# IAQ QUALITY SUSTAINABILITY AWARD 2022 - ONE-PAGE SUMMARY

The One-Page Summary should be filled in and submitted as Appendix 1 to your Application. It will also be published on the IAQ Quality Sustainability Award Homepage; http://iaqaward.com. The length of this document must not exceed 1 page.

## Project and contact details

**The name of the quality sustainability project (max. 100 characters)**
Intelligent Passenger Security Inspection System

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**Organisation(s), country, where the project-members are working, including Web-page links**

**Organisations**：Beijing Capital International Airport Aviation Security Ltd.（CAAS）& Beijing Airport Security Technology Co., Ltd. (BAST)

**Country**：China

**Where the project-members are working**：Beijing

## Project description

This project adopts Total Quality Management (TQM) and root cause analysis to deeply analyze the difficulties and pain points in the business process with the user's needs as the core. Adhering to the concept of "safety, efficiency, low consumption and friendliness" in the design, a special investigation was carried out on the current problems of low identification rate of passenger documents, low accuracy rate of passenger identification, long time to query passenger information in case of emergency, security check channel operation with low efficiency, high labor intensity of employees, high labor cost, etc., as well as the shortcomings of potential safety hazards of suspicious baggage mixed with safe baggage in baggage detected by equipment. DMAIC model is fully used, and integrated innovation research method is adopted. At the same time of improving safety margin and reducing physical labor of security personnel, the passenger information and baggage security information will be one-to-one correspondence, effectively improving the quality of travel inspection service and emergency handling capacity. It has eight functional features, including passenger self-service verification, prevention of missing inspection and wrong judgment, convenient identity recognition, automatic binding of passenger and bags' information, baggage identification and sorting, automatic pallet return, automatic information integration and rapid information query. It has leading technical advantages in the country and even the world. It applied for 13 patents and 11 software copyrights. It strongly supports the sustainable development goals of industry, innovation and infrastructure.

## Project leverage potential

Intelligent passenger security inspection system has attracted extensive attention at home and abroad. Frankfurt Airport in Germany, TSA in the United States, Shanghai Hongqiao Airport and Guangzhou Baiyun Airport all investigated the intelligent passenger security inspection system, and fully affirmed the substantial achievements of the system. The hardware of the system is designed in a modular structure, which has strong adaptability to the site and intensive use of resources. Compared with the existing security inspection system, it has higher information integration, faster query of information, more equipment reliability, and system operation more efficiency, good feeling of passengers passing the inspection, and reduced labor intensity of employees, which improves the quality of security inspection, and is suitable for extensive application in Chinese airports. At present, the system has completed 73 sets in Beijing Daxing International Airport, 10 sets in Shijiazhuang Zhengding International Airport, 1 set in Dalian Zhoushuizi Airport, 14 sets in Jinan Airport, 3 sets in Ezhou Huahu Airport, 12 sets of products in Nanchang Airport and put them into use, all of which have achieved good results, To provide solid support for the construction and innovation of the "four type airport".

## Picture/Image describing the project



Note. More information about the award and how to apply can be found on the IAQ Quality Award homepage