

物流及自動化 Logistics & Automation 工程服務 Engineering Services 基建工程 Infrastructure Engineering 機場設備工程 環境工程 Airport Environmental Engineering Engineering

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OVERVIEW 集團概覽

Associated Engineers, Ltd. (AEL) was established in 1961 as a specialist electrical and mechanical equipment repair and maintenance services providers for airports. AEL has further expanded its business scopes over the years. With nearly six decades' experience in turn-key engineering projects, AEL has been transformed from an engineering workshop to a well-known Multidisciplinary Solutions Provider specializing in Airport Engineering, Environmental Engineering, Infrastructure Engineering, Logistics & Automation and Engineering Services. To date, AEL provides one-stop solution from feasibility study, design, manufacturing, project management, commissioning and after-sales maintenance. Our work force comprises experienced engineers, technicians and engineering supporting units. In over sixty years, AEL has consistently been entrusted by its loyal clients to undertake substantial projects. Leveraging on its visionary management, customized innovation and its commitment to raising the standard of the industry, AEL has pioneered many "industry firsts", such as the design and supply of the world's first hydraulically driven Mobile Tail Dock Enclosure at the Hong Kong International Airport, construct the first Marine Cargo Terminal at Chek Lap Kok in a record-breaking 120 days, supply of Hong Kong's first vertical conveyor system to St. Paul's Hospital and design, build and operate the first yard waste processing centre in Hong Kong. In the future, AEL will remain committed to building and maintaining long-term relationships with our clients, suppliers and partners.

VISION

願景

To be a leading engineering solutions provider by integrating global technologies

以整合國際頂尖技術成為領先的工程集團

MISSION 使命

- To offer excellent services and multidisciplinary engineering solutions
- To create values for stakeholders, employees and the community
- To provide a better living environment
- 為客戶提供卓越服務及綜合工程解決方案
- 為各持份者、員工及社會創優價值
- 為客戶和社會共建更美好的將來

VALUES 企業價值

Excellence 精益求精

Novelty 靈活創新

Global perspective 國際視野

Integrity 誠信正直

Nurturing 培育人才

Expertise 精湛技術

CORPORATE MILESTONE

公司里程碑

1961

Associated Engineers, Limited (AEL) was established, specializing in electrical and mechanical equipment maintenance and repair services for airport Ground Support Equipment (GSE) at Kai Tak Airport, Hong Kong.

聯誼工程有限公司創立,主要從事香港啟 德機場地面地勤設備維修及保養服務。



1976

Installed the first multi-level refuse transfer system in Hong Kong.

為香港多層式大廈安裝首套垃圾輸送系統。



1985-1989

Supplied and installed the Cargo Handling System for Terminal 2 and the expansion of Terminal 1 of HKCTL.

為香港空運貨站有限公司一號貨站擴建 工程及二號貨站供應和安裝貨物處理系 統設備。



1994

Introduced Automated Refuse Collection System for public estates under the Hong Kong Housing Authority.

為香港房屋委員會其下新屋邨安裝 自動垃圾收集系統。



998

Designed, supplied and installed air cargo handling system for Super Terminal 1 at Hong Kong International Airport, Lantau Island.

為大嶼山香港國際機場之超級一號貨站 設計、供應及安裝全自動化空運貨物處 理系統。



1998

Constructed the first fully sealed large-scale refuse transfer station at Xiamen, China.

於廈門建設全國第一座大型全密閉垃圾 壓縮轉運站。



2009

Skyway system for Shanghai Pratt & Witney aero-engine maintenance and overhauling workshop.

上海普惠飛機引擎維修中心運輸系統。



2004

Designed and supplied the first tower type automated car parking system in Hong Kong.

設計及安裝全港第一個塔式自動泊車系統。



2003

Constructed the biggest refuse transfer station at Changsha, China (Final capacity: 8000t/day) 於中國長沙與建全國最大規模的垃圾轉運站,最終處理量達到每天



2000

Designed and built air cargo handling system for the Beijing Capital International Airport.

為北京首都國際機場供應和安裝全自動空 運貨物處理系統。



999

Designed and built Mobile Aircraft Tail Dock Enclosure, which is the world's first hydraulic-driven self-propelled system, at Hong Kong International Airport facilitating tail maintenance for wide-body aircrafts including B747, B777, A330, etc.

設計和興建全球首個以液壓系統推動的 流動機尾維修塢於香港國際機場,以便 為大型機種包括B747、B777、A330等 進行維修。



1998

Designed and supplied the multi-purpose Aircraft Maintenance Docking at the hangar of the Hong Kong International Airport

於香港國際機場維修庫設計和興建多功 能飛機維修平台。



2010

Designed, supplied and installed air cargo handling system for Cathy Pacific Cargo Terminal in Hong Kong.

為國泰航空香港貨運站設計、供應及安



2015

Supplied vertical conveyor system to St. Paul's Hospital, which was the first of its kind in Hong Kong.

為聖保祿醫院提供全港首個垂直輸送 系統。



2017

Supplied and installed all supporting steel structures, maintenance platforms, cat ladders, and exterior aluminum for Hong Kong's largest LED screen on the outer facade of SOGO Department Store.

為崇光百貨外牆,全港面績最大的LED 戶外播放屏幕興建工程項目供應及安裝所 有支撐屏幕的附屬鋼結構,維修平台,貓 梯以及外圍裝飾鋁板。



2020

Designed and supplied the automated refuse collection system at Innovation Vally, Jinan, China.

為中國濟南創新谷設計及安裝自動垃圾 收集系統。



2020

Design, build and operate the first yard waste processing centre (Y-Park).

設計、建造及營運全港首個園林廢木回 收中心。



202

Designed and installed the automated refuse collection system at Macau Health Services Complex.

為澳門離島醫院設計及安裝自動垃圾及 被服收集系統。



AIRPORT ENGINEERING 機場設備工程

AEL was founded on providing repair and maintenance services to airport ground and support equipment, and has later diversified its business scope and offer customized solutions that suit client's needs. We provides wide range of services including manufacture, assemble, installation, testing, warranty and maintenance.

AEL offers solutions for aircraft maintenance facilities which include the design and supply of aircraft maintenance docking system and telescopic platform. Over the years, AEL completed many significant projects such as the design of aircraft maintenance docking system and aircraft engine handling system for Super Terminal 1 at the Hong Kong International Airport, Airbus and Boeing, as well as successfully built the world's first hydraulic-driven self-propelled aircraft tail dock enclosure system in 1999. Our clients include Hong Kong Aircraft Engineering Co Ltd, Hong Kong Aero Engine Service Limited, Taikoo (Xiamen) Aircraft Engineering Co Ltd, Xinjiang Airline, Vietnam Airline, etc. AEL also offers various facilities at airport, like, baggage handling system, luggage trolley conveying system and passenger access bridge, etc.

1. Aircraft Engine Handling System 飛機引擎輸送系統

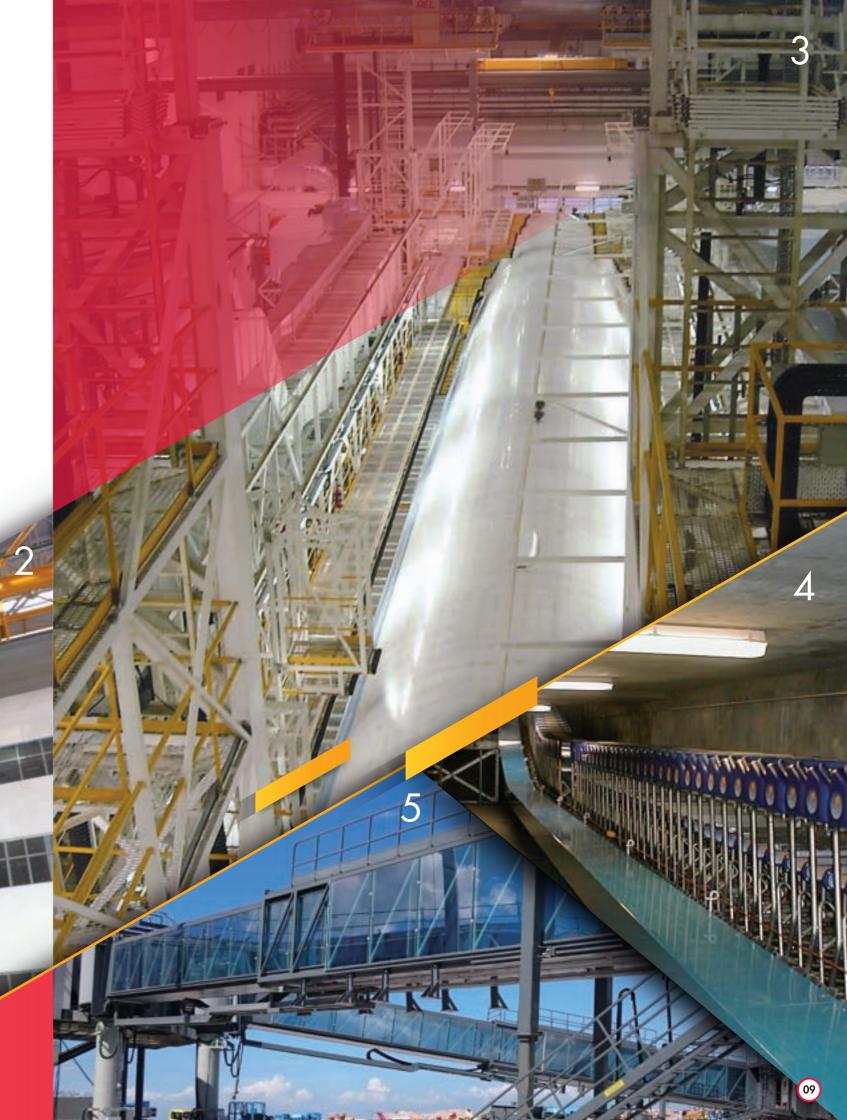
 Aircraft Maintenance Docking System 飛機維修塢系統
 Luggage Trolley Conveying System

行李車輸送系統

5. Passenger Access Bridge at Midfield Concourse 中場客運廊登機橋

聯誼起源於機場地勤設備的維修和保養,其後業務已擴展至種類廣泛的產品和服務,按照客戶的要求,提供至從設計、製造、組裝、裝置、測試、運轉、調校以至維修和保養的整套服務。

聯誼過往於飛機保養維修設備的工作包括供應飛機維修 場系統和設計適合不同飛機類型的懸掛式維修平台。聯 誼多年來參與了不少標誌性的機場設備項目,例如設計 飛機維修對接系統及飛機引擎輸送系統予香港超級一號 貨站、空中巴士和波音公司、以及於1999年成功興建全 球首個液壓自行式流動機尾維修塢。服務客戶有香港飛 機工程有限公司、香港航空發動機維修服務有限公司、 太古(廈門)飛機工程有限公司、新疆航空、越南航空 等。聯誼亦為機場提供不同設備,例如行李處理系統、 行李車輸送系統及乘客登機橋等。



ENVIRONMENTAL ENGINEERING 環境工程

AEL strives to provide a greener future for customers and communities. Since 1970s, we have been expanding our business in environmental engineering and involving in research and development in solid waste management, including Automated Refuse Collection Systems, mobile refuse compactors and food waste composting systems. In 1976, AEL installed Hong Kong's first refuse handling system for housing estates. AEL has since been awarded major contracts from the Hong Kong Housing Authority to design and install Automated Refuse Collection Systems for new housing estates in 1999. We have secured and completed serval ARCS projects in the China market.

AEL provides one-stop environmental engineering services which cover the entire project lifecycle, from preliminary studies to detailed design, procurement, construction and installation as well as testing and commissioning, operation and maintenance. With extensive E&M capabilities and broad experiences on various advanced environmental technologies, AEL offers a full spectrum of comprehensive, effective and reliable solutions on a multitude of environmental engineering fields, including food and solid waste handling and treatment systems, refuse compaction systems, Automated Refuse Collection Systems, deodorization systems and central monitoring control systems. In recent years, we further expended our business to provide our turn-key solution in swimming pool, municipal wastewater and water treatment plant.

聯誼的使命是為客戶和社會提供一個綠色的美好將來。 早於70年代,聯誼已積極拓展環境衛生工程業務以及進行多項固體廢物的研究,產品橫誇多個範疇,如住宅區垃圾槽、中央垃圾收集系統及垃圾壓縮機等,累積經驗逾數十載。於1976年安裝香港首個多層式垃圾輸送系統;於1999年獲得香港房屋委員會合約,為新屋邨安裝自動垃圾收集系統。

聯誼致力提供一站式環境工程服務,涵蓋整個項目週期,從初步研究到詳細設計、採購,設施建設和安裝,以及測試和調試、運營與維護。憑藉豐富的機電工程的專業知識和各種先進環境技術的廣泛經驗,聯誼能在眾多環境工程的領域提供全面,有效和可靠的解決方案,包括:餐廚/廚餘垃圾和固體垃圾管理和處理系統,垃圾壓縮系統,中央自動垃圾收集系統,除臭系統和中央監控系統。聯誼近年亦拓展環境工程的業務,提供泳池、濾水廠及污水處理廠相關的整套服務。

- 1. Equipment installation at Shatin Sewage Treatment 沙田污水處理廠設備安裝
- 2. Automated Refuse Collection System 自動垃圾收集系統
- 4. Yard Waste Processing Centre (Y-Park) 園林廢木回收中心
- Swimming Pool Filtration System 泳池過濾系統



AEL has provided our unique solution of steel structures and specialized E&M installation in the infrastructure engineering sector for nearly three decades. AEL's past projects have fully displayed our technical expertise in design, fabrication and installation of different types of steel structures. Our project reference in this field include LED screen installation, noise barrier, warehouses, footbridges, metal roof cladding, metal ceiling system, building maintenance unit as well as skylight and glazing wall system.

AEL is also a registered Building Contractor which provide solutions on the construction of the entire building complex from foundation work, electrical work, fire service installations, aesthetic internal fittings to addition and alteration works. Besides, our space frame system is also at the leading-edge in the industry. More than 70% of the spaceframes in Hong Kong is supplied and installed by AEL and our project references include indoor games hall, shopping commercial complex, universities, residential buildings, etc.

發光二極管屏幕

過去的三十年間,聯誼於基建工程領域上提供領先和專業的鋼結構及機電安裝方案。聯誼在以往項目上充分展現其設計、製造及安裝不同種類鋼結構的能力。有關專案種類包括發光二極管屏幕安裝項目、隔音屏障、倉庫、行人天橋、金屬面板、天花系統、建築物維修平台,以及天窗系統和玻璃幕牆系統。

聯誼亦是註冊的建築承辦商,包辦整個樓宇建造的工作,例如地基建造、電力安裝、防火設備安裝,加建及改建工程。於太空架系統領域方面,聯誼也是行內的佼佼者。香港超過七成的太空架系統由聯誼供應及安裝,應用實例主要有室內運動場、公共車站頂蓋商場、大學、和住宅建築等。



LOGISTICS AND AUTOMATION 物流及自動化

AEL offers a comprehensive selection of logistics and automation system which tailor to the needs of the customer and also the operational requirement.

Our key services in logistics and automation system include cargo handling equipment, automatic storage and transportation system, pneumatic tube transportation system, vertical conveyor system, crane and hoist lifting solution, vehicle turntable platform, automatic car park system, etc. AEL has started to supply cargo handling system since 1985 and has extensive experience in this field. We participated in more than 24 air cargo terminal facilities around the world, produced more than 2,500 roller decks, 4,500 sqm ball deck, 1,000 right angle decks, 500 works stations and 30 stacker cranes. Besides, the vertical conveyor system supplied to St. Paul's Hospital is the first of its kind being put inn service in Hong Kong health care industry for achieving a higher operational efficiency.

1. Automatic Multi-level Bicycle Parking 多層自動單車泊車系統

3. Pneumatic Tube Transportation System 氣動管道輸送系統

4. Automatic Sorting System

5. Automated Car Park System 全自動泊車系統

自動被服收集系統

6. Automated Linen Collection System

自動分件機

2. Automatic Storage and Transportation System 自動倉庫及運輸系統



ENGINEERING SERVICES 工程服務

AEL's Engineering Services Unit consist of Registered Lift Engineers, specialist engineers and experienced technicians, the team provide a comprehensive range of engineering services solutions, from mechanical equipment installation, routine inspection to emergency repair services. We also undertakes warranty, repairing and maintenance work for stairlifts, lift and vertical lifting platform.

AEL has extensive experiences in engineering services projects and provided a wide scope of services, which cover from E&M equipment and lift maintenance, warranty and after-sales services, structure repair, refurbishment work, and 24-hour emergency repair services. Our comprehensive approach makes us a front-runner in engineering industry. The key projects in engineering services we completed in the past include refurbishment for Grab Unloaders of CLP Power Hong Kong Limited, ride installation at amusement park, MTR deport project and deck replacement project of DHL Central Asia Hub.

聯誼的工程服務部由註冊電梯工程師、專業工程師和富經驗技術員組成,負責提供機械安裝、例行保養及緊急維修等工作。該部門也為各類型的傷殘人仕升降台、垂直升降機及垂直工作升降台提供廣泛的合約保用及維修保養服務。

聯誼多年帶參與及承包多個不同類型工程服務之項目,由機電及升降機設備、保養年檢、結構維修、翻新工程至提供24小時緊急維修服務,服務涵蓋範圍廣闊,於工程業界佔有領先地位。我們於工程服務方面的重點項目包括中電青山發電廠卸煤機維修工程、大型遊樂場設備安裝、港鐵車廠工程及DHL物流中心更換地台工程等。





Founded in 1992, Associated Engineers Zhuhai S.E.Z. Limited (ZAEL) is the subsidiary of AEL. Until now, ZAEL has built over 1,000 refuse compaction facilities in China, including Xiamen, Beijing, Qingdao, Changsha, Shanghai, Guilin, Shenzhen, Kunming, Chengdu, etc. ZAEL successfully won the bid of mobile refuse compactor for the 2008 Beijing Olympic Games, which brought the company to a new stage. Besides, ZAEL was recognized by the Chinese Government and invited to take part in the establishment of Industry Code (CJJ47-2006) for Transfer Station of Municipal Solid Waste.

ZAEL has been actively involved in the design and installation of material handling system of Air Cargo Terminal and aircraft maintenance docking / teleplatform system at the airport in Mainland China. In recent years, ZAEL further expanded their business in the environmental field in Mainland China by providing design and build a solution for Automated Refuse Collection System and foodwaste treatment system for airport, hospital and property development.

珠海經濟特區聯誼機電工程有限公司(珠海聯誼)成立於 1992年,為聯誼全資直屬子公司。經過不斷研發壓縮處理技術,珠海聯誼先後在內地城市設計及建造近一千個垃圾壓縮設備,包括廈門、北京、青島、長沙、上海、桂林、深圳、昆明、成都等地,更成功於 2008 年取下北京奧運會項目,於奧運會期間提供垃圾處理服務,創下一個里程碑。珠海聯誼得到中國政府認可,受邀參加行業標準生活垃圾轉運站壓縮機及生活垃圾收集站壓縮機的編制。

珠海聯誼一直積極參與中國大陸機場的航空貨運站物 料搬運系統和飛機維修對接/遠程平台系統的設計和安 裝。近年來,珠海聯誼通過提供針對機場,醫院和物 業的自動垃圾收集系統和食物垃圾處理系統的設計 和建造解決方案,進一步擴展了其在中國大 陸環境領域的業務發展。



KEY REFERENCES 主要工程項目

Europe

Asia-Pacific

6

China





1. Dubai Mega Terminal

The biggest cargo terminal in the Middle East and one of the top terminals in the world which fully automated air-cargo handling facilities.



2. Australia King Street Wharf



3. Hong Kong

5. Guangzhou

Vertical Conveyor System
AEL designed, supplied and installed the first vertical conveyor system for hospital.



3. Hong Kong
Structural Steelwork
AEL has long track record in the design and construction of structural steelwork.



Supplied and installed the supporting steel structures, maintenance platforms, cat ladders, and exterior aluminum for Hong Kong's largest LED screen on the outer facade of SOGO Department Store.

為崇光百貨外牆,全港面績最大的LED戶外播放屏幕興 建工程項目供應及安裝所有支撐屏幕的附屬鋼結構,維 修平台,爬梯以及外圍裝飾鋁板。





Hactl Super Terminal 1
The largest single air-cargo terminal in the world handling 3.5 million tons of cargo



4. Macau

Daya Bay Nuclear Power Station AEL liaised with Reel of France to supply a special crope to the first commercial Automatic refuse and linen collection system at Macau Health Services Complex.



6. Urumqi

Maintenance platform installed at aircraft hanger in China.



7. Chengdu Tail Docking System



CORPORATE SOCIAL RESPONSIBILITY

企業社會責任

Community Caring

As a good corporate citizen, we deliver reliable and professional engineering services, and we are devoted to giving back to the community. AEL has been awarded the "10 Years Plus Caring Company Logo" in recognition of our commitment in Caring for the Community, Caring for the Employees and Caring for the Environment. We actively encourage our employees to participate in voluntary services and support the needy. Over the years, AEL volunteer team has taken part in various community activities, such as charity run, costal cleanup, winter clothes distribution to vulnerable groups, cooperating with Tung Wah Group of Hospitals on other CSR projects etc..



2022 HAPPY COMPANY 2022 開心工作間

社區關懷

作為一個良好企業公民,我們提供可靠安全而專業的工 程服務,並致力為社會發展作出貢獻。聯誼獲頒「10年 +商界展關懷」標誌,以表揚我們對關懷社群、關心員 工及愛護環境方面作出貢獻。我們鼓勵員工踴躍參與義 工服務與社區活動,幫助有需要社群。過去數年,聯誼 義工隊參與了不同的義工活動,包括慈善跑、海岸清 潔、社區派發禦寒各物及物資,及協辦東華三院義工項

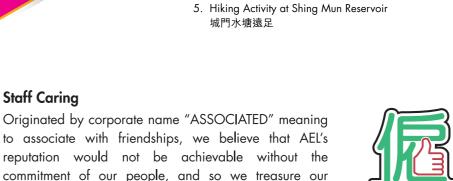


Support The Racial Diversity & Inclusion Charter for **Employers** 支持《種族多元共融僱主約



13 Years Plus Caring 連續13年獲「商界展關懷





3. Staycation at WM Hotel

WM 酒店度假活動 4. Wine Tasting Night 品酒之夜

to associate with friendships, we believe that AEL's reputation would not be achievable without the commitment of our people, and so we treasure our employees by attending to their physical and mental health, creating a safe and harmonious working environment and advocating a work life balance. Additionally, we organize various recreational and sports activities for employees and their family members to promote healthy living and happiness at work.

員工關懷

源自於企業名稱「聯誼」,意旨聯繫友誼,我們相信擁有 一個專心致志和可靠的團隊是聯誼成功的其中關鍵,我 們致力關顧員工的身心健康、營造安全及和諧的工作環 境,亦提倡家庭工作平衡。此外,我們鼓勵員工及其 家人參與各項康樂和體育活動,提倡健康生活和愉快 工作。







Signatory of the Good Employer Charter 《好僱主約章》的簽署機構

CORPORATE SUSTAINABILITY

企業可持續發展

AEL implements an Integrated Management System including Quality Management System, Environmental Management System, Occupational Safety and Health System and Energy Management System. Also, AEL is committed to providing high quality products and service, perpetuating an injury free operational and working environmental, protecting the environment and enacting energy conservation.

聯誼實行包括品質管理系統、環境管理系統、職業安全 健康管理系統及能源管理系統在內的綜合管理系統,並 致力提供高品質產品和服務及安全的營運和工作環境, 及致力保護環境和節約用電。



ISO 9001:2015



ISO 45001:2018



ISO 14001:2015



ISO 50001:2018



The CLP Smart Energy Award - Merit Certification 「中電創新節能企業大獎」優異證書



Hong Kong Green Organization 香港綠色機構



The HSBC Living Business ESG Award 2021 - Certificate of Merit 「滙豐營商新動力」環境、社會及管治獎 - 優異獎



BOCHK Corporate Environmental Leadership Awards: 2021 中銀香港企業環保領先大獎2021



Energywi\$e Certificate - Excellent Level 節能證書「卓越級別」



Wastewi\$e Certificate - Excellent Level 節能證書「卓越級別」

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AWARDS & RECOGNITION 獎項及榮譽

Lifting Safety Management System - Merit Award 吊運安全管理系統獎 - 優異獎



Minor Renovation and Maintenance Works in the Construction Industry Safety Award Scheme 2021/2022 Merit Award 建造業安全獎勵計劃

2021/2022 - 小型裝修及維修工



28th Considerate Contractors Site Award

第28屆公德地盤嘉許計

Merit Award

劃 - 優異獎

THE HONG KONG INSTITUTION OF ENGINEE

香滩工程師學會

ufacturing, Industrial & Systems Di

Conference ala Dinner

GOLD Innovation Award 「2022年香港工程師學會 - 製造、 工業及系統工業獎」- 創新金獎

The HKIE MIS Industry Award 2022

Patent of Synchronous adjusting system for

INNOVATION & PATENTS 創新及專利

AEL has a strong company culture of innovation and continuously invested in research and development over the years. We secured many patents in the field of aircraft maintenance facility and waste treatment plant over last two decades. We strongly believe in seeking progressively development on firm foundations and building our future on creativity.

聯誼工程具有強大的創新企業文化,多年來不斷投資於研發。在過去 的二十多年中,我們獲得了飛機維修設施和廢物處理領域的許多專 利。我們堅信在穩固的基礎上尋求逐步發展,並在創造力上建立我們



for Telescopic Platform: 2022 面向懸掛升降平台的移動式配重系統



維修平台的同步調整系統專利證書2015



Patent on Food-waste vacuum collection b 廚餘垃圾真空收集處理系統專利證書2016



傾斜垃圾壓縮機專利證書2015



Patent of Linen Separator for ARCS: 2023 一種污衣被服分離機專利證書2023



廚餘垃圾蒸氣分離器專利證書2016



at of Rolling compaction head: 2015

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