

## A Barnes International Success Story

# Barnes Test Tool Supports Issuance of over 60 Million EMV Cards at Leading South African Bank



First National Bank South Africa is the oldest bank in South Africa and is today one of South Africa's "big four" banks, providing personal, private, business, commercial and corporate banking services to millions of customers across the country. Starting in 2007 FNB have migrated huge numbers of bank cards to the EMV smart card standard, replacing the now outdated magnetic stripe-based system, which was prone to fraud.

Through their internal personalisation bureau, FNB have issued, replaced and reissued around 60 million chip cards since 2007.

### Cards Issued



### Testing and Verification of EMV Bank Cards

It is crucial for card issuers that their cards pass payment scheme certification, and function flawlessly when used by the customer in a retail outlet or when taking their money out of an ATM. At the start of their EMV programme in 2007, FNB chose the Barnes EMV Personalisation Validation Tool CAT 3000v3 to ensure their cards would pass White Test Plastic Certification quality control checks and achieve MasterCard and Visa certification. The CAT 3000v3 is an advanced version of Barnes CPT 3000v3 with additional script development functionality for testing of non-standard card profiles.



Bernard van der Nest  
Product Specialist, FNB

*"We use the Barnes test tool to ensure we achieve Visa or MasterCard certification first time. We have had very few instances where we had to resubmit cards, saving resource time, courier costs and certification costs and reducing the overall project timelines."*

## The Barnes CAT 3000v3 Test Tool in Operation



### THE BARNES ADVANTAGE

Barnes is the chosen partner of Banks & Issuers, Card Manufacturers, Personalisation Bureaux and Test Laboratories worldwide.

Here are some reasons why:

### COST ELIMINATION

The high business costs and wasted resources of producing and issuing invalid cards is eliminated.

### RISK REDUCTION

The reputational risk of issuing invalid EMV cards to end customers is reduced.

### FUTURE PROOFED

Barnes works in partnership with all major payment schemes. As scheme rules evolve, Barnes rapidly make updated test script packs available to customers via the Barnes website.

### SERVICE EXCELLENCE

Our clients have every confidence that whatever their test requirement, the Barnes team is always on-hand to deliver expert advice, training, consultancy and fast support.

### BUSINESS AGILITY

Barnes test tools are easy to use by both technical and non-technical users, and speed up card development and payment scheme certification.

The device is simple to use, and can be operated by non-technical staff, however it also provides in-depth capabilities for providing detailed technical information for IT and engineering staff.

The tool was developed in collaboration with Visa and MasterCard, and is utilised by Visa, MasterCard, American Express, JCB, major banks and card bureaus globally. Over the years, customer feedback has led to enhancements to the tools functionality to the benefit of all users.

*“We have a close working relationship with Barnes and have requested a number of enhancements which have been delivered in surprisingly quick timelines.”* Bernard van der Nest

## Business Benefits

The Barnes test tool supports the migration process in a way no other system currently on the market can do, saving banks and issuers time and money when issuing EMV cards.

*“I would not advise any Issuer to migrate to EMV without test tools.”*

*If you do not have the ability to test and evaluate your Issuance system*

- Quickly tests that data on the chip and magnetic stripe are correct and valid according to issuer profiles and all major payment scheme specifications
- Script-based test suites can be run in isolation, or be linked together to perform multi-application tests in a single card insertion.
- An EMV payment application test suite is provided. New test scripts are written in the industry standard TCL scripting language.
- Supports all payment devices: contact and contactless cards, mobile phones, and tokens.

*and cards, you will fail in some part of the migration process.*

*The Barnes tool gave us the assurance that what we have planned and developed meets the standards, our requirements and functionality. It also gave us insight into the chip no other tool or documentation could provide.”* Bernard van der Nest

## Overall Results – Why You Should Choose Barnes EMV Personalisation Validation Tools

The Barnes toolkit of EMV Personalisation Validation software and the associated reader is essential to assist banks and issuers migrating from magnetic stripe cards to EMV chip cards. It is quick to detect and diagnose errors introduced at the personalisation stage, and enhances the QC procedure so all personalisation data on the card is validated, ensuring the card is not rejected by the payment scheme at the end of the process – which is costly and time-consuming.

The Barnes CAT 3000v3 test tool is a market leading EMV test tool and has been adopted by major players in the industry.

Its functionality, ease of operation, and the technical support from the Barnes team make it the EMV personalisation validation tool of choice for leading card issuers like FNB.

*“We have been working with Barnes since 2007. The combined strength of the tool and the team’s in-depth EMV knowledge and focus on providing superior customer support have outperformed our expectations. We are very excited about current projects we are collaborating on which will improve our offline risk management capabilities.”* Bernard van der Nest