



Quality Merchant Services, Inc.

QMS

Strategic Card Facility in China



Nov. 2015

Company Profile

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Company Overview

QMS's strategic card facility partner was established in 1993 in China.

Registered capital 33 million US.

HQ in Beijing, 28 subsidiaries & branches across 28 provinces.

GSMA SAS, VISA, MasterCard, CUP, ISO27001, ISO9001&ISO14001, OHSAS18001, certified card manufacturing and personalization plant.

Providing integrated card products from card printing, card manufacturing, embedding and personalization to fulfillment and delivery.

Ranks top one in China for issuing Social Security Cards recent 4 years.

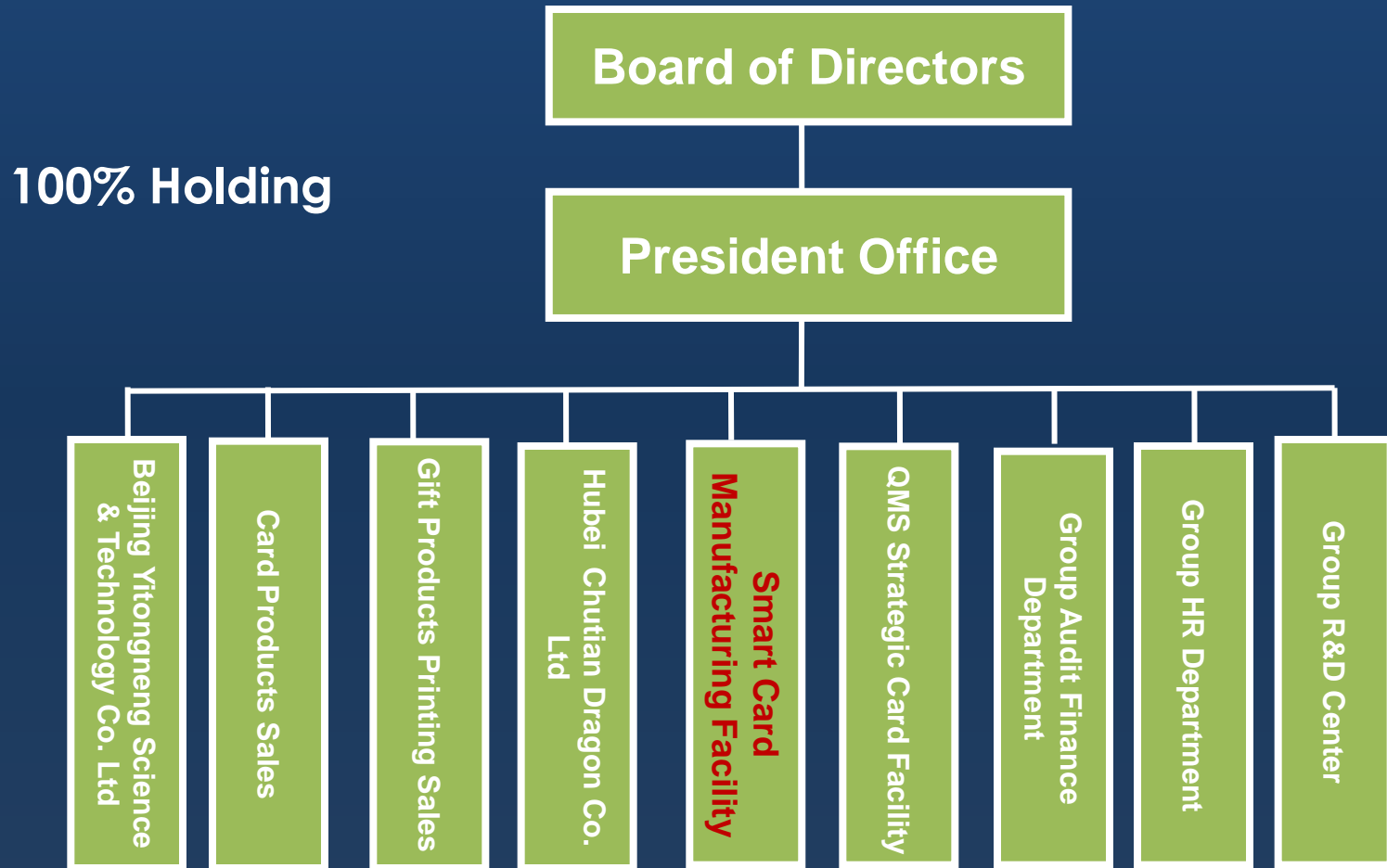
Getting Gold Ants Certification of China Gold Card Project.

2013 Annual sales: 1.1 billion RMB, ranking No.2 in China.

2014 Annual sales: 1.68 billion RMB, ranking No.1 in China.

Covering about 30,000 square meters.

QMS Strategic Card Facility



Card Facility

General Manager

Established in China 2002

Vice GM

GM Assistant

Chief Engineer

GM Assistant

GM Assistant

Market Sales
Department

Production
Department

Quality Department

Equipment Insurance
Department

Craft Affairs
Department

Software Department

Data Room

Administration
Section

Security Affairs
Department

Purchase
Department











Financial Department

International Market
Department

GM Office

HR Department

Main Certificates

Logo	Description	Logo	Description
	China UnionPay certificate Expiry date: 2016-6-17 Product scope : Mag-stripe personalizer /Mag-stripe manufacturer /IC embedder/IC personalizer		ISO 14001 Environment certificate The last updating for the certificate: 2013-5-14
	Comply with the international quality level AAAAA Product scope : IC Expiry : 2016-10-23		OHSAS 18001 certificate Expiry Date: 2016-5-14
	MC LOA certificate Product scope : IC card (contact/dual cards) Approval identifier :CLOA-GCDS140803-140826(a) /CLOA-GCDS140802-140925(a) Expiry Date: 2018-8-26/2016-9-25		MasterCard certificate product scope : Card manufacturing/Chip embedding/Card personalizing/Card embossing/Card Encoding/Chip personalizing/Card mailing Expiry Date: 2016-4-1
	VISA LOA certificate Product scope : IC card (contact/dual cards) Expiry Date: 2016-9-15/2016-11-7 Reference No:LBGCDS2144B/LBGCDS2138		Visa certificate product scope : Card manufacturer/IC embedder/IC personalizer/IC pre-personalizer/Magnetic stripe personalizer Expiry Date: 2016-1-1
	ISO 27001:2013 The last updating for the certificate: 2016-9-9		CQM certificate product scope : ICC/CB/ICCP/PICC Expiry Date: 2016-3-21
	ISO 9001 Quality certificate Expiry Date: 2016-5-14		GSMA SAS Certificate Expiry Date: 2016-8-30 Certificate No: CD-DN-0815

Number of Staff

Total Number of Staff : **~1500.**

Edu Type	Doctor	Master	Bachelor	Junior College	Others	Total	Percent
Manager	2	10	82	8	2	104	6.98%
Sales	0	5	100	35	12	152	10.20%
Designer	1	10	24	23	6	64	4.30%
Developer	3	15	150	75	0	243	16.31%
Production Staff	0	2	120	256	549	927	62.21%
Total	6	42	476	397	569	1490	100.00%

As a branch, the total Number of Staff:
1273 (till 2015.6.19)

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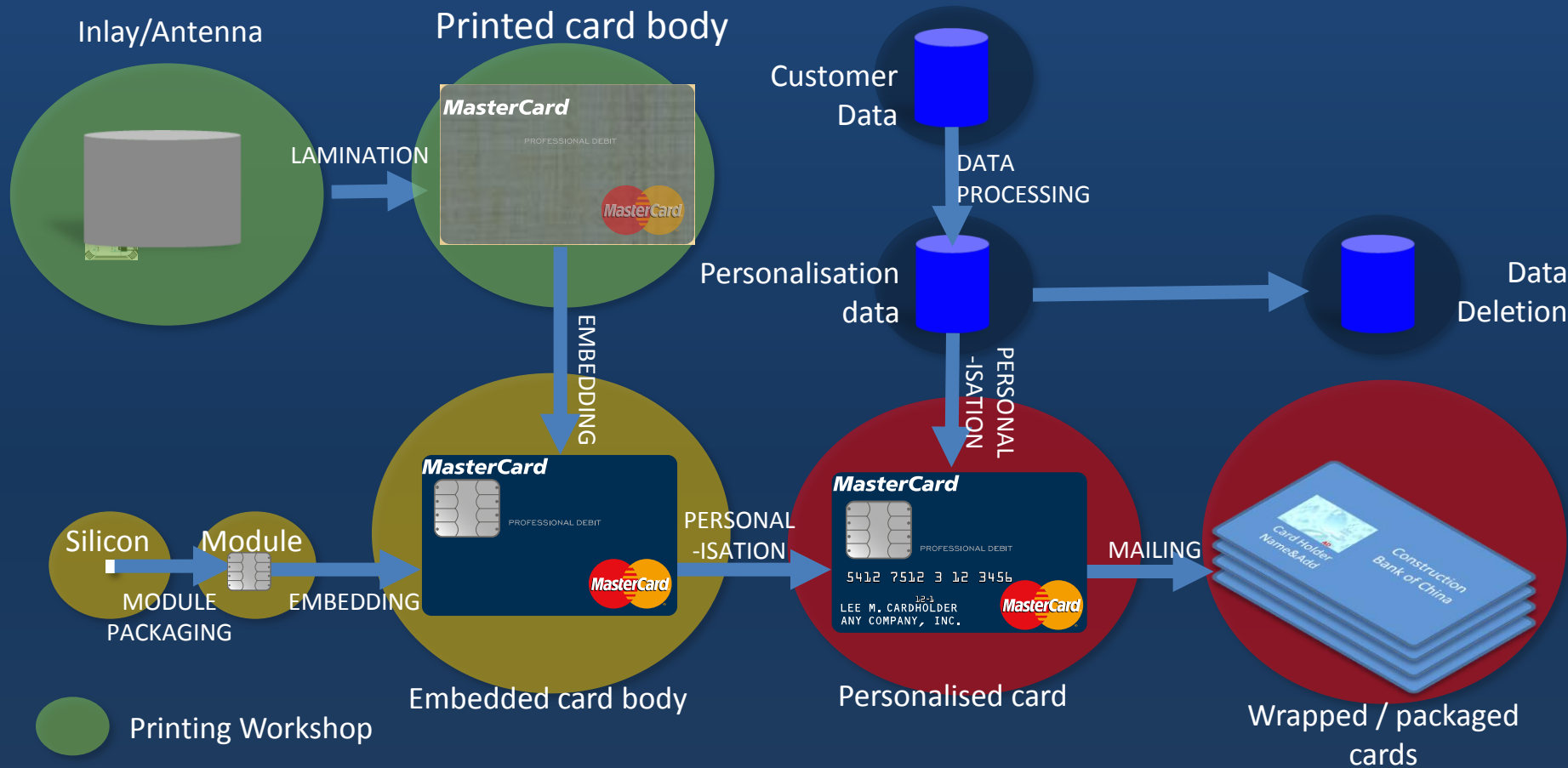
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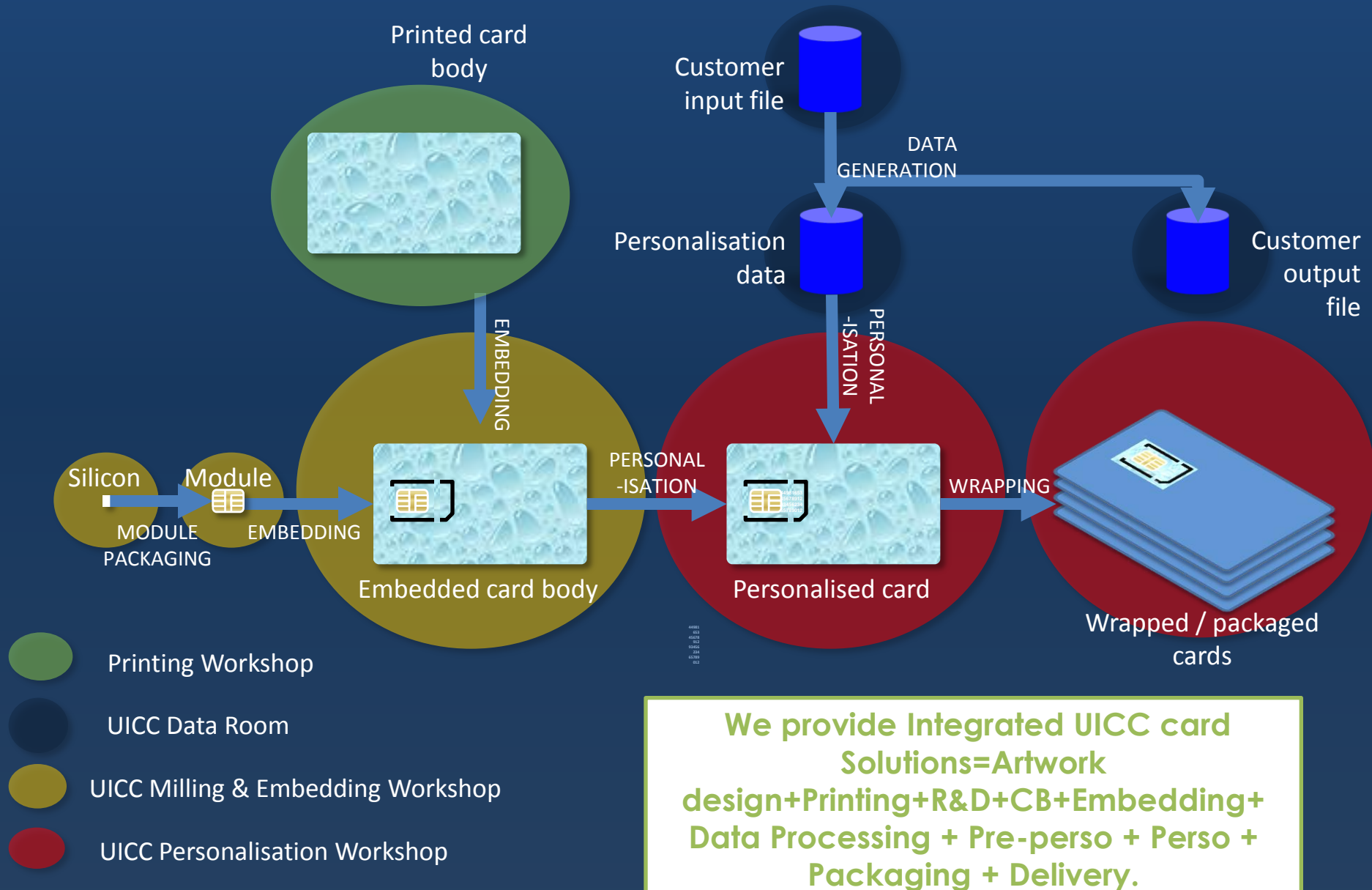
Bank Card Manufacturing Process Diagram



We provide Integrated Bank card Solutions=Artwork design+Printing+R&D+CB+Embedding+ Data Processing + Pre-perso + Perso + Packaging/Mailing + Delivery.

UICC Card Manufacturing Process

Diagram



We provide Integrated UICC card Solutions=Artwork design+Printing+R&D+CB+Embedding+ Data Processing + Pre-perso + Perso + Packaging + Delivery.

Main Machine

Workshop	Equipment Name(Example)	Qty	Equipment Function(Example)
Printing	Heidelberger Five Colors Printing Machine; CTP	22	Paste Making/Silk Printing/Offset Printing
Making Card Body	Integration of Laminating Machine (Burkle GmbH)	48	Laminating/Punching Machine
Financial Card Workshop	Holographic Hot Stamping Machine (KURZ) /Skyline Personalization Machine	28	Hot Stamping Holographic Label or the Signature Strip/Financial Card Personalization
Milling/Embedding	Dual Interface Integration Machine/Butt Welding Machine/Automatic Antenna Placement Machine/Automatic Antenna EmbeddingIntegration Machine (China)	67	Card Body Slot Milling/Embedding
Personalization	High Speed Personalization Machine (China)	32	Personalization
Packaging	Automatic Packing Machine/Mounted Magnetic Machine/ (China Taiwan)	13	Finished Products Packaging

Main Machine List

Workshop	Equipment Name(Example)	Qty	Equipment Function(Example)
UICC Milling/Embedding	Automatic High Speed Milling Machine/Automatic High Speed Embedding Machine/Pre-perso Machine (China)	14	UICC Card Body Milling/UICC Card Body Embedding/UICC Pre-perso
UICC Perso	High Speed Personalization Machine (China)	6	UICC Personalization
UICC Packaging	Automatic Packing Machine (China)	6	UICC Finished Products Packaging

Capacity



Dual Bank Cards:

- Embedding 600,000 PCS/day
- Perso 3500,000 PCS/day

Contact IC bank cards:

- 300,000 PCS/day

Social Security Cards:

- 400,000 PCS/day

UICC cards:

- 300,000 PCS/day



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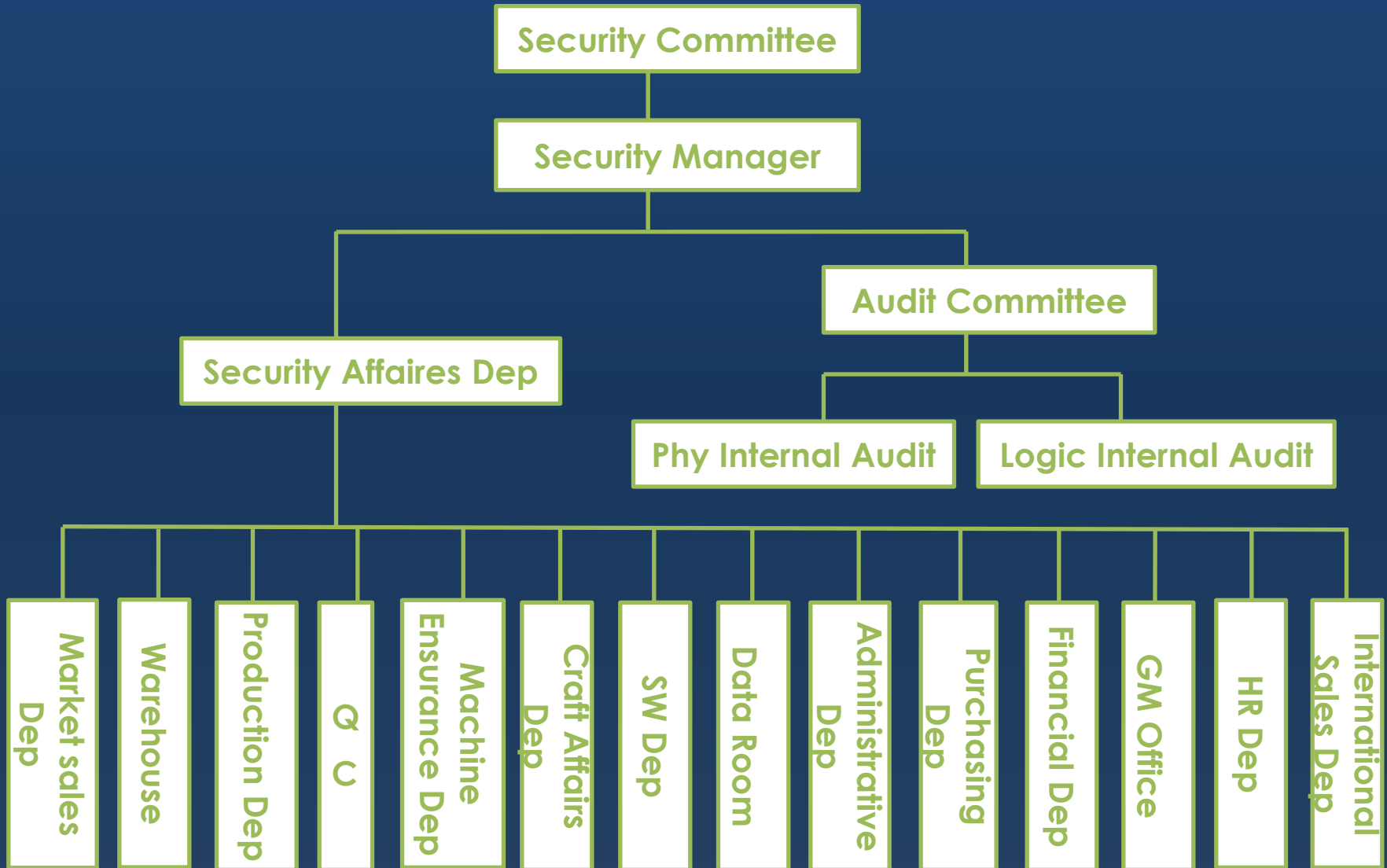
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Market Position · Cases

Security Org



Security Responsibility

Responsibilities of Security Committee

- The chairman of security committee is GM.
- Formally authorise SM, backup SM, Phy / Logi SM.
- Security Affairs Dep implement and maintain the operation of security management system in compliance with security requirements.

Responsibilities of Audit Committee

- Ensure correct operation of Security Management System by there levels of internal audit.
- Shift monitor level audit each week
- Workshop/dep level audit each month
- Company-wide audit each quarter
- Make company-wide internal reports to Security Committee.



Security Manager Appointment Letter

Employee Security

NEW Employee:

- - Background checks
(previous employment survey,
education level confirmation,
criminal/credit record check)
- - Work Training & Security
Training

ALL Employee:

- - Confidentiality Agreement
- - Security Training once a year
- - Training records are kept
(training materials, trainee
signature, training tests)
- - Termination checklists (e.g.
physical /logical access
revoked)



Company-Wide Training to
learn GSM Standards(1)



Company-Wide Training to learn
GSM Standards(2)

Personnel Security: Visitors

Reservation prior to visit

Registration in reception

Confidentiality Agreement signature

Display/Scan valid ID for records

Issuing access card (VIP card)

No camera or mobile phone in HSA

Accompanied by staff always

Recover the VIP cards while leaving

Regular visitor needs to put on records for reference.

保密协议
Non-Disclosure Agreement

作为被允许参观卡生产安全区域的条件，我同意不向第三方谈及或透露有关广东慧天龙智能卡有限公司生产、进行智能卡个性化或任何其他所使用的方法以及设备方面一般性或细节部分的信息，包括其客户的相关情况。

As a consequence of being allowed to visit the Smart Card Manufacturing security area of Guangdong Chutian Dragon Smart Card Co., Ltd., I agree not to discuss or disclose to any third party any information acquired in the course of visit, including any information of its customer(s), the generalities or details of manufacturing method, manufacturing machinery and manufacturing processes.

按照公司安全方针的要求，所有员工及参观人员有其在离开建筑物时被检查，我已知道被检查的可能性并同意在必要时进行这种检查。

In accordance with company Policies all employees and visitors are liable to be searched on leaving the premises. The possibility of being searched has been brought to my attention and I agree to such a search being carried out should for any reason it be considered necessary.

未经允许，禁止在安全区域使用照相机及移动电话等相关设备；来访人员必须在公司专门人员的陪同下，方可在指定区域工作或参观。本协议有效期为一年。The use of cameras, mobile phones and associated equipment are prohibited in Security Areas without authorization. Visitors can visit or work in designated areas accompanied by our designated personnel. This NDA is valid for 1 year.

作为进入广东慧天龙智能卡有限公司安全区域的条件，我同意以上条款。

I agree to the above conditions for entry to Secured Areas of Guangdong Chutian Dragon Smart Card Co., Ltd.

来访者姓名 Visitor signature	有效证件名称 ID name	有效证件编号 ID no.

来访单位 Visitors company:
事由: _____
Purpose: _____
被访者姓名: _____ 日期: _____
Host's name: _____ Date: _____
物理安全经理签名: _____
Physical security manager signature: _____
安全负责人签名: _____
Security manager signature: _____

机密 Confidential SP-001-008 Rev: 1.2

Confidentiality Agreement for Visitors

Physical Security

CCTV room installed with:

- Alarm system (IR, duress button, door open alarm) with electronic alarm logs
- CCTV system (24/7 control under 4EP)
- Access control system.

Duress button system connected directly to local Police with quick response in 3 min

Camera images kept for at least 3 months



Physical Security

One-by-one door is to provide personnel access to production area.

Only for employee entrance/exit, not for goods transfer.

Make use of 2 factor authentication

- Access card
- Human weight auto-test (+/- 5KG)

Anti-pass function

Auditable access records on PC.



Physical Protection



Infra-red Sensor



Vibration Sensor



**Fire Door With
Door Open Alarm**



**FW Is Locked
By Keys**



CCTV Movement Sensor Access Control



Dual Access Control



Duress Button

Vault Door

Standard bank type vault door.

Dual combination locks

An inner grille under dual control

A vault register to record the date, time in/out, signoff.



Production Security

**Cards transfer:
locked trolley
4-Eye
principle**

**Storage: Semi-finished
embedded products
stored in vault/temporary
storage room, bad cards
temporarily stored in
locked box.**

**100% counting
cards since
embedding
stage until
package stage.**

**Dual control
while
counting
cards.**



Good cards Storage/transfer



Bad cards Storage



100% counting cards

Audit Trail

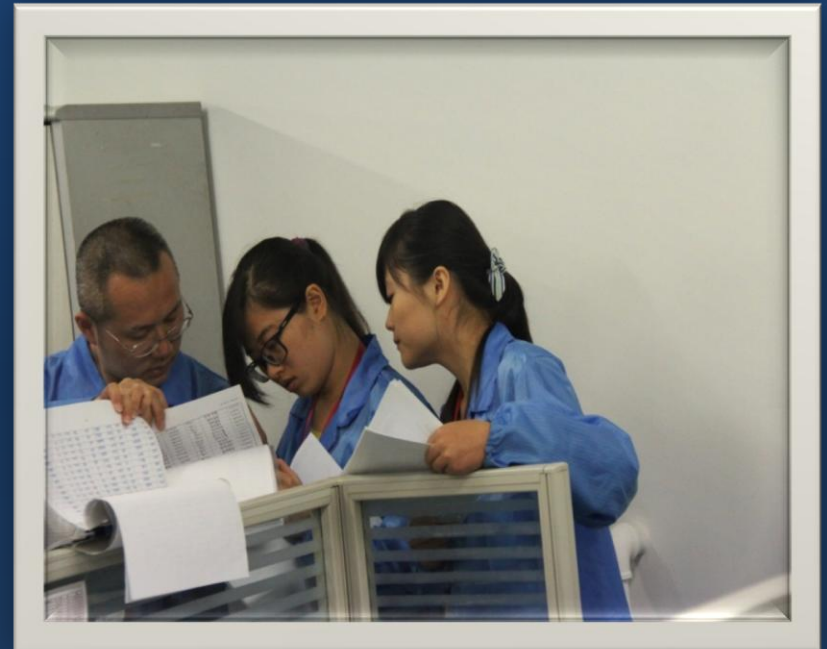
Maintain accurate audit trail for
production job activities

Signoff and date at every point of
transfer

Dual control

Record movement of card and
components

Records kept for 24 months.



Destruction: Rejects

Rejects collected from workshops, stored in vault, destroyed next morning.

Count rejected cards to validate the rejected records prior destruction

Destruction process always under dual control and adequate CCTV coverage

Never third person being present in the destruction area

Housekeeping after destruction is completed

Destruction records maintained, covering destruction start/end time, destruction person and watchdog signature, etc.

Destruction Record

[illegible]

Shredder

Network Security

Production network consisting of data receiving network, data room network, perso workshop network, physical/logical separated by FW.

Data receiving network is connected to data room network with a dedicated firewall; data room network is connected to personalization network with a dedicated firewall.

Designated data receiving PC of data room network and key receiving/processing PC have dedicated and respective access to folders of data receiving server, which however has no access to data centre network and personalization network.

Data processing PC and workshop perso PC only allowed to access database server and designated folder of file server and vice versus is not allowed.

Personalization network has no access to internet.

Internet has no access to data processing network and perso network.

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Quality Management



Quality Management System covers:

- GB/T19001—2008; ISO9001:2008; MasterCard Card Quality Management; CUP Quality Management System



IQC Starts From Raw Material Quality Control

- IC module, mag-stripe, signature panel, hologram, PVC
- Selection of suppliers
- No defective raw material batches into production



PQC

- Establish clear process quality instruction for each stage.
- Rigorous inspection before moving to next stage



OQC _ Traceability

- Keep audit quality logs from receiving order, producing samples, receiving materials to delivery for each stage each shift
- Tractability for finished products and partly finished products.

Quality Control

Internal quality control management

- Regular quality meeting
- Regular quality internal audit

Management review

- Improvements as required.
- **Frequency: at least once each year**
- **Include: customer satisfaction assessment, quality management system assessment, quality policy, quality target, improvements.**

Critical quality control points:

- **CB: 100% layout inspection; Hot-stamping: 100% inspection + 5% sample inspection; Milling & embedding: peel strength, resistance to impact, color test; Perso testing: ① 2% sample testing for function and initialization ② 100% personalization testing and 10% sample testing for data matching**



Testing Devices List

High-tech testing devices for physical testing

SN	Testing machine	Type	SN	Testing machine	Type
1	Microscope	MMC176-526DC	9	Depth tester	543-533DC
2	Standard Light source box		10	Micrometer	0~25mm
3	refrigerator	BD-255LTA/100LTB	11	Digital Caliper	0-200mm
4	Bending Tester	HT-W02	12	Peel force tester	SH-200
5	Heat Tester	HT-8247A	13	IC induction frequency tester	AT5006
6	Mag-Tester	Mag-Tester MT3000	14	UV Light	BLB 20w
7	Pre-perso Tester	Silon 2000	15	Mag-Reader	LKE2300-66
8	IC Card Reader	RD600	16	Spectrometer	500 Series

Testing Software List

Testing SW Type	Testing SW name	Version
Chip Testing	Bank Dual Card Reading Tool (CL)	V1.30
	Bank Dual Card Reading Tool (CT)	V1.31
Initialization Production	Testing key perso card issuing SW	V1.01.dll
Initialization Dynamic Lab	ABC- Initialization	V1.09.dll
	CCB- Initialization	V1.00.dll
Reading CL IC PAN Testing	CL Reading PAN	V1.02
Machine Testing Initialization	NXP General CL Testing	V1.00.dll
Gas Tank Initialization	Gas Tank Initialization SW	V1.7
Testing Mag-stripe encoding SW	Bank Card Testing Mag-stripe Channel Tool	0101
Testing Financial App	Financial Virtual Terminal Offline Mock Transaction	



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Main Clients: Payment

Customer	CTD Description	Customer	CTD Description
 中国农业银行 <small>AGRICULTURAL BANK OF CHINA</small> ABC	Financial IC blank card	 河南省农村信用社 <small>HENAN RURAL CREDIT UNION</small> Hainan Rural Credit Cooperatives	Financial IC debit card & Magnetic stripe card
 中国建设银行 <small>China Construction Bank</small> CCB	Financial IC blank card/credit card	 安徽省农村信用社联合社 <small>ANHUI RURAL CREDIT UNION</small> Guangdong Rural Credit Union	Financial IC card &
 中国邮政储蓄银行 <small>POSTAL SAVINGS BANK OF CHINA</small> Postal Savings Bank of China	Financial IC card & personalization	 郑州银行 <small>BANK OF ZHENGZHOU</small>	Financial IC card & personalization
 广东农村信用社 <small>GUANGDONG RURAL CREDIT COOPERATIVES</small> Guangdong Rural Credit Cooperatives	Financial IC card & personalization	 湖北銀行 <small>HUBEI BANK CORPORATION LIMITED</small>	Financial IC card & personalization
 湖南省农村信用社联合社 <small>HUNAN RURAL CREDIT COOPERATIVE</small> Hunan Rural Credit Cooperatives	Financial IC card & personalization	 广西农村信用社 Guangxi Rural Credit Cooperatives	Financial IC card & personalization

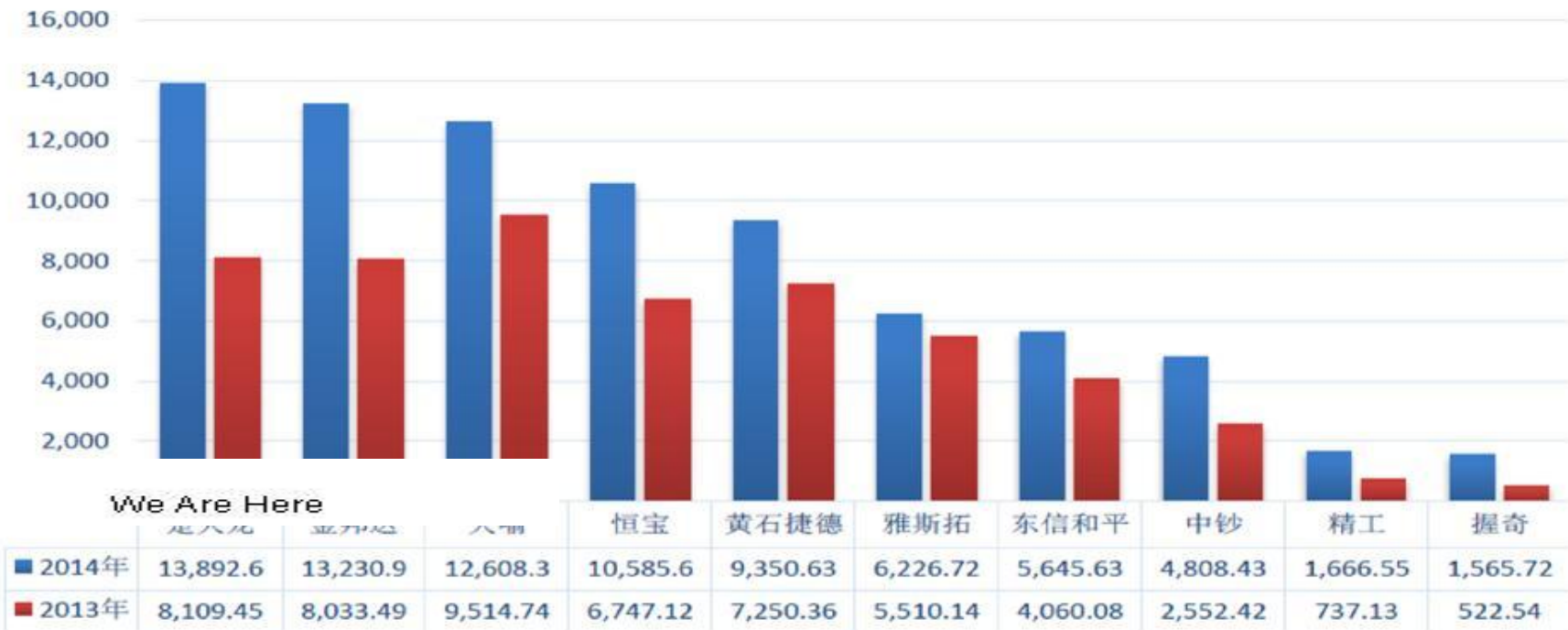
3 of 6 Nationwide Stateowned banks

Main Clients:Telecom/Govt

Projects	Description	Projects	Description
 <p>中国移动通信 CHINA MOBILE</p> <p>移动信息专家</p> <p>China Mobile</p>	M2M card & Scratch card	 <p>Social Assurance Card</p>	<ul style="list-style-type: none"> Rank top in sale volume in domestic market recent 4 years. 85 projects in total.
 <p>China unicom中国联通</p>	USIM card & scratch card	 <p>Citizen card</p>	
 <p>中国电信 CHINA TELECOM</p> <p>China Telecom</p>	USIM card & scratch card	 <p>Bus card</p>	

Domestic Market Position

CUP Bank Cards Top 10 Sales List



单位Unit:万 (10000pcs)

Overseas Market Penetration



Thank You !



Contact Us

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