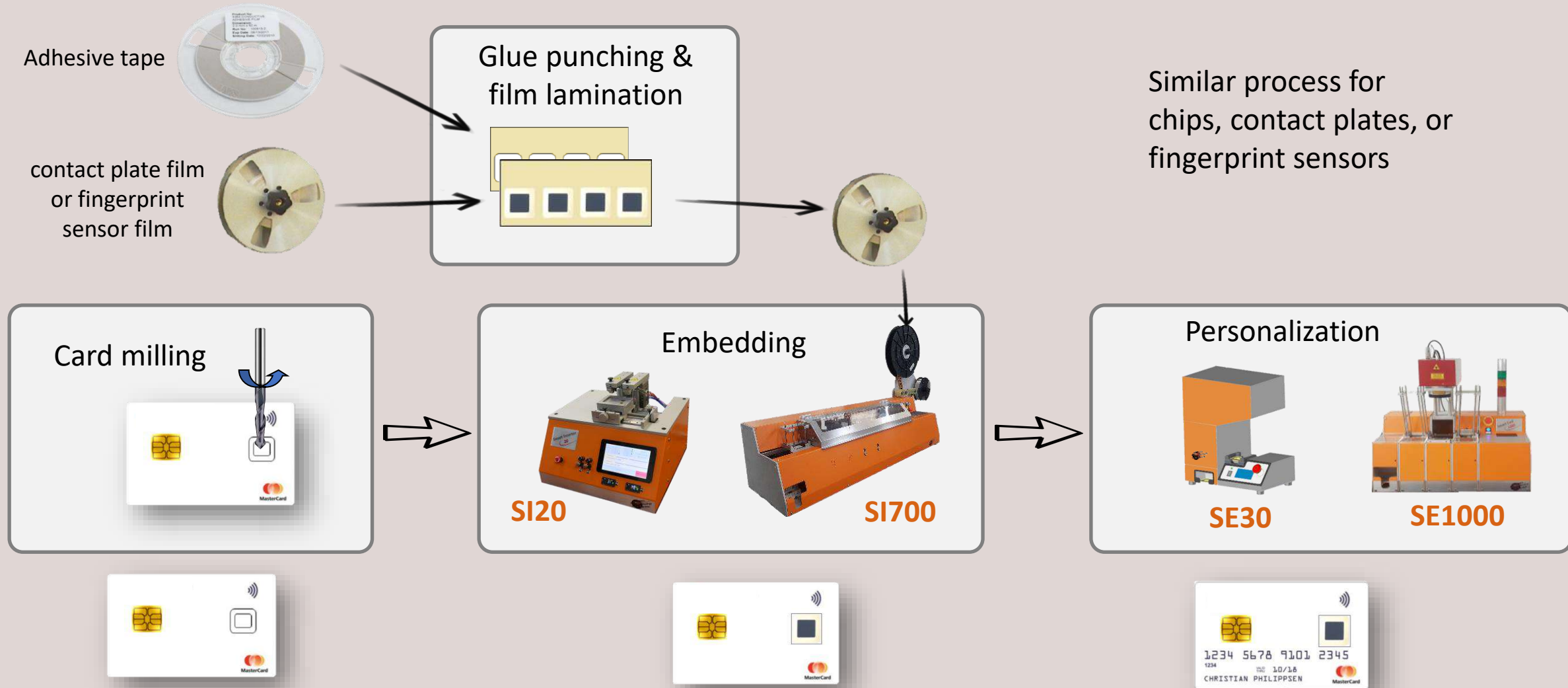




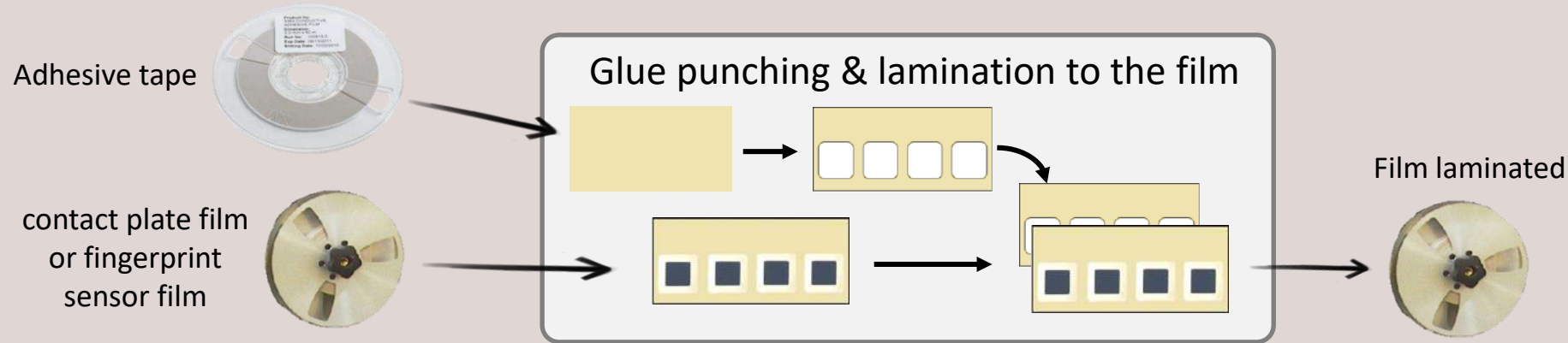
# STS solutions overview for biometric cards

*June 2021*

# Equipment overview for milling, lamination, embedding, personalization



# Alternative solutions for lamination



## Solution 1



Use an OEM laminator supplied by STS

## Solution 2

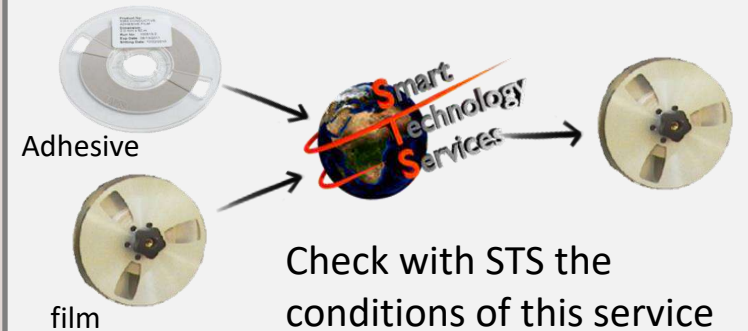


Use your existing laminator, or a laminator from another brand

The lamination presser head and punching tool may need to be changed. Check with STS for feedback.

## Solution 3

Outsource lamination to STS

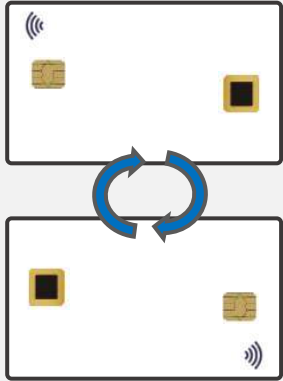


Check with STS the conditions of this service



# Alternative solutions for card milling

## Solution 1



If the sensor is in the ISO position when the card is turned 180°, then an existing milling machine can be used (by turning all cards by 180°)

## Solution 2



Use an OEM manual milling system supplied by STS, able to mill in various positions

Card milling



## Solution 3

If a MPR5000 or MPR5800\* with a milling module is available, then STS can adapt it to be able milling in any position

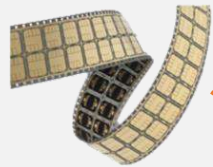


\* STS can also supply second-hand MPR5800s fully refurbished and tested by STS with a 1 year warranty included

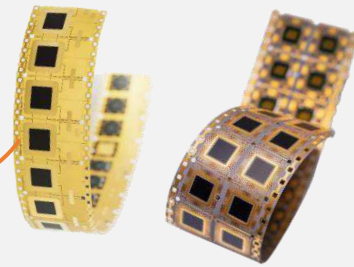
# Embedding with the SI20 semi-automatic presser heads system

The SI20 allows testing/tuning a process by manually embedding sensors, chips or contact plates on test cards – before producing cards in volume with the SI700

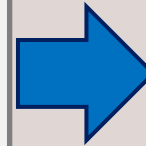
*Test / Experiment  
with the **SI20***



FPC sensors



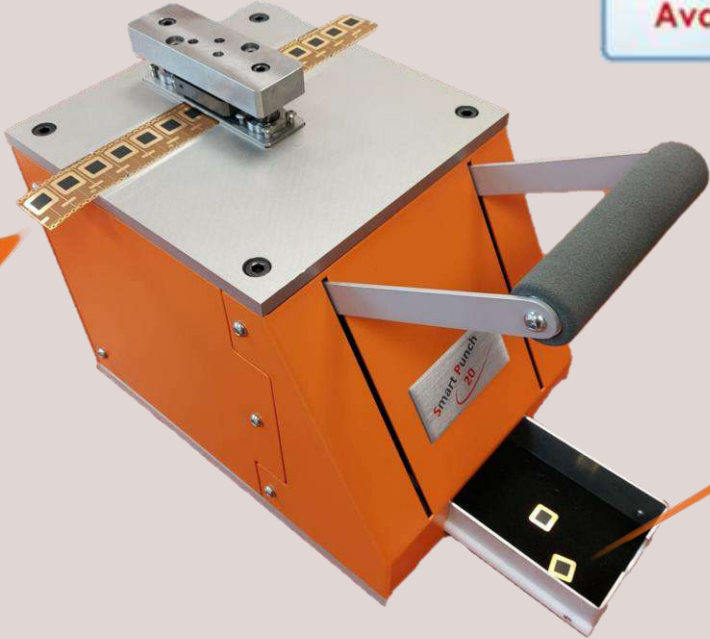
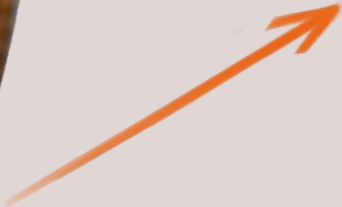
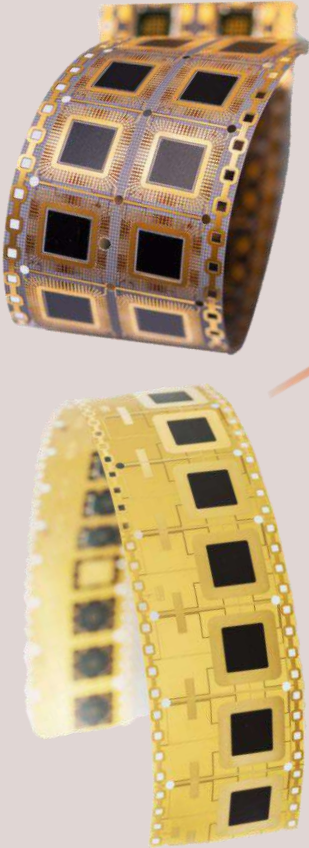
IDEX sensors



*Deploy with the **SI700***



# SPu20 Manual punching system



SPu20



Use the Manual Punching system Smart Punch 20 (SPu20) to get a sensor from the film





# How to embed a sensor or a chip on a card using the SI20?



1

Set the embedding parameters using the touch screen



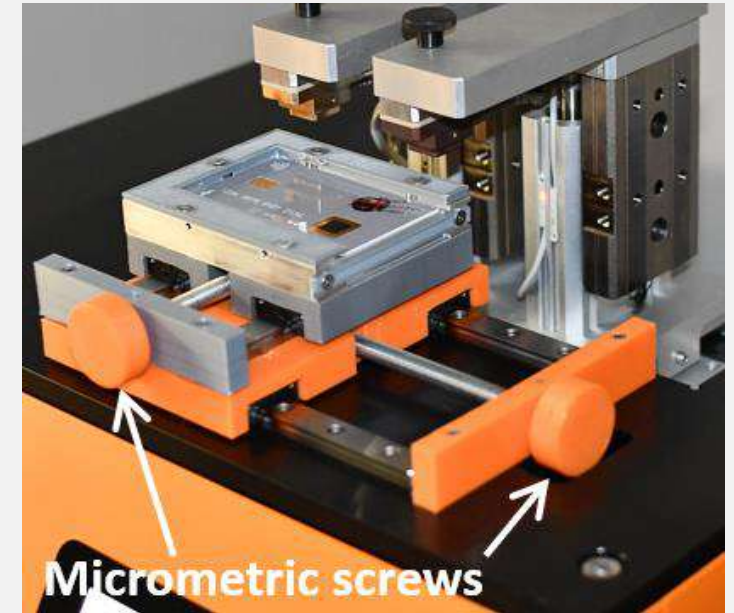
2

Manually load the sensor or the chip in the card cavity



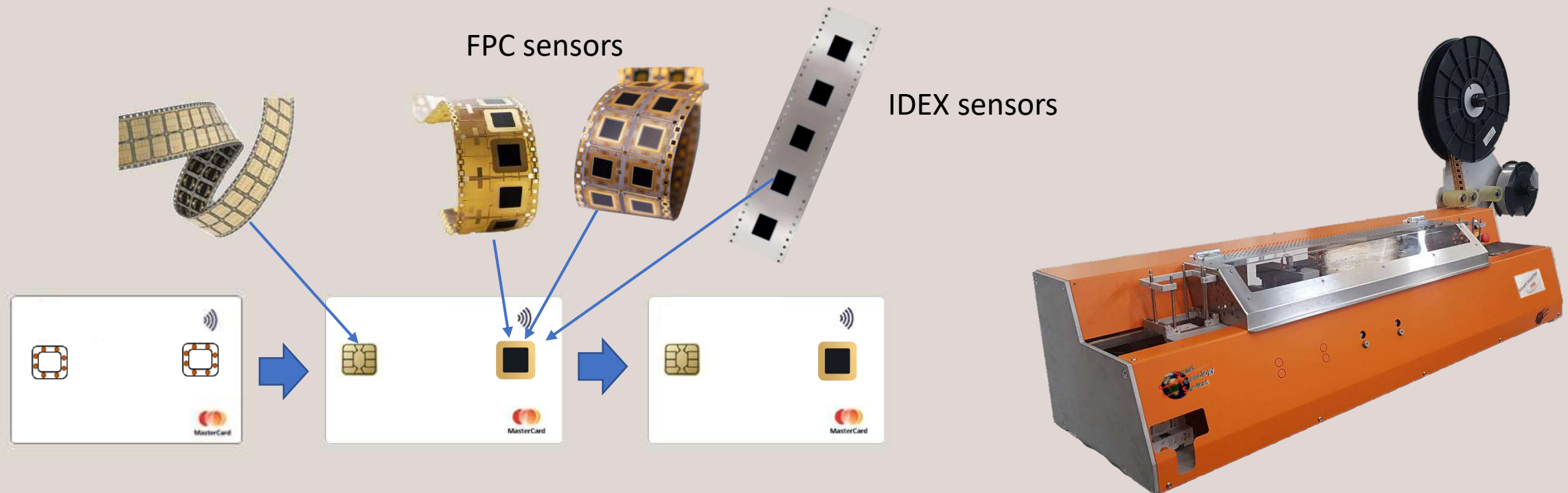
3

Load the card, adjust its position and hit the "start cycle key" to press



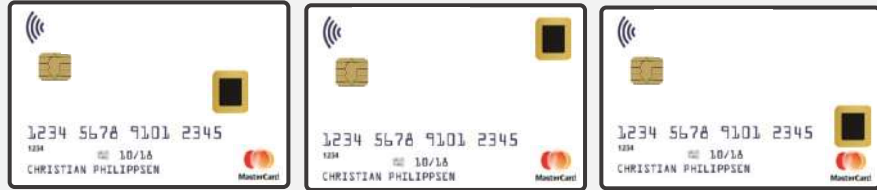
# SI700 automatic card embedding system

*A versatile desktop automatic card embedding system  
for contact cards, dual interface cards and biometric cards*

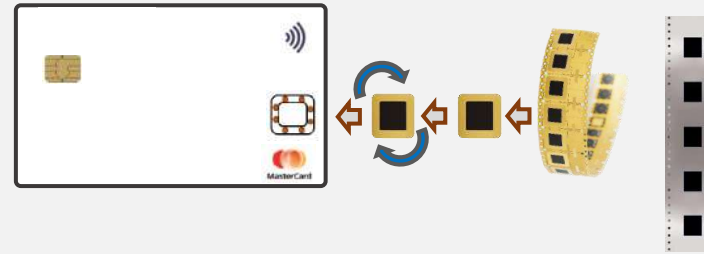




# SI700 overview

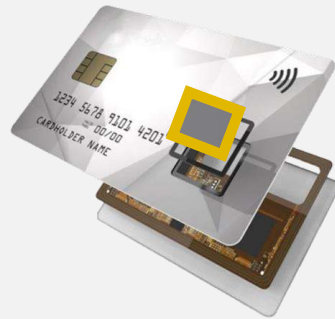


Can embed the contact plate or fingerprint sensor in any position on the card



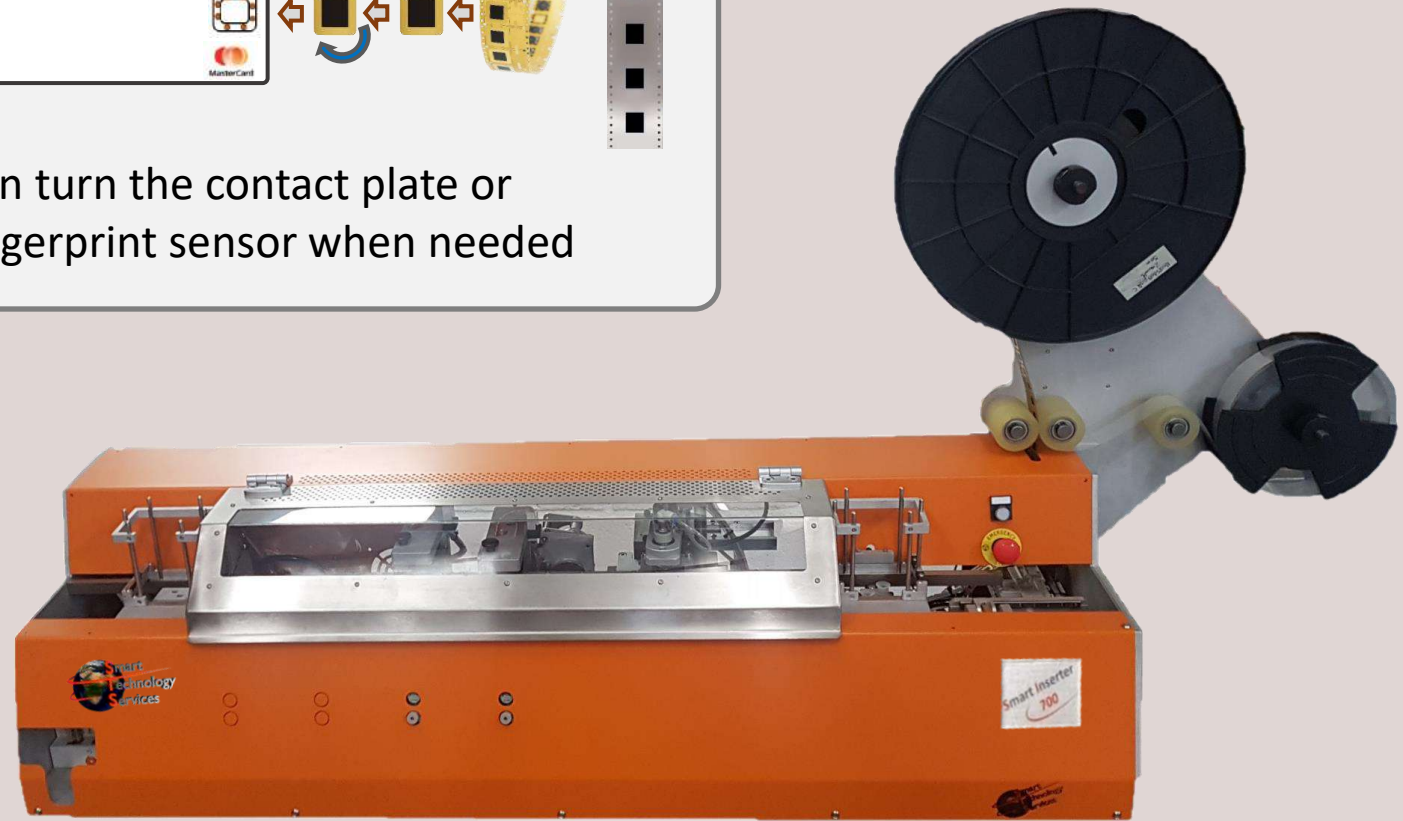
Can turn the contact plate or fingerprint sensor when needed

Use ACF glue or Edgelink<sup>®</sup> to contact the plate or fingerprint sensor to the card inlay



Edgelink is a Trademark of Linxens

Throughput up to 700 c/h



1,5 meter

## Various options can be offered for the SI700, including:

- Additional toolkit(s) to support additional component(s) like chips, contact plates, other sensors
- A vision control station before the embedding station – to check the milling cavity
- A vision inspection station after the embedding station – to check the component placement
- An electrical contactless test station after the presser heads station – to test the card through the contactless protocol (ATS)



# Card manufacturing service by STS, for small volumes

For small volumes of cards (for a pilot, experiment ...), card manufacturing can be outsourced to STS

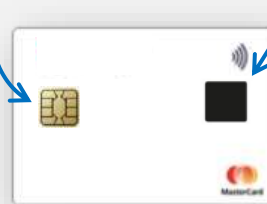
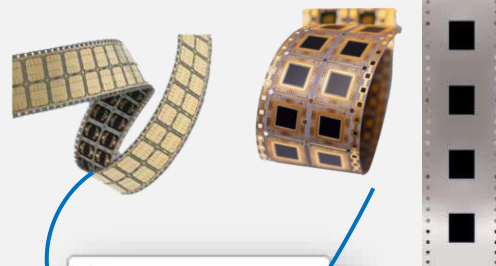
1

Card Issuer sends to STS the material



2

STS manufactures and tests the cards in its factory in France



3

STS delivers the cards to the Card Issuer who can test them

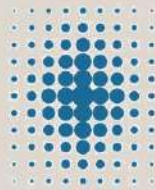




# About Smart Technology Services - STS

- ✓ Founded in 2013 in France
- ✓ All STS staff comes from Entrust Datacard and brings more than 20 years experience from the smart card industry
- ✓ Work with 80 customer sites worldwide
- ✓ Collaborate with multiple industrial and technology partners to allow offering turn-key solutions

**Dexerials**



FINGERPRINTS



Please visit <http://stservices.fr/> for further information

**TOPPAN FORMS**

**DNP**  
Dai Nippon Printing Co.,Ltd.

**GE** Giesecke & Devrient

**IDEMIA**  
augmented identity

**HOKA KAPPA** **HOKA CARD**  
PLASTIC CARD MANUFACTURER

**WAHYU KARTUMASINDO INTERNATIONAL**

**cpi card group**

**SELP**  
SMART CARDS AND SOLUTIONS

**THALES**

**SENTRY**

**MK smart**  
Focus makes the difference

**Card**  
BEAUTIFUL CARD

**etisalat**

**zwipe**

# About Smart Technology Services - STS

## 2 main activities

### Desktop Card Production & Personalization with the SI20, SI700, SE30 and SE1000

Standard cards and biometric cards



*SE30 & SE1000  
personalization*



*SI20 & SI700  
card embedding*



### Central Issuance systems support and second hand systems

- Spare parts, upgrades, specific adaptations and developments ...
- Second hand MPR5800s, refurbished and supplied with a 1-year warranty







*Thank you*

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- Thierry Buisson (CEO) [t.buisson@stservices.fr](mailto:t.buisson@stservices.fr) +33 6 0666 3928