

PRINTING ON PLASTIC CONTAINERS

GUIDE TO THE
CHOICE OF RIBBONS
AND PRINTING
METHODS
FOR STRONG AND
DURABLE PRINTS.



Due to the availability of the **I-ROLLER** and the **H-PAD**, the new types of Coditherm printers, you can now get texts very resistant and durable on plastic containers and pallets.

I-ROLLER works with a **Hot Roller** transfer and is suitable to make prints, even large, on surfaces free of lateral encumbrance.

The **H-PAD** works with an **Hot Pad** and is suitable to make prints smaller in size in the "recess" areas. They are the typical areas of the structured containers.

Depending on the kind of thermal ribbon used it is possible to obtain different levels of "durability".

PRINTING WITH ROLLER OR PAD COATED WITH CONDUCTIVE RUBBER.

The print executed by roller or pad coated with conductive rubber does not tend to deform the surface, so the result is aesthetically excellent. The heat transfer is, however, a bit less than that which is obtained with the roller or pad entirely metallic.

a) PRINTS OBTAINED WITH A SINGLE PASS

In this case you print directly on the colored surface of the plastic container. You use the color **BLACK** if printing on clear surfaces and the **WHITE** color if printing on dark surfaces.

Printing with the RINK method:

- **ST 110 + 800 Series:** with average resistance to scratching and solvents.
- **ST 110 + 950 Series:** with excellent covering of white. Excellent solvent resistance. Poor scratch resistance.
- **ST 110 + 850 Series:** with high resistance to scratching and solvents. It requires high transfer temperature.



Example of printing on P.E.

b) PRINTS OBTAINED WITH DOUBLE PASS: TRANSPARENT BACKGROUND + COLOR.

- **ST 020 + 490 Series:** with high resistance to scratching and solvents



Surface to be printed



1st printing pass



2ndt printing pass

c) PRINTS OBTAINED WITH DOUBLE PASS: WHITE BACKGROUND + BLACK.

In this case a layer of opaque white color is applied to the part.

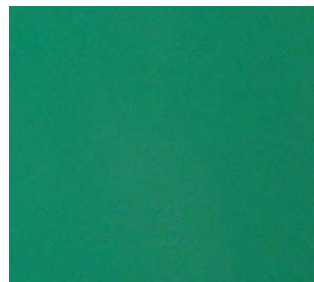
The second step is performed with the transparent receptor + color (white or black).

Printing with the POSY-Hard method:

- 1st pass: **White BY 890.**
- 2nd pass: **ST 020 + 490 Series.**

The two stages can be performed in two ways:

- **Whit a single printer:** first you have to print the white background on all containers, then after you have changed the ribbons, you overprint the containers with colored text.
- **With two printers in parallel:** Each container is previously printed with the white background by the Printer 1. Immediately after it is over-printed with colored text, with the Printer 2.



Surface to be printed



1st printing pass



2nd printing pass

PRINTING WITH METALLIC ROLLER OR PAD.

The printing done with a integrally metal roller or pad ensures the maximum durability. The high temperature, combined with the excellent transmission of the heat and high pressure, causes the surface of the plastic arrivals to the fusion of the surface layer.

The result is that of a printing area slightly hollowed.

This technique only works with "single pass" method and, at the moment, only with the ribbon Series 850D.

The plastic must be of low melting temperature type, that is **typically P.E.**

Also the thickness of the plastic must be up to 4mm max, in order to allow the plastic surface to perfectly adapt to the planarity of the metallic pad (or roller).

a) PRINTS OBTAINED WITH I-ROLLER withm metal roller.

It is used for the printing of rectangular areas of medium dimension (typically 50 x 200 mm). You use the color BLACK if printing on clear surfaces and the color WHITE when printing on dark surfaces.

Print with RINK method:

- **ST 110 + 850 Series:** with high resistance to scratching and solvents.



Example of printing whit metallic roller

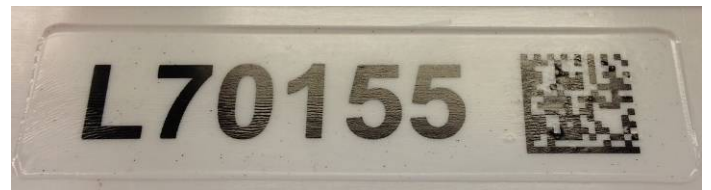
b) PRINTS OBTAINED WITH H-PAD with metallic pad.

It is used for the printing inside the "recessed" areas of the containers. These are small rectangular areas with rounded edges..

You use the color BLACK if printing on clear surfaces and the color WHITE when printing on dark surfaces.

Print with RINK method:

- **ST 110 + 850 Series:** with high resistance to scratching and solvents.



Example of printing whit metallic pad