

INSTRUCTIONS FOR USE

System PPP-MF + System PPP-MF-k with compensated MM-Grid

for presses with single or double circumference of impression cylinders

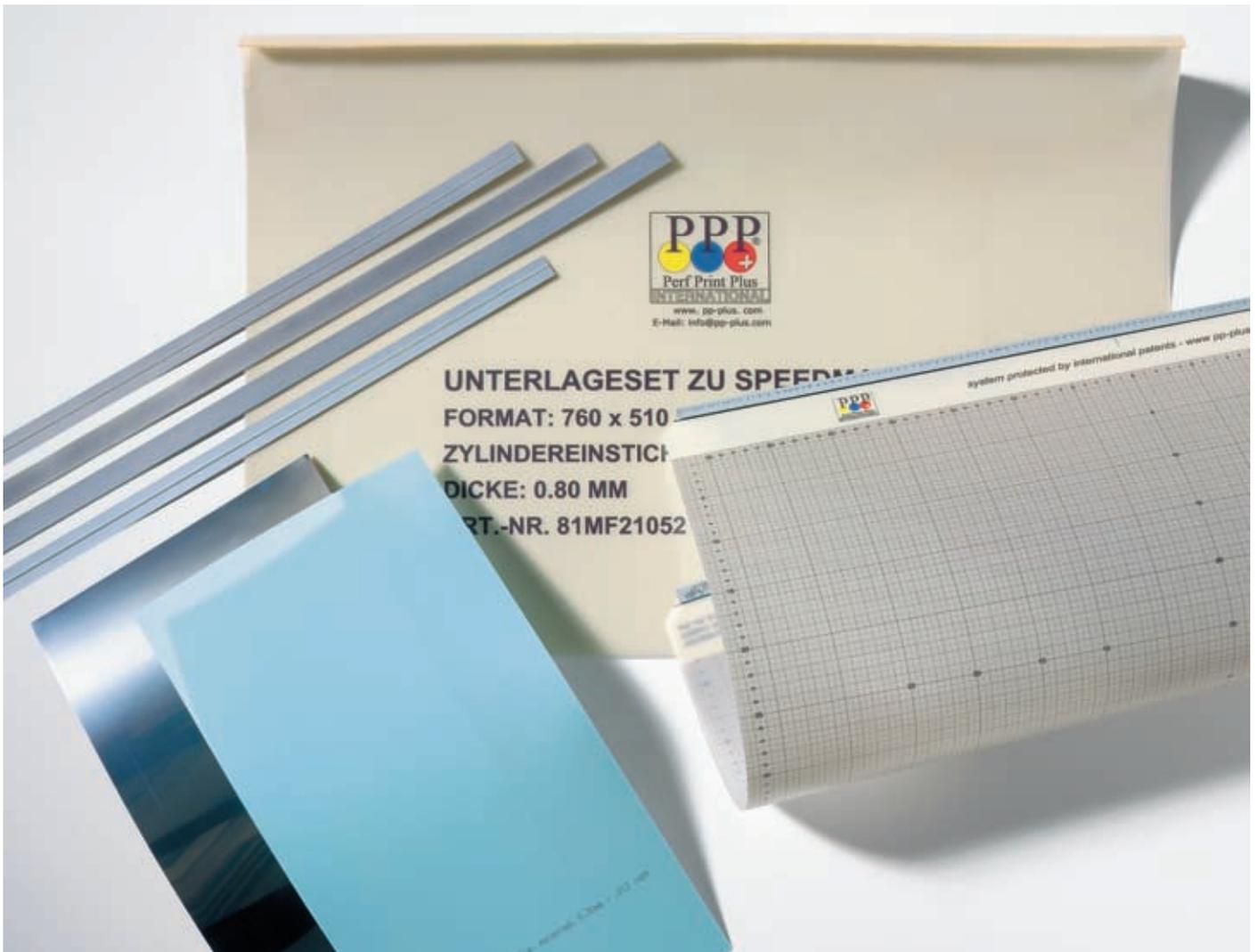
- for envelope printing
- for partial ink transfer
- for partial coat transfer
- for perforating, cutting, partial cutting, die-cutting, slit-scoring and scoring, embossing



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a) PPP-MF + PPP-MF-k: Perforating, cutting, die-cutting and slit-scoring in offset printing presses

These functions are performed from the blanket cylinder against the protected impression cylinder (impression cylinders with double circumference have to be protected on 2 positions)

The materials

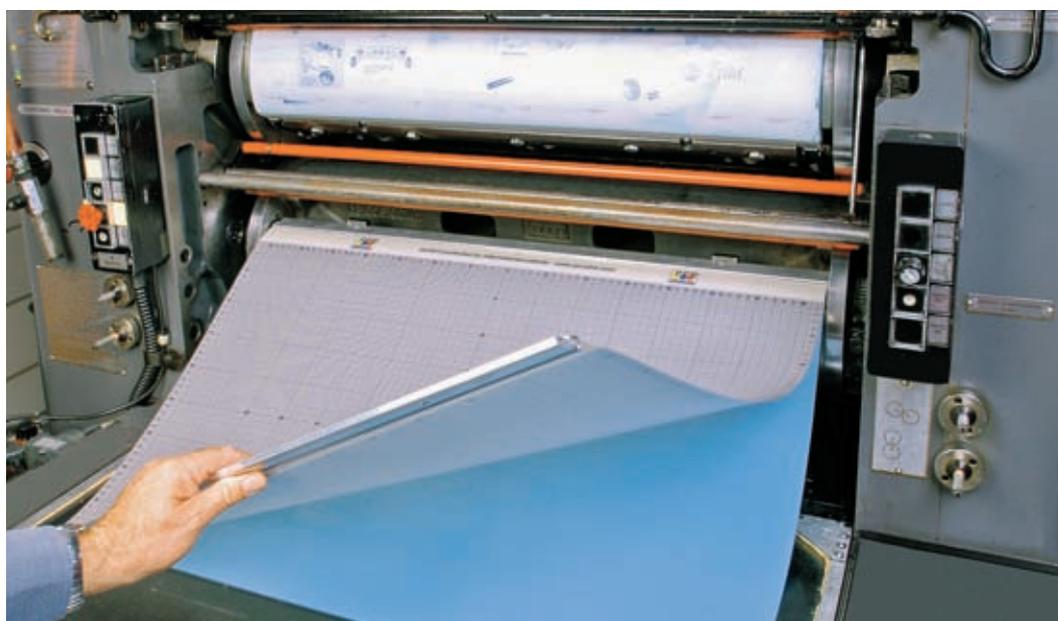
Base set	made to the right thickness in order to compensate for the height of the cylinder bearer and is ready for immediate use
Base foil	with integral millimeter grid for easy positioning of the forms/rules (in the MF-k version compensated)
Accessories	Perforation rules in different lengths (31 cm/62 cm/74 cm), with 6/8/12/16 or 34 teeth, centred or side perforation Cutting rules, scoring rules, back rules, slit rules for scoring Standard forms for cross-/angle and T-perforation/cutting Special forms: on demand
Protection foils	for runs of >50 000 samples for covering the impression cylinder
Protection plates	for runs of >500 000 samples for the protection of the impression cylinder
Perforator plates	for runs of >500 000 samples with a rough surface for covering the impression cylinder

Where are the different materials installed in the press?

Blanket cylinder	The base set and the base foil are installed on the blanket cylinder (instead of the blanket). The perforating/cutting/die-cutting forms are stuck directly on the base foil. Possibilities of combination: perforation, cutting, die-cutting and slit-scoring: individual use or in combination. Scoring: due to the different height of the forms we recommend to always score on a separate printing unit or as an additional printing process.
Impression cylinder	Protection plates and protection foils Impression cylinders with double circumference have to be fully protected on 2 positions

1. Installation of the base foil with the standardized base set

- 1a Remove the blanket and the packing from the blanket cylinder.
- 1b Hook the base foil into the front clamping bar holder of the blanket cylinder. To provide for this effect, the base foil is supplied with the required bar or is appropriately prepared to permit hooking into the clamping device.
- 1c Slip the base set under the base foil, and fix it into the holding device. A double-sided adhesive tape is found on the inside of the edged foil. Remove the protection paper and attach the adhesive tape to the cylinder canal.



Section 1

1d Inch the cylinder forward until the rear clamping bar of the base foil can be hooked into the bar holder on the blanket cylinder. For precision installation of the base foil, the bars have to be installed strictly parallel to the cylinder gap.

Important for clamping: Clamp the base foil on the cylinder. Clamp it tightly, but do not apply (undue) force. Check the foil before each re-use.

Useful practical tips

In order to affix the protection plates uniformly without the formation of air bubbles, and with optimum adhesion on the impression cylinder, mount them on the impression cylinder prior to removing the blanket.

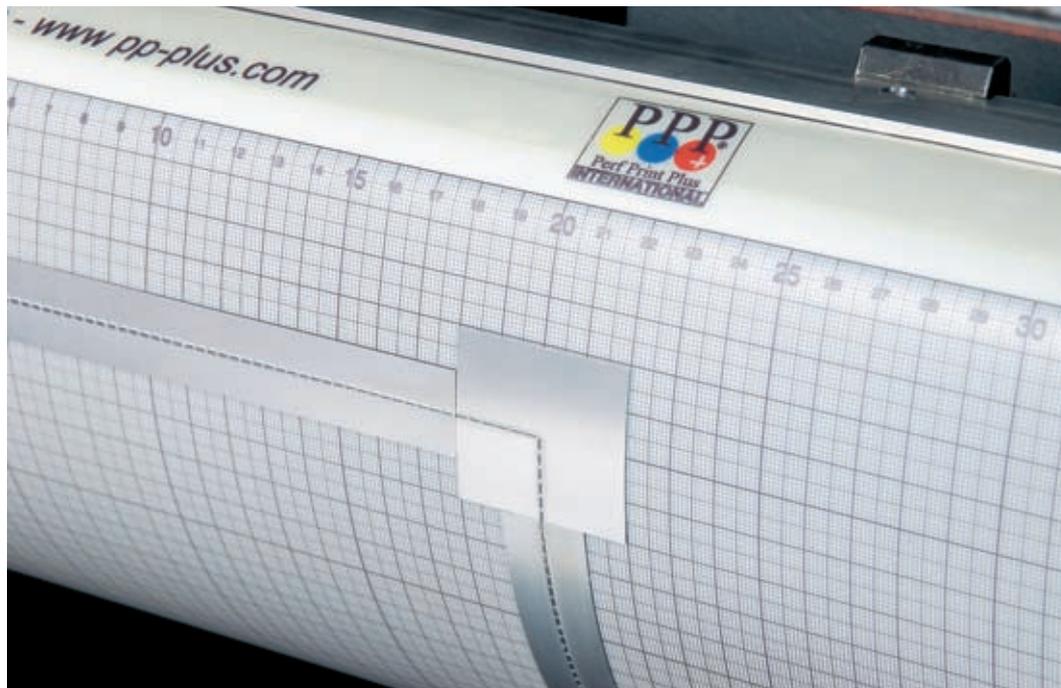
1. Thoroughly clean the impression cylinder (**ensure that it is absolutely oil free and without silicone residue. Do not use ink solvent!**) **Attention: remove oily residue from oil-removing detergents (AII and AIII products).**
2. Manually press the protection plates onto the impression cylinder.
3. Prior to removing the rubber blanket, reduce the pressure by 0,20 mm, and firmly press on the protection plates by way of a few turns with the pressure applied.
Affix the protection plates at the front and rear, using adhesive tape (also refer to point 3a+b).
4. Subsequently, proceed with step 1a.

2. Positioning of the forms for perforating/cutting/die-cutting and slit-scoring

2a The base foil is manufactured with an integral millimeter grid. This makes positioning easier as the exact position can be measured.

The forms can be stuck directly on the installed base foil (to increase safety secure the formes with tape)
Possible corrections can also be done easily thanks to the millimeter grid.

ATTENTION: As the work is done from the blanket cylinder against the impression cylinder, the formes must be installed laterally reversed (see also Tips and Tricks section on page 7).



2b Relieve the blanket cylinder from printing pressure.

2c Increase the pressure in small steps of 1–2/100 mm, until the paper is perforated at minimum pressure. Perforation can be performed without pressure.

2d Check the perforation of the first 2000 to 3000 printed sheets more frequently.
Increase the pressure by 1/100 mm only if necessary.

b) PPP-MF + PPP-MF-k: Mounting of the scoring and embossing forms in offset printing presses

- a. Same as 1 (but without «PPP® base set» = do not apply 1c).
- b. Position a protection plate or a protection foil on the impression cylinder in every place where the scoring or embossing forms make contact with the cylinder.
- c. Stick the PPP backrule directly on the protection foil or the protection plate.
- d. Relieve the blanket cylinder from printing pressure.
- e. Increase the pressure in small steps of 1–2/100 mm, until the embossing and/or scoring contours are clearly visible.



3. Mounting of the protection plates on the impression cylinder

3a Stick the protection plates on the impression cylinder (the plates are supplied with a double sided adhesive tape). Be aware that the impression cylinder is absolutely free of any grease. If necessary, clean it with isopropyl alcohol, do not use ink solvent for cleaning the base foil.

NOTE: double circumference impression cylinders: protection on 2 positions!

After a longer standstill of the press (e.g. over night) check the proper adhesion of the forms before the next run. If necessary, change the forms.

3b Secure leading and trailing edges of the protection plates with adhesive tape.

We recommend the following: Tesa no. 4104, white, width 38 mm.

PPP-MF + PPP-MF-k: For partial ink and coat transfer

Generally, this function is performed more or less the same as for perforating, cutting and die-cutting. Instead of the forms, a self-adhesive blanket is used for the transfer of ink or coat to the paper.

The materials

Base set	made in the right thickness in order to compensate for the height of the cylinder bearer; supplied ready for immediate use
Base foil	with integral millimeter grid for easy positioning of the self adhesive blanket
Self-adhesive blanket	for the transfer of the ink or coat

Where are the different materials installed in the press?

Blanket cylinder (printing unit) or printing cylinder (coating unit)	The base set and the base foil are installed on the blanket cylinder (instead of the blanket). The self adhesive blanket can be stuck directly on the base foil.
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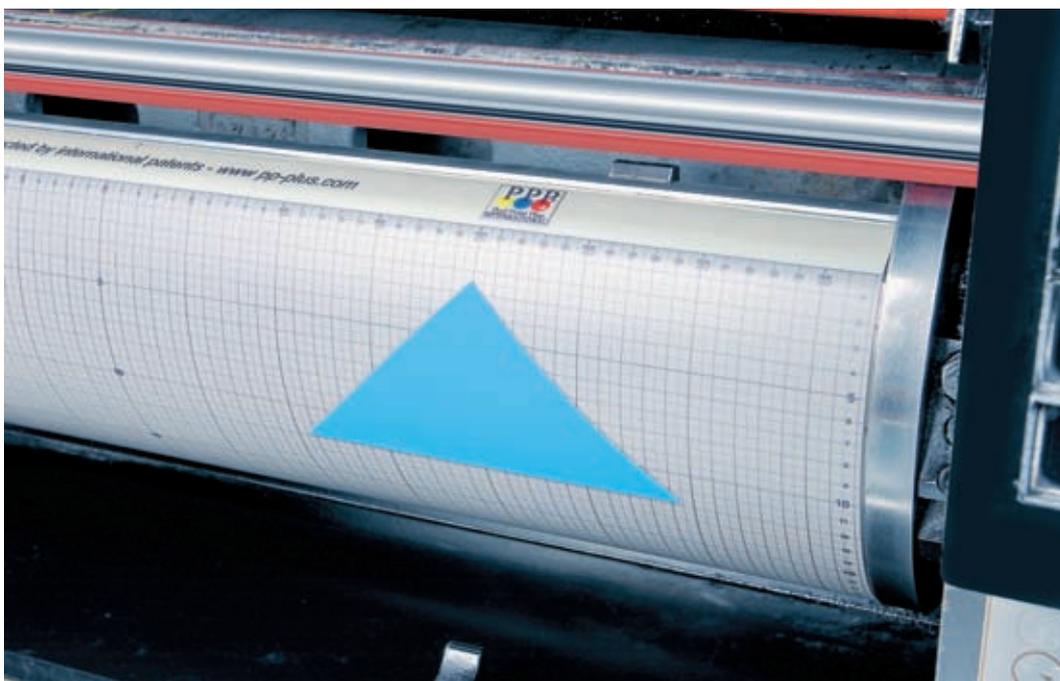
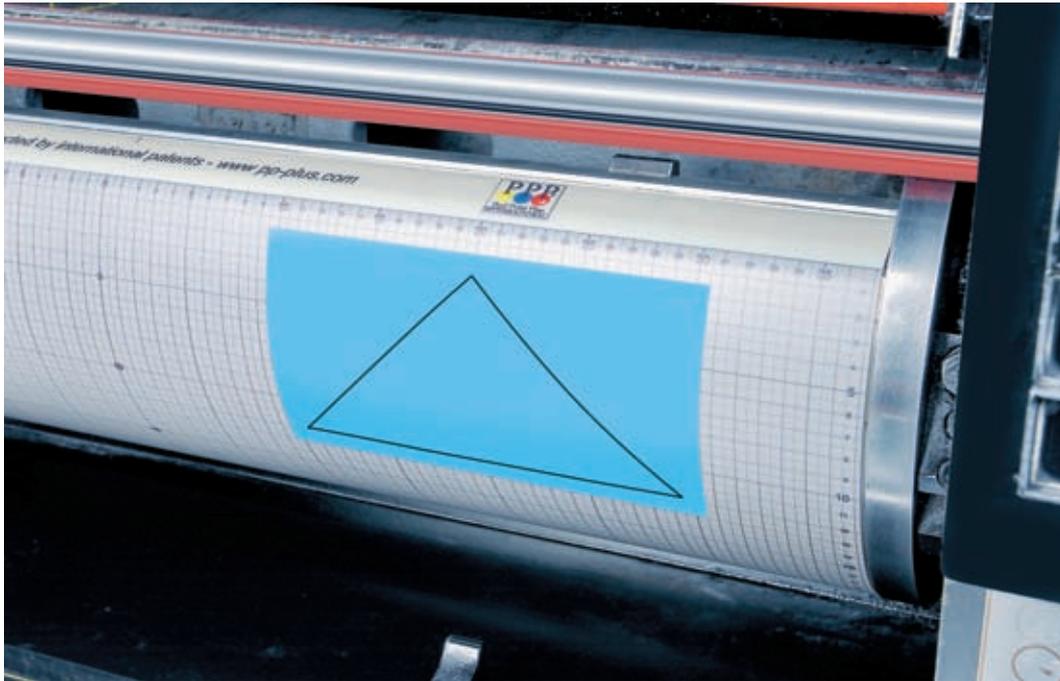
1. Installation of the base foil with the standardized base set

The installation of the base foil with the standardized base set is exactly the same as described in chapter 1, page 3.

2. Positioning of the self adhesive blanket for partial coat transfer in offset presses

2a The self adhesive blanket is stuck directly on the base foil. With an impression of the image on the rubber blanket it can be accurately determined where the coating is subsequently to be transferred.

2b The parts around the subsequent coating elements are then cut out. Peel off the unnecessary parts of the blanket. Coat transfer is done in a controlled manner using the rubber blanket.



3. Positioning of the self adhesive blanket for partial ink transfer

3a As for partial coat transfer the blanket is fixed on the base foil where the ink is to be transferred. There is of course no need to cut the image.

PPP – Tips and tricks for practical application

1. Installation of the base set

In order to ensure that the base set can not move, it is provided with a double-sided adhesive tape on the inside of the edged foil.

2. Scoring and embossing

During scoring, affix the back rule directly on the protection plate on the impression cylinder. This will guarantee absolutely reliable production.

3. Positioning outside the press

Take the sheet straight out of the delivery, turn 180° and turn over once. Place it on a luminous table in this position and place the base foil directly on the sheet. Due to the fact that the base foil is transparent, the position of the perforation/cutting is visible and can be marked directly on the millimeter grid of the base foil. Affix the forms appropriately and make any required corrections directly in the press.

When clamping the prepared base foil on the cylinder, it can happen that, due to the circumference of the cylinder, the forms come off, therefore secure them with tape before mounting the foil. (Tesa 4105 from your PPP agent).

4. Correct positioning

In perfecting presses: based on the sheet guide, take into account whether the forms should be fitted right or laterally reversed.

5. Checking the base foil

Although the manufacture of the base foils, particularly the bar clamping, is subject to strict quality control, it is important to check the conditions of the foil before each use. This can be undertaken easily and quickly: each supplied base foil is marked with a thick black line along the bar. Each time a foil is newly clamped, check whether the line is still running closely along the bar. In the event that parts of the foil are visible between the line and the bar, the film has moved in the bar (as a result of an excessive pulling effect in the press). Do not use these foils as they may tear out.

6. In which unit shall perforation work be done?

As a rule, perforation takes place in the last unit. In presses equipped for turning, the perforation can also take place in the printing unit upstream of the turn, as the adhesion of the protection plates is better ensured on smooth cylinders (no rough cylinder surface). It is also possible to perforate in the first unit. Die-cutting is only possible in the last unit of the press.

7. Cleaning the impression cylinder

Clean the impression cylinder thoroughly. It has to be absolutely free of oil. No silicon or detergents (class AII or AIII products) should be used which may leave an oil-residue.

8. Cleaning the base foil

Use a film cleaner for cleaning the base foil. IMPORTANT: Never clean it with acetone or products containing acetone!

9. Even clamping of the base foil with bars

When clamping the base foil, watch out that the clamping bars are fastened absolutely parallel to the cylinder and equally throughout the entire width.

