

PRINT PERFORMANCE

- Print width: 53 mm (SWING X2)
107 mm (SWING X4)
128 mm (SWING X5)
- Print length: up to 400 mm or 600 mm.
- Max single text extension: 400 mm.
- Resolution: 12 dots/mm (300 d.p.i.).
- Printing speed: up to 400 mm/sec on plastic film,
up to 250 mm/sec on paper (medical sector) film.
- Carriage return travel speed: up to 600 mm/sec.
- Number of print repetitions: programmable up to 99 prints.
- Printing pitch: programmable.
- Incorporated and standard "Ribbon saving" function.
- Automatic re-processing of the date, hour and minutes (HH:MM),
without reducing the marking rate.

MODELS

- SWING X2.40 with max. print area 53 x 400 mm.
- SWING X2.60 with max. print area 53 x 600 mm.
- SWING X22.40 with max. print area 2 x 53 x 200 mm.
(with double printing head).
- SWING X22.60 with max. print area 2 x 53 x 300 mm.
(with double printing head).
- SWING X4.40 with max. print area 107 x 400 mm.
- SWING X4.60 with max. print area 107 x 600 mm.
- SWING X5.40 with max. print area 128 x 400 mm.
(for large area texts).

Supporting brackets are available, suitable for the most known packaging machines of the market.

	53 mm (2")	107 mm (4")	128 mm (5")
corsa/stroke 400 mm	✓	✓	✓
corsa/stroke 600 mm	✓	✓	
corsa/stroke 400 mm doppia testina/double head	✓		
corsa/stroke 600 mm doppia testina/double head	✓		

Comparison table of the several available models

TECHNICAL CHARACTERISTICS

PRINTABLE TEXTS:

- Texts with alphanumeric characters programmable character height. Font: Internal Arial Font; Windows true type fonts. Normal, Bold, Italic. Positive and negative printing. Symbols and characters Unicode in the various languages (UTF-8 code).
- Bar codes: EAN-13, EAN-8, EAN-128, UPC-A, 2/5 Interleaved, Code 39, Code 128 (A,C), ITF-14, PARAF, HIBC-43, Binary.
- 2D codes: Datamatrix, PDF417, QR-Code, Databar.
- Graphics: BMP, PNG, TIF, JPEG, PCX.
- Text orientation: in the 4 quadrants.

THERMAL TRANSFER RIBBON:

- Inked thermal ribbons packaged in rolls 1,000 m long and up to 130 mm wide.
- For the system to work smoothly use original Eidos ribbons.

ELECTRONIC UNIT:

- 5.7" colour graphic display TFT with touch screen.
- "ARM" microprocessor. SMD technology with program and texts recorded in FLASH Memory.
- USB-Host Port to manage USB type memory.
- Ethernet LAN 10/100 Port (Standard). For link to the Ethernet-WiFi devices in the wireless connection
- For connection to an external P.C: RS-232 serial interface programmable up to 115200 baud.
- SYNC-24: synchronous signals. Logical signals completely opto-isolated (4 inputs and 4 outputs). Passive type circuits (not powered) suitable to work at a voltage of 24 V. For print command and for warning announcement.
- HIGH POWER model (standard): for high performances.

EXTERNAL POWER SUPPLY:

- Electrical: 220 V a.c. 50 Hz. or 110 V a.c. 60 Hz. autorange.
- Power: 350 VA max.
- Compressed air: de-lubricated, filtered and regulated at 6 Bar.
- Peak consumption: 10 l/min.

ENVIRONMENTAL CONDITIONS:

- Environmental temperature: from 5°C to 40°C.
- relative humidity: from 10% to 70% non condensing.

SAFETY STANDARD:

- The system complies with the provisions of current regulation regarding "Machine Safety" and CE marking.

"MADE IN ITALY"

The SWING X series are designed and produced entirely in Italy by Eidos s.p.a.

Swing

X series

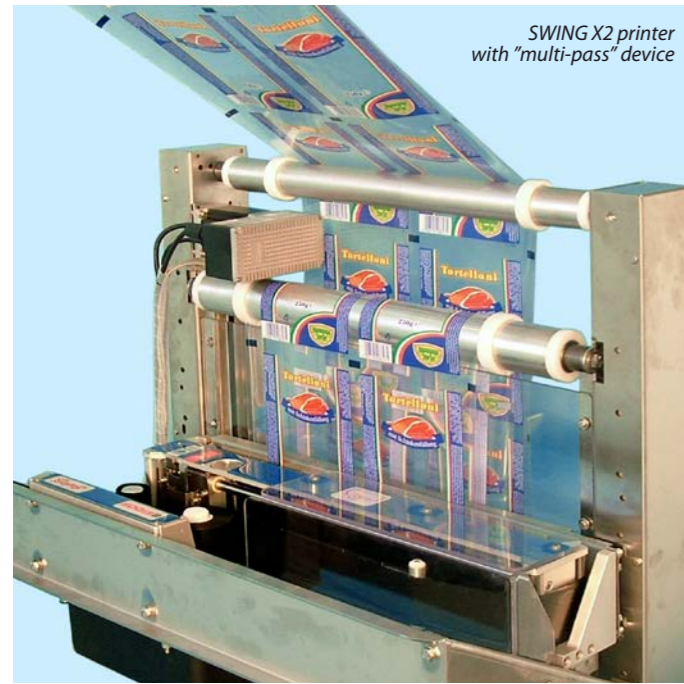


THERMAL TRANSFER PRINTER FOR "MULTI-TRACKS" PACKAGING MACHINES

- For crossway mounting on the thermo-forming and thermo-sealing machines.
- It replaces the mechanical date coders at comparable cost.
- No "cliché" required, so no cliché change operation required.
- Clean environment: it works with dry ink.
- Print Unit very light and compact, easy to be installed.
- "Multi-pass" printing device available (till 4 passes).
- Protecting devices:
for wet environments: milk, dairy and fresh food industries.
for dusty environments: feedstuffs, fertilizers.
for cold environments.

OVERPRINTING OF VARIABLE DATA ON PACKAGING FILM

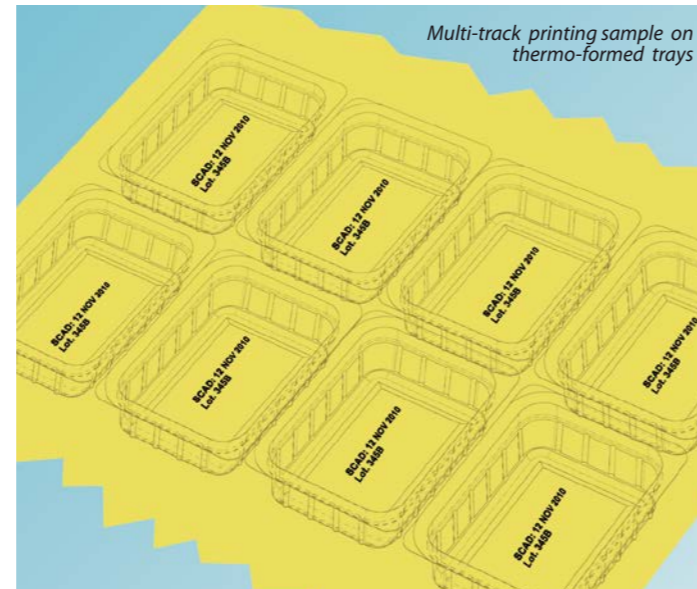
The **SWING X series** are electronic "thermal transfer" printers able to automatically and directly write on plastic or paper (medical) film used in packaging machines ("Thermo-forming" and "Thermo-sealing" types). They are used to encode with expiring date, barcode and logo the various production lots with extreme flexibility and high print quality and speed. The printing is made directly on the production line.



SWING X2 printer with "multi-pass" device

"MULTI-PASS" MOTORIZED DEVICE

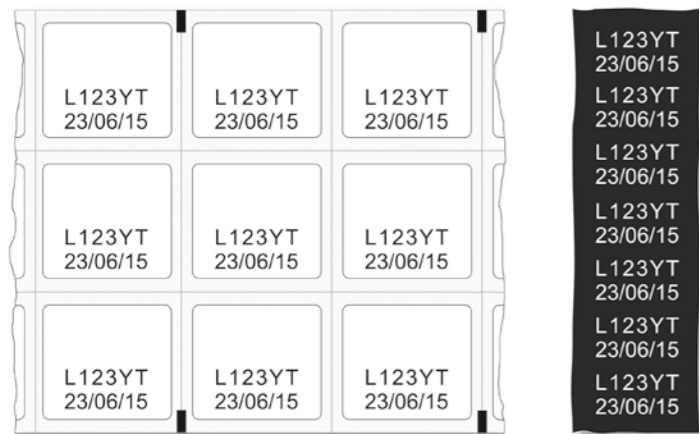
A special optional device has been designed, able to perform dual-pass, triple-pass and even quadruple-pass printing. In this way (into the case of "Dual-Pass"), during the stop time for sealing of the film, a first printing pass is performed and then a second pass at a fixed distance from the first one. In the case of the triple-pass, during the stop time of the film for sealing, the following steps are performed: printing of the first track, shifting of the film of 1/3 of pitch, printing of the second track, shifting of a further 1/3 of pitch and, at last, printing of the third track. So **SWING X series** with "multi-pass" device enables the multiple printing of texts, not only in the cross way, but also in the longitudinal way.



Multi-track printing sample on thermo-formed trays

"MULTI-TRACK" PRINT FUNCTION

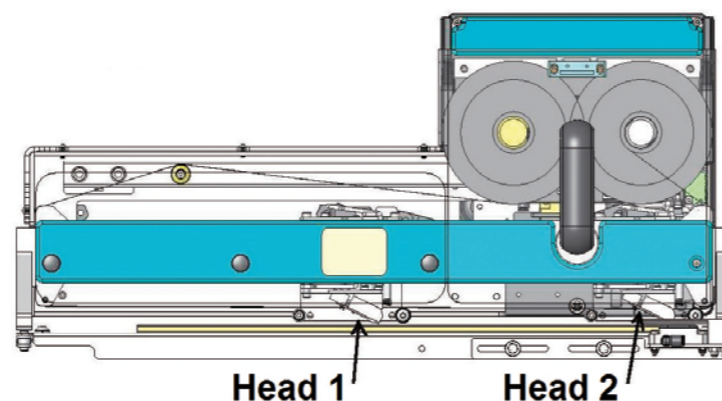
The Print Unit is installed crossways to the machine. During the stop time for sealing, the print head prints texts repeated a number of times, corresponding to the number of "tracks" to be printed. It can print up to a width of 53 mm (model X2), 107 mm (model X4) or 128 mm (model X5). The total stroke can be 400 mm (for 420 mm film width) or 600 mm (for 520 mm or more film width). Printing takes place at high speed and with the total saving of the thermal ribbon (both between one print and another and between the last print and the first of the next cycle). The return stroke of the print head takes place while the film on the packaging machine advances, so saving very precious time.



The thermal Ribbon is automatically controlled for the best ribbon-saving performance

MODEL WITH "DOUBLE PRINTING HEAD"

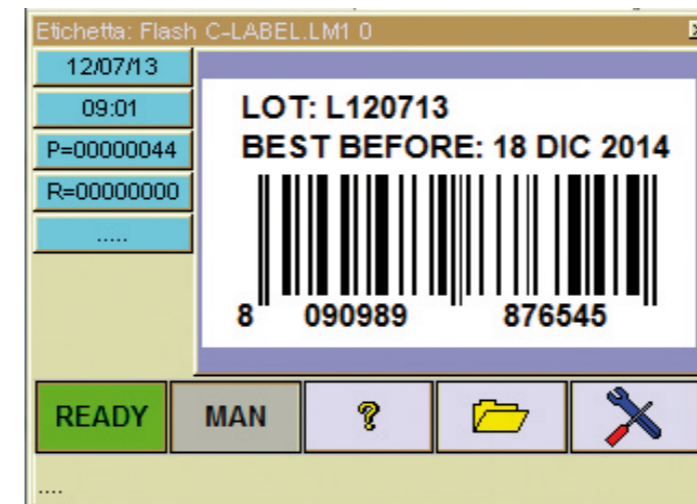
The model with "double printing head" mounts two print heads. The heads print in parallel the same text, running a stroke that is half the equivalent of a one head printer. The first head prints the first half of the film width, and the second head prints the second half of the film. So it is possible to half the print time and to increase very much the working rate. The distance between the heads is easily adjustable. The "double-head" model is suitable to print both even and odd number of tracks. And it is specially suited when the "multi-pass" device is used.



Swing X-Series model with double print head

PECULIAR CHARACTERISTICS OF SWING X series

- The Print Unit, very compact and light, enables the installation of **SWING X series** even in the most difficult places. It is specially suited to replace the "mechanical markers" of the old style, with the same or smaller overall size.
- It has the well known advantages of the **electronic printing** (no "cliché" required), so it is possible to change very easily the texts with the touch-screen and to print the variable data (as hours and minutes), with continuous updating, with no detriment of the print cycle. Moreover the print quality is very good because the print head has a 12 dots/mm definition.
- The **cost** of the **thermal ribbons**, used on the **SWING X series**, is **nearly the half** of that of the foils of the hot stamping machines.



Interactive Colour Graphic display

DATA ENTRY "CONSOLE"

The interactive colour graphic display (touch screen) simplifies the operation of locally changing data and enables the on-line control of what the machine is printing. The text of the label is displayed on the screen and can also be enlarged (zoom). The high capacity internal FLASH memory enables a large number of label texts to be stored, including those with logos. It can be easily interfaced to all P.C. by means of a USB memory. The data that usually needs to be set by the operator are hours and minutes (HH:MM), variable Data, Lot, Nr. progressive, Nr. etc. The text is usually processed externally by means of an EIDOS "Easycode" type software. For simple texts, the EDIT function on board of the printer can be used.

SYSTEM CONFIGURATIONS

• **"Date" mode - local EDIT function:** Many different texts have been prepared in the memory of the printer. A large choice of print configurations (for: expiring date, lot number, date + lot, etc.) are ready to be recalled by the operator in a very easy way. So it is possible to install and start up the printer with no need of a specialized technician.

• **"Stand-alone" mode:** The printer can function also if not directly connected to a computer. The data is stored in non-volatile memories. When switched on, the machine starts up with the same data as when it was switched off. New texts can be inserted in the printer by means of a USB Memory Card.

• **"On-line" mode:** Another way of working is a connection with an external processor. The EASYCODE or STARCODE software must be installed on the P.C, or a "custom" software can be developed by the customer by using the E-LIB libraries. The connection (standard) can take place in three ways:

- Ethernet TCP/IP type connection by means of a cable.
- Wireless connection type 802-11g.
- Serial connection type RS232 or RS422 towards P.L.C.

SOFTWARE TO MANAGE THE PRINTER

EASYCODE it is a powerful program created by EIDOS, in a Windows® environment that enables text to be set, memorised, changed and printed in an easy and guided way for the operator (available at different levels). It transmits the label text and work parameters to the connected printer (Serial connection or Wi-Fi). The printer also interfaces with all of the other main label creation programs (CODESOFT®, LABELVIEW®, EASYLABEL®, NICELABEL®, BARTENDER®, BAR-ONE®.) by means of an emulation program SATO and ZEBRA ZPLII type.

E-LIB: availability of libraries .DLL, to be used in User-Programs, to facilitate the software engineer to interface the printer with the central computer system.

STARCODE 7®: patented software for the centralised management of Eidos printers. It manages the centralised file; it monitors the lots in progress and production at all times, pointing out the jobs flow and can manage till 24 printers.



Printing of large area texts with SWING X5 40