XE series

CENTRAL CARD ISSUANCE SOLUTIONS

The XE SERIES product line is based on modular HW / SW platform that allows to configure layout of the customization line and quickly implement standard plastic card production systems (ID Cards, Financial Cards, Loyalty Cards, etc) and customized production systems. In fact, it is possible to create non-redundant custom solutions that are created with the aim of having the maximum production performance and / or a complete range of card personalization technologies in the same machine.

Unlike the Pro Series, the XE SERIES line consists of complete personalization system defined by Customer on a single production line with the aim of reducing the complexity of connection between machines / modules and the timing of card handling between the different machines.

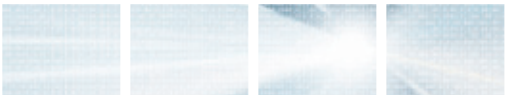
The Machine and User interfaces have been developed with new technologies in order to reduce the complexity of the infrastructure and simplify the User-Machine communication.

HMI (HUMAN MACHINE INTERFACE)

The new XE SERIES provides an User Interface based on a 5 " sized touch screen (resolution 800x480) that allows to manage all the configuration and machine setup functions very easily, due to the new window based hardware and software technology.
Another innovative aspect is availability of connection to the machine via a Web Based Interface (Internal Web Server) and to use a diagnostic powerful "System Diagnostics Manager".
Based on Virtual Network Computing Technology, it is also possible to connect remotely to the machine console.

SOFTWARE

- Multi-platform runtime for different operating systems (MS Windows, Linux, Mac OS);
- Interface to all most common databases based on Object Relational Mapping technology;
- Very simplified layout editing Object based;
- Production logging system based on Block Chain Technology (Operation and System).



ELECTRONIC COMPONENTS

- Architecture Multiple Instruction Multiple Data based on Multiple PLC (MIMD);
- Local closed network between the "n" personalization Modules via TCP / IP and UDP protocols;
- Supervisor based on "Smart PLC" with Ethernet and web based interface;
- Smart automation modules with dedicated drivers for Stepper and Brushless motors;
- Real-time multi-tasking operating system for high process performance, data processing and automation control.

MECHANICAL COMPONENTS

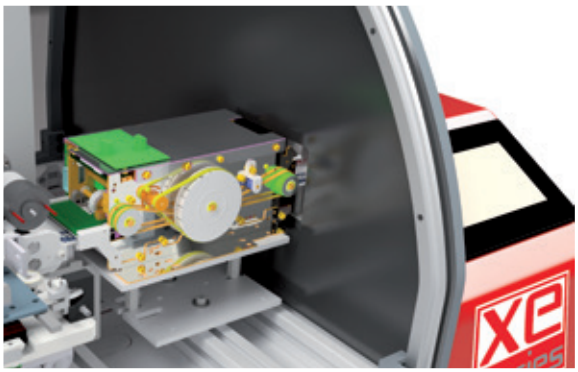
MAGNETIC STRIPE ENCODING

The encoding technology allows for encoding from one to three HiCo/LoCo tracks (Read/Write) with high-precision.
The encoding stations can be installed in-line, each performing independently and in sequence:

- Writing three magnetic tracks simultaneously. Rereading of tracks and data verification;
- Smart card encoding (ISO 7816/14443), read back function (optional).

Up to TWO magnetic stripe encoding stations can be configured in-line.

Performance: up to 1.200 cards per hour



SMART CARD MULTI-ENCODING

The electric encoding station allows for personalizing a wide range of contact and contactless smart cards. Inside the encoding area the card has one position to physically communicate with the chip and/or antenna. In case of contactless encoding only, it is possible to prevent the chip from touching the card surface. The chip and the antenna, are physically and logically independent from each other, making it possible to activate them independently.

Features:

- Smart card encoding (contact ISO 7816, contactless ISO 14443);
- Up to 6 independent slots in one station;
- Readers supported by drivers with PC/SC technology.

Performance: up to 1.000 cards per hour

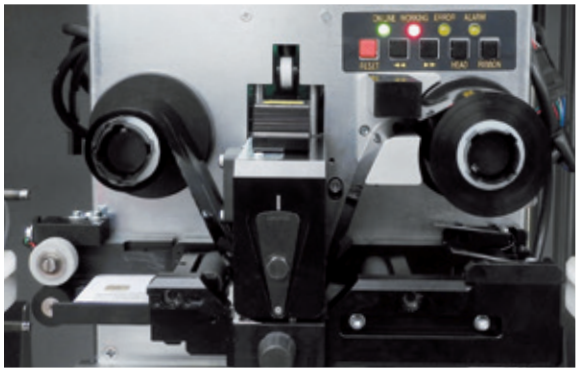
THERMAL PRINTING

This station, CIM proprietary technology, allows you to print photos, images, logos, barcode and texts, ensuring high printing quality. Individual print devices can be configured in series, depending on the personalization job.

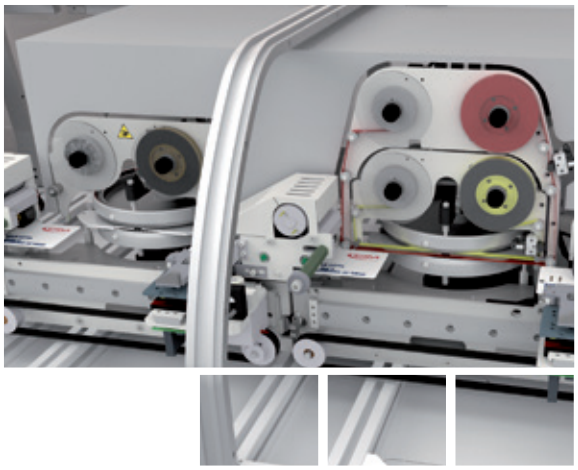
Features:

- Technology: thermal transfer and thermal sublimation;
- Edge-to-edge color printing;
- Printing resolution 300 dpi;
- Color dye sublimation ribbons (RFID protected);
- Monocolor black resin ribbons (RFID protected);
- In-line card cleaner.

Performance: up to 1.100 cards per hour



MECHANICAL COMPONENTS



EMBOSSING AND INDENTING

This station performs the personalization of the cards by embossing or indenting technology, with high precision. The character-carrying drum consists of 105 slots and has a durable and robust mechanism designed to support high production batches.

Features:

- 105-slot characters drum;
- ISO 7810 card format;
- Embossing system based on HPB (High Performance Bushless Motor).

Up to THREE embossing stations can be installed in-line, equipped with different sets of characters and infiller devices.

Performance: up to 900 c/h with banking format (3 lines, approx. 35 car.), and up to 1.000 c/h with standard format (2 lines, approx. 30 car.) With 2 Embossing stations.

INFILL

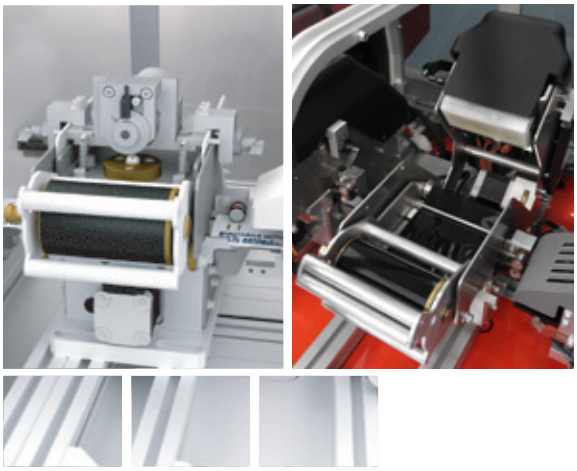
To improve the readability of the indented characters, an infill station is used. It consists of two infillers devices, rear indent and front indent, working alone or both on the same embossing station. The ribbons, are available in different colors and have a yield of up to 5.000 cards.
Up to TWO infill stations per drum can be installed.

TIPPER

The tipper station is used to improve the readability of the embossed characters. The ribbons are available in different colors and have a yield of up to 3.000 cards. A device inside the station regulates and optimizes the consumption of the ribbon. It can be set for each job.
The station is equipped with ribbon cartridge. Easy ribbons replacement.
Up to THREE tipper stations can be installed in-line (eg: different colors).

FLIP-OVER

Multiple flip-over devices available.



VISION INSPECTION & DATA COLLECTION

It is a very useful station for the visual check of the card type or to verify the personalization data matching. It can be installed in a single place or in several places along with the production line, usually after the input hopper and at the end of the process.

Features:

- From 1 to 4 CCD camera - high resolution image capture;
- Recognition of the graphics and geometric defects;
- Character OCR recognition;
- Barcode recognition and decoding.

CARD AFFIXING E MAILING

Flexible and reliable multi-station system solution for card matching, affixing, folding, enveloping and mailing. The solution has been developed with flexibility, easy of use and high throughput in mind.

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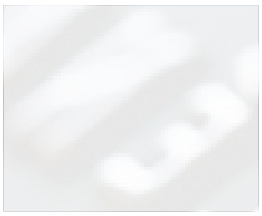
COVERING

The new XE SERIES design is based on combination of two or more basic elements (BIG and SMALL) in order to provide a cabinet for any more or less complex composition of personalization Modules. The modular structure is characterized by electronic components produced for industrial market, so that they are robust and being easily integrated.

The structure of all parts that composes XE SERIES product family has been designed in order to have maximum ease on accessing, consumables changing and maintenance operating. In fact, we find wide front doors that do not limit the actions of extraction and insertion of the cartridges of the consumable ribbons. Rear doors allow to perform all the maintenance operations without having to disassemble the machine cabinet.

All illustrations, descriptions and technical specifications are subject to change without prior notice. XE SERIES ENG Rev. 01-03/19



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