALSCO), Taikoo Spirit AeroSystems (Jinjiang) Composite Company Limited and Taikoo Engine Services (Xiamen) Company Limited (TEXL) to further strengthen its position as a one-stop-shop aeronautical engineering group.

TAECO opened its sixth hangar in Xiamen. HAECO Group formed Shanghai Taikoo Aircraft Engineering Services Company Limited to provide line maintenance services in Shanghai and Nanjing. HAESEL in Hong Kong opened its Phase V Component Repair Centre of Excellence. HAECO ITM Limited, a joint venture with Cathay Pacific Airways, was formed to provide Inventory Technical Management services in Hong Kong. HAECO Cabin Solutions was established to further enhance the Group’s capabilities in cabin completion and reconfiguration projects for VIP and commercial aircraft. The Group acquired TIMCO Aviation Services Inc. in the USA, creating one of the world’s leading providers of aircraft maintenance, repair and overhaul services and aircraft interior products and services.
CABIN SOLUTIONS

HAECO Group provides turnkey cabin integration solutions that include design engineering, testing, certification, manufacturing, kitting and logistics, and installation services for commercial aircraft and private jets. The Group holds Federal Aviation Administration (FAA), European Aviation Safety Agency (EASA), Japan Civil Aviation Bureau (JCAB) and Hong Kong Civil Aviation Department (HKCAD) STCs for cabin interior modifications. As a holder of FAA Organisation Delegation Authorisation (ODA), HAECO Americas provides additional time-saving benefits to customers through the design and development process.

As an authorised aircraft seat and cabin interior products OEM, the Group’s facilities in the United States offer a complete range of cabin products that are led by the FeatherWeight™ line of seats, galleys and lavatories. The new Vector-Y™ economy seat offers airlines light, long-lasting carbon fibre construction, loyalty-driving passenger experience and fast, easy maintenance. The Group’s deep experience with aircraft Maintenance, Repair and Overhaul (MRO) provides customers with an additional layer of value across all of its interiors products and services.

PRIVATE JET SOLUTIONS

HAECO Group operates the first Airbus-approved and Boeing-licensed private jet cabin completion centre in the Asia-Pacific region, specialising in design engineering, certification, vendor management, manual supplements, as well as post-modification support for executive and private jets.

ENGINE SERVICES

HAECO Group offers world-class repair, overhaul and testing services for Rolls-Royce RB211-524 and the Trent family of engines through Hong Kong Aero Engine Services Limited - HAESL - which boasts nine Gold Accredited Rolls-Royce Aero Repair & Overhaul (AR&O) Global Centres of Excellence; as well as for GE Aviation GE90-110/115B engines through Taikoo Engine Services (Xiamen) Company Limited - TEXL - the sole holder of a GE90 GE Branded Service Agreement in Asia. The Group also operates repair, overhaul and testing facilities for Pratt & Whitney JT8D-series engines in the United States.
COMPONENT SERVICES

HAECO Group operates purpose-built component workshops in Hong Kong and Mainland China offering repair and overhaul services that include hydraulic, mechanical, avionic and pneumatic systems across Boeing and Airbus commercial aircraft fleets. The Group provides repair and overhaul services and rotatable exchange support for landing gear as well as aerostructures, including nacelles, radomes and flight controls. Through co-operation with various OEMs, HAECO Group also provides aircraft component repair and overhaul services covering wheels and brakes, tyres and APU.

INVENTORY TECHNICAL MANAGEMENT

HAECO Group provides Inventory Technical Management (ITM) solutions ranging from fully-fledged Power-By-The-Hour (PBH) inventory management, to one-off loans, exchanges and AOG support. The Group manages component repair/overhaul, component engineering, and logistics covering all commercial aircraft types on a nose-to-tail basis, including Line Replaceable Units (LRUs) for airframe, engines, APUs, landing gear and cargo loading systems.

FLEET TECHNICAL MANAGEMENT


PARTS MANUFACTURING

HAECO Group offers a range of design, fabrication and testing services for airframe and cabin parts, supported by well-established OEM relationships. As a Part 21 certified manufacturer, the Group has the capability to manufacture machine parts, sheet metal parts and electrical wire bundles, as well as floor beam assemblies for Boeing 747-400 BCF projects.

TECHNICAL TRAINING

HAECO Group provides training and examination services in Hong Kong and in Xiamen and Jinan in Mainland China to support the aviation industry’s demand for aircraft engineering professionals. The Group collaborates with the world’s major aircraft manufacturers to provide training on a wide range of aircraft types. With the acquisition of the simulation-based Boeing 787 Dreamliner training suite, HAECO Group is the first MRO and Aircraft Maintenance Training Organisation in Mainland China fully licensed to provide advanced Boeing 787 training. The Group has also entered into a long-term agreement with Airbus to provide maintenance and engineering training in Mainland China and Southeast Asia. The Group conducts over 1,800 training courses and trains 23,500 students annually.
## GROUP PORTFOLIO

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Associated Companies:
- Goodrich Asia-Pacific
- Taikoo (Shandong) Aircraft Engineering
- Sichuan Aircraft Maintenance Engineering
- Goodrich TAEACO
- Honeywell TAEACO
- Dunlop Taikoo

www.haeco.com
### GROUP CAPABILITIES

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<th>FAA Line Services</th>
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<th>CAAC* Line Services</th>
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* Maintenance of aircraft registered in PRC, Macau SAR and Hong Kong SAR respectively is provisioned under the Joint Maintenance Management (JMM) cooperation arrangement.

Capabilities of the HAECO Group include but not limited to major aircraft types as listed above.

### Hong Kong

- U.S.
- Xiamen
- Jinan

The Group also has approvals for aircraft cabin design and products as well as for airframe, engine and component maintenance from regulatory authorities across Asia, Africa, the Americas, Australia, the Caribbean and the Pacific, including: Australia CASA; Azerbaijan SCAA; Bangladesh CAAB; Fiji Islands CAAF; India DGCA; Indonesia DGCA; Israel CAAI; Japan JCAB; Jordan CARC; Kenya CAA; Korea MOLIT; Macau SAR JMM; Malaysia DCA; Mauritius DCA; Nepal CAA; Pakistan CAA; Papua New Guinea CAA; Philippines CAA; Qatar CAA; Republic of China CCAA; Singapore CAAS; South Africa SACAA; Sri Lanka CAA; Thailand DCA; United Arab Emirates GCAA; and Vietnam CAAV.
Cabin Reconfiguration / Modification

**Winglet Modification**
- Boeing 737, 757, 767

**Freighter Conversion**
- Boeing 737-300/400 using PEMCO STC
- Boeing 747-200/300 using Boeing & FSI STC
- Boeing 747-400 using Boeing 5Bs
- Boeing 757-200 using Precision STC
- Boeing 767 using customer-held STC

**Cabin Seats & Products**
- Passenger seats (Boeing and Airbus approved)
- Lavatories, galleys and other monuments
- Fully certified, on-site testing laboratory (static, cycle, flammability, prototype workshop, and complete test sled)
- FAA repair station
- FAA production approval holder

**Design & Engineering**

Approval:
- FAA STC and PMA ODA
- HKAR-21 DOA
- SAR-21 DOA
- CAAC DMDOR

QMS Accreditation:
- ISO 9001-2008
- AS9100C

**Private Jet Solutions**
- Airbus approved and Boeing licensed VIP cabin completion centre for executive and private jets

**Engine Services**
- Rolls-Royce RB211-524
- Rolls-Royce Trent 500, 700, 800
- GE Aviation GE90-110B, -115B
- Pratt & Whitney JTBD

**Component Repair / Overhaul**
- Avionics: Instrument, Electrical System, Communication System, IFE,
- Mechanical: Gear Box, Heat Transfer Equipment, Cargo Handling System, Actuators
- Fuel: Fuel Pump, Fuel Flow Regulator, Fuel Metering Unit, Fuel Microbiology Test
- Hydraulics: Hydraulic Pump, Hydraulic Actuator, Power Control Package, Servo Valve
- Pneumatic: Engine Starter, Air Motor, Pneumatic Valve, Ram Actuator
- Safety: Slide Raft, Life Raft, Fire Extinguisher
- Lavatory equipment: Vacuum Toilet, Tank, Faucet

**Composite Repair / Overhaul**
- Airbus A330 Trent 700 TR & NC
- Airbus A320 V2500 A5 TR, FC & NC
- Airbus A319, A320, A321 V2500 A5 CNA
- Airbus A318, A319, A320, A321 CFM56-5B TR, FC & NC
- Airbus A340 CFM56-5C TR
- Boeing 737NG CFM56-7 TR, FC & NC
- Boeing 777 Trent 800 TR, FC & NC
- Boeing 777 GE90-90/94/110/115 TR, FC & NC
- Boeing 777 PW4000 TR, FC & NC
- Boeing 767, 747 CF6-80C2, TR
- Boeing 767, 747 PW4000, TR

**Wheels & Brakes Repair / Overhaul**
- Boeing 737, 747, 757, 767, 777, 787
- Airbus A300, A310, A320, A321, A330, A340
- Embraer ERJ135, 145
- Bombardier CRJ100, CRJ200, CRJ700

**Tyre Retreading**
- Boeing 737C/NG, 747, 757, 767
- Bombardier CRJ200
- Dash-8 300/400
- Dornier 328
- Embraer ERJ145
- Fokker 70/100

**Aircraft Parts Production & Manufacturing**

Approval:
- HKAR-21 POA
- CAAC PMA
- FAA PMA
- FAA TSO Authorisation

QMS and Process Accreditations:
- Boeing BQMS
- Boeing approved special process D1-4426
- ISO 9001:2008
- AS9100C / EN 9100:2009
- Nadcap (chemical processing, heat treating, NDT)

Calibration & Testing Accreditation:
- CNAS ISO 17025

**Maintenance Training & Examination**

Approval:
- HKAR-147
- CCAAR-147
- EASA Part-147
- SAR-147
- HKCAD Aircraft Maintenance Basic License Examination Site
- CAAC Aircraft Maintenance Basic License Examination Site
- EASA Aircraft Maintenance Basic License Examination Site

**Aircraft Painting**

**Non Destructive Testing (NDT)**

**Hydrostatic Test Facility**

Approval:
- U.S.A. - DOT

**Calibration Laboratory (CALMET)**

- HOKLAS accredited laboratory; Mutual Recognition Arrangement through APLAC on traceability of standards
- CNAS accredited laboratory