

Sanden has acted to educate its customers through a series of newspaper advertisements as the solution is rolled out into new markets. Sanden has also trained distribution centres on how to use the system and act on detecting a counterfeit model.

As a user of nonClonable™, Sanden has also benefited from complimentary inclusion in Bilcare Technologies' No To Fakes initiative [www.notofakes.com](http://www.notofakes.com); an Internet-based community putting brand owners directly in touch with their customers on the subject of counterfeits.

### Benefits

Sanden has reported a reduction in the level of counterfeits in the market, and an increase in the number of sales of legitimate products from its distributors. Sanden distributors and their customers have given thumbs-up approval for the nonClonable™ solution, and its anti-counterfeiting capabilities. Introducing the nonClonable™ solution has given reassurance to the customers that they are able to distinguish and authenticate the Sanden compressor. To date 40 distributors have been exposed to our technology.

### The Future

Sanden and Bilcare Technologies are continuing to work together to add further benefits to the system. These include integration with the warehouse management system to provide information about product movement and stock levels in the field.

Bilcare Technologies is also embracing new indexing technologies to augment its nonClonable™ fingerprint solution, and a DataMatrix version of this technology is being developed in collaboration with Sanden.

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**Bilcare** nonClonableID™

## Case study

### Sanden's automotive air-con compressors

#### Company Background

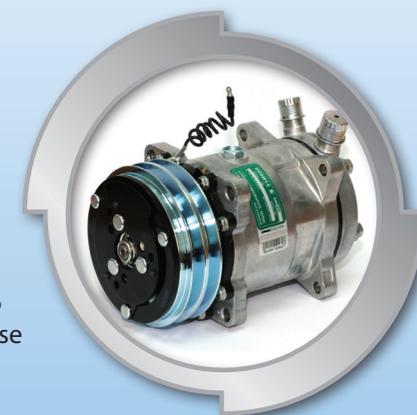
Sanden International (Singapore) is a manufacturing and sales subsidiary of Sanden Corporation, Japan, the leading independent manufacturer of air-conditioning compressors and associated systems for the automotive sector. The Singapore factory produces hundreds of thousands of compressors a year, serving South East Asian and Middle Eastern markets with a range of product families including the new AC Edge range.

Sanden's 2005 sales revenue was S\$246m. Sanden prides itself on delivering high quality products and the Singapore operation has demonstrated this by obtaining TS 16949, ISO 14001, and OHSAS 18001:1999 (OHSMS) certification. The company was awarded the 2006 Deming Application Prize by the Union of Japanese Scientists and Engineers (JUSE).

#### Brand Protection

The Sanden brand is synonymous with reliability, efficiency and engineering excellence. As such, Sanden's compressors have been subject to counterfeiting and cloning, particularly in Asia and the Middle East. Some imitations were very difficult to distinguish from the genuine article, unless you knew what to look for. The problem was that the aesthetic qualities of these knock-offs were not matched by their functional quality. As a result, Sanden's brand reputation was in danger of being tarnished.

Sanden has long been proactive in the fight against counterfeits. The company invests heavily in research and development, it patents new designs and aggressively pursues those that infringe its intellectual property rights. In addition, Sanden has used embossed castings, laser etched markings and distinctly designed labels to deter copying; these measure were found to reduce but not solve the problem.





### Bilcare Technologies' remit

Bilcare Technologies (and formally as Singular ID) worked with Sanden to create the right solution for protecting Sanden's products. A key requisite was for this solution to fit as seamlessly as possible into their production line process, to provide a low-cost but scalable solution and to roll out the solution as quickly as possible on a range of products so that protection for each product type in a given territory could be complete.

### Bilcare Technologies' solution

Bilcare Technologies provided modified labels, each containing a unique and random linear barcode (effectively a machine readable index number) and a unique materials based "fingerprint" (a unique signature, different on each label and prohibitively difficult to copy). Reading these two features together with a proprietary scanner confers authenticity with a database record, rather like comparing the photograph and passport number against an immigration database. Bilcare Technologies calls this solution nonClonable™.



Bilcare Technologies' nonClonable™ label for Sanden

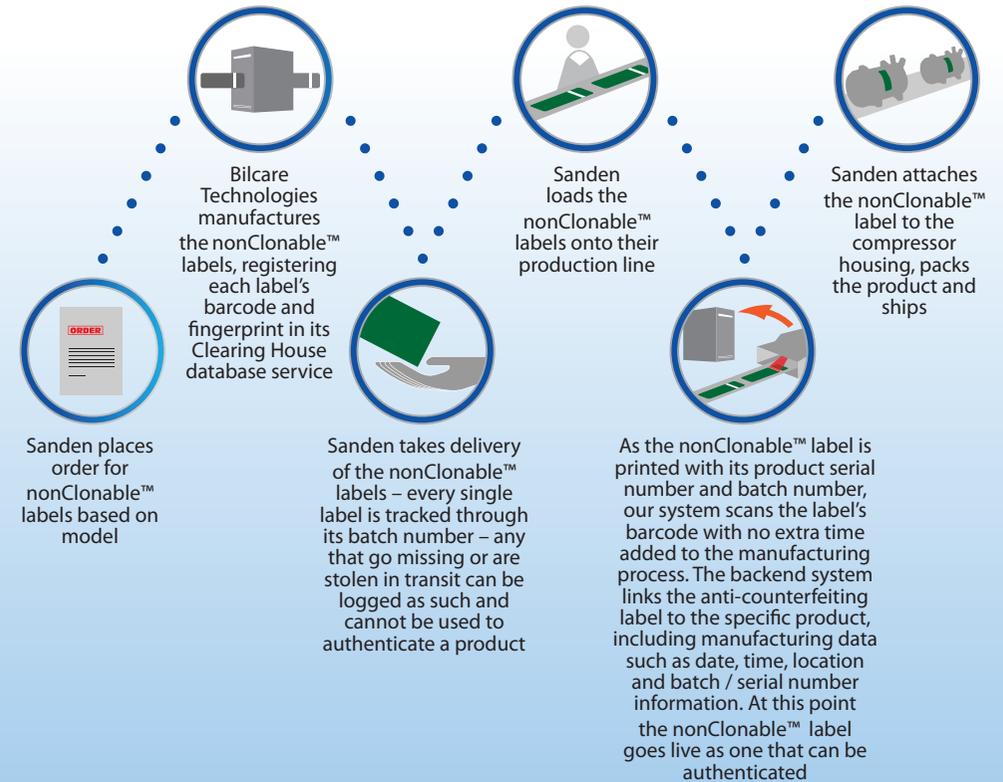
### Implementation

Bilcare Technologies provided a full turn-key solution to Sanden, integrating the system into their existing production line:

- Modification of the production-line printer software to capture the serial number of the item being manufactured and labeled

- Installation of a linear barcode scanner to automatically link the label to the manufacturing and anti-counterfeiting data, as part of the printing process
- Installation of a local server to host the confidential information

### The manufacturing process flow



### Authentication, education and dissemination

