

# Eliminating threat and improving efficiency with liquid security inspection

Dr Chen Zhiqiang & Mr Liang Yinpen, NUCTECH Co. Ltd., P.R. China

No matter whether they are in a seaport or airport, travellers need no longer worry about bringing liquids on-board their chosen form of transport. This is because a high-tech liquid security inspection system is now available which is able to detect and identify different categories of liquids precisely and efficiently. It is already in use at several major airports.

In August 2006, a plot to blow up an aircraft using liquid explosives departing from London Heathrow Airport to the US was thwarted by the authorities. No one was harmed, but it led to tightened security in UK and US airports, meaning a longer check-in process and more strict rules on luggage control, if left unabated, the same could happen in seaports. All airports and seaports worldwide are facing the same problem: how to avoid the threat caused by possible liquid explosives. The traditional security inspection systems deployed at ports cannot detect and identify if the liquids in containers taken by passengers are safe or not. Nonetheless, a lot of explosives can be easily made by mixing some seemingly safe liquids together. Terrorists could take advantage of this weakness and cause some very serious disasters.

Many air and sea travellers are facing the strictest security measures in years: all sorts of liquid have not been permitted as carry-on items. However, some necessities like baby foods and prescribed medicines cannot be prohibited by any airline, cruise or ferry companies. Recently, strict new security



The THSCAN LS8016 Liquid Security Inspection System.



Using x-ray technology, the LS8016 is capable of identifying if a liquid is safe or contains explosive components automatically and precisely in five to six seconds. The system can alert authorities when detecting corrosive and flammable liquids.

measures on hand baggage have come into effect across European airports, curbing the amount of liquids passengers can bring with them on board planes. The new rules will limit passengers to carrying no more than 100 millilitres (a fifth of a pint) of liquid per container. All such containers should fit into a clear re-sealable plastic bag to be presented at security checkpoints. This will cause more trouble and economic losses to both passengers and airline companies.

## Detection solutions

A new generation of security inspection system, the THSCAN LS8016 Liquid Security Inspection System (as shown on the front cover) designed and manufactured by NUCTECH Company Ltd. can efficiently save people and authorities from these troubles. Using x-ray technology, the LS8016 is capable of identifying if a liquid is safe or contains explosive

components automatically and precisely in five to six seconds. The system can alert authorities when detecting corrosive and flammable liquids.

As the LS8016 is different from chemical methods, non-intrusive inspections of liquids can be carried out without opening people's containers. The LS8016 is the only system in the world that can inspect liquids packed in all kinds of containers, such as plastic, tinfoil, glass, metal and crockery. The transparency of the container is also not a problem. The system can be used at any and all checkpoints, bringing safety and convenience to the world on land, sea and air.

For example, the system is being used by Chengdu and Hongqiao Airport in China. There, the LS8016 Liquid Security Inspection System is providing passengers, airline companies and authorities with a convenient and efficient way to detect liquids, which may revolutionise traditional security measures.

### ABOUT THE AUTHORS

Dr **Chen Zhiqiang**, is the Associate Professor of the Department of Engineering Physics, Tsinghua University and the Director of the Institute of Nuclear Technology of Tsinghua University. He has profound researching experience in the field of Particle and Radiation Imaging and Data Acquisition and Signal-Processing.

Mr **Liang Yinpeng**, Deputy General Manager of Mini Security Inspection System Business Division of Nucotech Company Limited. He is specialised in the field of security inspection protocol and marketing strategy of mini security systems.

### ABOUT THE COMPANY

**NUCTECH Company Limited** is a high-tech company originating from Tsinghua University. Possessing all the intellectual property rights of core technologies in radiation applications, NUCTECH has become an internationally leading company specialising in research and development of X-ray inspection technology, as well as system design, manufacturing, engineering and customer service. So far, with near 200 sets of its systems and services being to about 40 countries and regions in Europe, America, Asia, Oceania and Africa, NUCTECH has become highly regarded by customers all over the world.

### ENQUIRIES

NUCTECH Co. Ltd.  
2/F Block A, Tongfang Building  
Shuangqinglu  
Haidian District  
Beijing China, 100084

Tel: +86 10 6278 0909  
Fax: +86 10 6278 8896  
Emails: chenzhiqiang@nuctech.com  
liangyinpeng@nuctech.com  
Website: www.nuctech.com

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