



Smart Inserter 700 SI700

A versatile card production system for Contact, Dual Interface and Biometric Cards



Designed to target multiple markets including Financial, ID, Access Control, Telecom and others, the **SI700** is a desktop system able to embed chips, or fingerprint sensors into cards.

The **SI700** easily sits on a table thanks to its compact size

The **SI700** is made in France

Chip or sensor embedding in any position

Configuring the system for chips or for sensors only takes few minutes and just requires changing a toolkit.

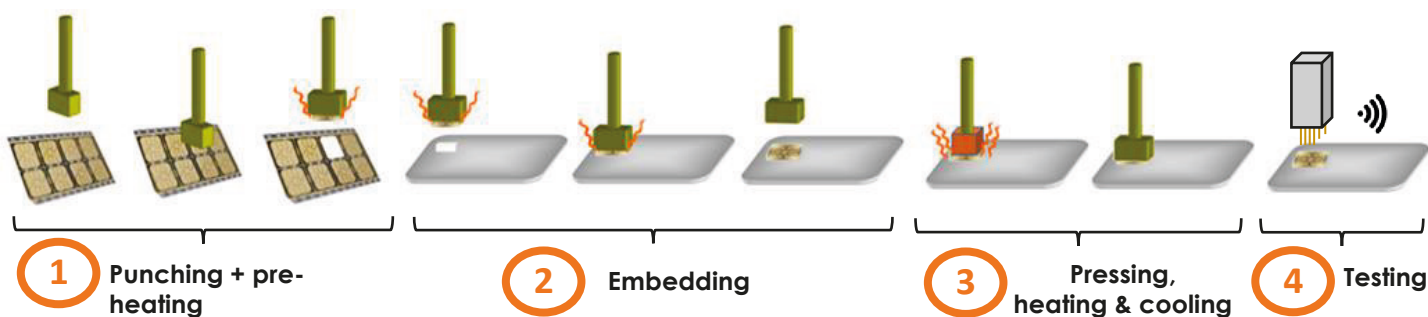
The system can embed fingerprint sensors in any position on pre-milled cards.



Fingerprint sensors can be located in various positions depending on the card inlay. The SI700 embedding position can be adjusted to solve this issue.

Chip or fingerprint sensor embedding is done in 4 steps

The card should be previously milled and the chip/sensor film should be laminated with glue



Smart Inserter 700 Specifications	
System Functionality	Implement either a chip, contact plate or biometric sensor on all the card surface except 1mm from the right and left edge of the card, and 2mm from the top and bottom of the card
Preliminary conditions	<ul style="list-style-type: none">- A cavity should be milled on the card, depending on the chip or sensor specification- The chip, contact plate or sensor film should be laminated with glue
Connecting technologies to the card inlay	2 supported technologies allow connecting the chip, contact plate or sensor to the contact pads of the card inlay: ACF glue (Anisotropic adhesive conductive glue), or Edgelink from Linxens
Rated Speed	Up to 700 cards/hour. Exact throughput depends on the exact time needed to press the chip, contact plate or sensor using the hot presser head stations
Chip or sensor cutting accuracy	± 30 µm. Cutting is performed using a tooling designed as per the chip/plate/sensor specification
Embedding Placement	± 50 µm. Embedding is performed using a pick&place system
Chip or sensor film	<ul style="list-style-type: none">- Standard S35, 35 mm (1.38 in.) - Pitch: 14.25, 9.5 mm (0.37 in.)
Presser heads temperature, pressure, time	<ul style="list-style-type: none">- From ambient to 250°C- Pressure force up to 6 bars- Pressure time up to 20 sec
Card Types Supported	ISO/IEC 7810 ID-1 Size; 30 mil (±10%)
Card Materials Supported	Polycarbonate, composite, PVC, ABS. The card material may influence the choice of the glue, and parameters used on the hot presser heads (temperature, pressure force, pressure time)
System dimensions	H 880 mm x W 450 mm x L 1550 mm with the tape storing the chip/contact plate/sensor film
Module weight	60 kg without the tape storing the chip, contact plate or sensor film
Power supply / Compressed air supply	120V / 240V, 50 or 60 Hz / Compressed air: 6 bars, 8 liters/minute

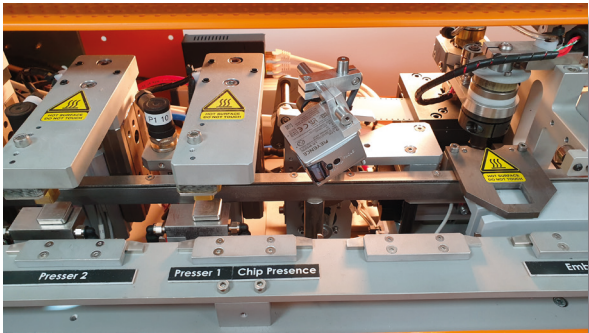
Several optional in-line quality control checks

The SI700 can integrate several optional features allowing:

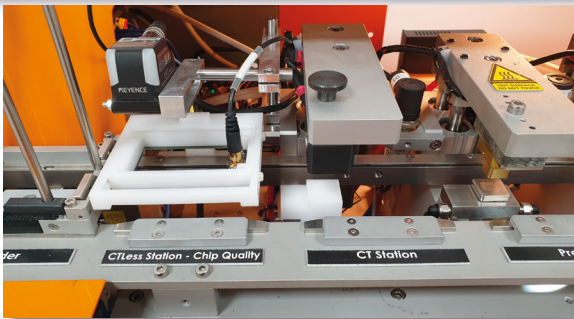
- checking the chip film or sensor film before punching
- checking the eventual presence of film protection before punching
- checking the presence of a cavity on the card before embedding
- checking the position of the chip or sensor after embedding
- testing the card through an ATR or/and ATS test
- checking the final card quality through vision inspection



Vision inspection of the chip/sensor film before punching



Vision inspection of the card before and after embedding



Contactless / contact test (ATS/ATR)
Card quality vision inspection

About Smart Technology Services (STS)

STS provides high level support services and card production & personalization solutions to card manufacturers and bureaus.

The company provides service support activities for card central issuance systems, and second hand systems. It also supplies the SE30 & SE1000, desktop card personalization systems, and the SI20, SM20, SPu20 and SI700, versatile card production systems for dual interface and biometric cards.