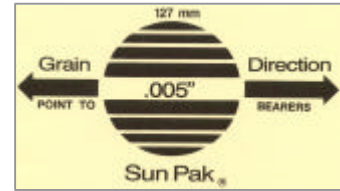




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# Press Packing Application Guide



## Product Overviews and Applications

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**Press Packing:** Precision built and engineered, Sunshine Press Packing papers are used in the pressroom to prepare a press for printing. Packing is used to build up the plate and blanket cylinder to the proper diameters or height and insure the best image quality. Packing creates the proper "balance of pressure" or "squeeze" between the inked plate and the surface to which it is applied.

Careful attention to the packing relationship between the plate cylinder and the blanket cylinder will reduce waste, make-ready time and assist the pressman in delivering a quality-printed project.

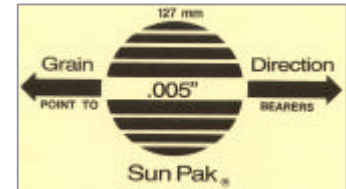
The skilled printing craftsman prefers packing paper characteristics, which include a special fiber and finish recipe for strength, resiliency, durability, smoothness, and caliper uniformity. Sunshine has it.

**Example:** If the plate cylinder is undercut .016 inch, and the plate "mics" out at .010 inch, this indicates a need for .006 inch of packing if the plate is to be packed evenly with the bearer. More packing will, of course, be needed if the plate is to be packed higher than the bearer. Similar measurements on the blanket cylinder undercut will yield the proper caliber requirement for packing that cylinder.

**SunShine Press Packing Papers** are made for only one use - to achieve correct printing pressures on a press run. Our focus is quality, reliability, and performance of our products.

*SunShine Packing papers deliver value.*

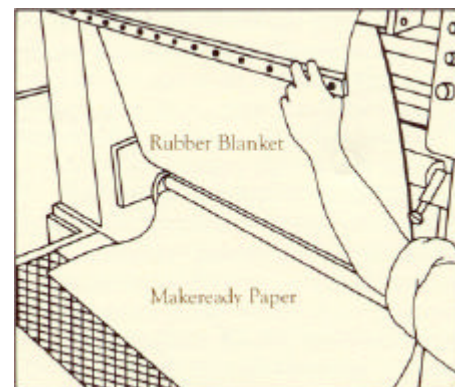




## **Attaining Print Quality With SunShine Press Packing**

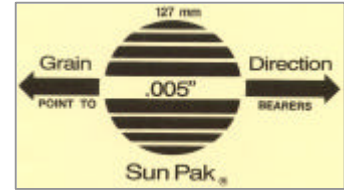
**Press Packing:** There is an intimate relationship between the lowly packing paper and problems the pressman fights with each and every job he prints. The information provided on this and the following pages is designed to help the printer reduce costly downtime, increase productivity, and solve problems when they do arise.

More than 80% of longer than normal make-ready involves problems associated with or involving packing. The packing paper quality and the packing process are essential to quality print output. Proper packing is critically important to every aspect of your print job. Packing sets-up the relationship between the plate cylinder and the blanket cylinder. Essentially it adjusts the "print length", and creates the printing diameter of each cylinder. The amount of packing paper required depends on the press manufacturer. As a rule, the packing should allow approximately .004 inch of "squeeze" between the plate and the blanket. Some presses require packing over the bearer (i.e.: +.002 inch's over bearer) and some require packing to a level just under the bearers. It is extremely important to follow the manufacturer's recommendations, as incorrect packing will cause an imbalance of the cylinder diameters. An imbalance of cylinder diameters may cause halftone slur or dot spread, packing creep, unnecessary plate wear or strain on the press.



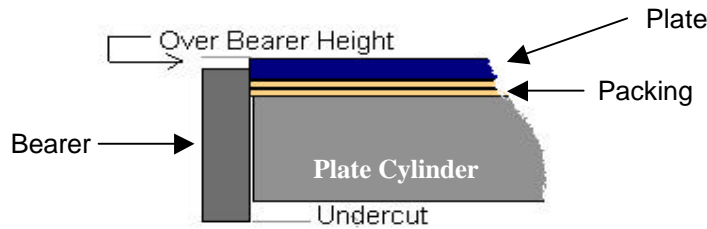
Packing causes or corrects problems associated with blind plates, plate wear, scumming, cracking, registration, ink streaks, dot integrity, as well as common packing complaints such as creeping and wicking.

***The quality of your print job depends on the quality of your packing.***



**Attaining Print Quality With SunShine Press Packing**

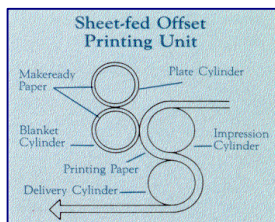
**Plate Packing:** The most important factor about the plate cylinder is the PRINTING DIAMETER. Printing diameter is determined by the thickness of the plate and its packing. First determine the plate thickness using a micrometer.



Once the plate's thickness is known, you can then determine the packing requirement. The Formula is Undercut + Over-bearer height - plate thickness = total packing. **Example:**

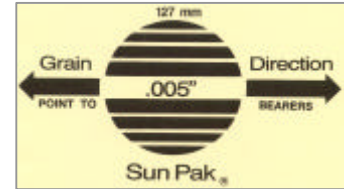
$$\begin{array}{r}
 0.021 \text{ Undercut} \\
 + \quad 0.002 \text{ Surface Over Bearers} \\
 \hline
 0.23 \text{ Subtotal} \\
 - \quad (.12) \text{ Less Plate Thickness} \\
 \hline
 = \quad 0.011 \text{ Total Packing Required}
 \end{array}$$

It is recommended that 2 sheets of packing (i.e. .005 + .006 for above example) be used to absorb vibrations and other forms of energy created when the press is running. These vibrations are caused by two different cylinders, pressures, materials and speeds, and are not absorbed by steel cylinders but by the packing.



These varying pressures create vibration which dissipates through the packing, creeping may occur when the energy trying to move the packing sheet is greater than the packing sheets resistance to movement. SunShine packing papers are engineered and formulated to an average COF (Coefficient of Friction) so it stays put.

Packing should be from 1/16-1/8 inch narrower than the plate to reduce wicking of press chemistry under the plate and into the packing. This wicking will cause the packing to swell and affect the image at the edge of the plate. SunShine packing papers are extremely dense and resist absorption of liquids



## Attaining Print Quality With SunShine Press Packing

**Blanket Packing:** Now that the plate cylinder has been packed to your desired specifications, the blanket cylinder will need to have the same attention to packing consistency and quality.

The relationship or interface between the plate and blanket cylinders sets the control for the entire printing process. From this point on the relationship between plate & blanket cylinders MUST remain constant, if you change packing in one cylinder, you must adjust the packing (to the opposite level) in the other cylinder.

**Example:** after you have reached the perfect “Squeeze” between the plate and blanket cylinder and you add .002 of packing to the plate cylinder, you must take away or reduce the packing under the blanket by -.002. Excessive squeeze in this nip will increase both plate and blanket wear. Blanket piling can be caused or aggravated by unnecessary nip pressure.

The blanket is the second most critical part of the ink trail from pan to paper. Even if the plate, ink, pressures, fountain solutions, and paper are flawless, a poor blanket section will give an inferior print. The blanket packing is so critical to blanket dot reproduction that a difference of as little as .0015 inch results in a noticeable change in color values. A combination of the blanket cylinder, press undercuts, blanket construction, and blanket thickness determines the packing, and therefore the PRINTING DIAMETER of the blanket cylinder.



*The quality of the print you get from your blanket depends on the quality of your press-packing.*