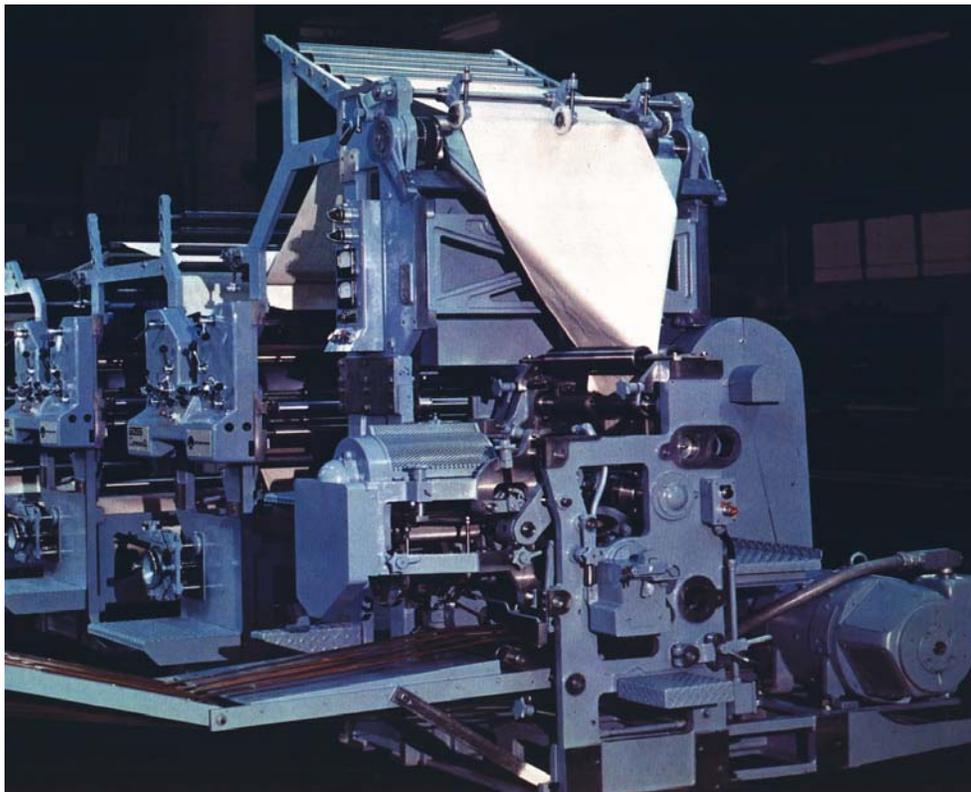




Ink A Division of Sun Chemical Corporation

The Importance of Press Maintenance



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Page 1

OFFSET PRESS MAINTENANCE

The most important part of Quality Printing is consistency in the pressroom. The only way to achieve this is through a preventive maintenance program, which will assure a desirable set of print conditions. A web offset newspaper press requires a strict maintenance schedule that must be followed by pressroom personnel. This maintenance schedule should be put into effect as soon as the offset press begins to operate.

Without a proper maintenance schedule in the offset pressroom operation, there will be many printing problems developing that have no bearing on the training of personnel. These problems will result in a greater waste of paper and increased labor costs. The pressmen will find the operation of a poorly maintained press very difficult. The printing quality of the press will deteriorate rapidly.

Every press manufacturer has a suggested maintenance routine in their press manual. A checklist for the press crew should be developed which will describe daily, weekly and monthly service points on the press. Pressroom personnel should be informed of the importance of using the checklist as help in maintaining the proper printing condition of the press.

The pressroom foreman or the production manager when preparing a maintenance list must be careful to include the following basic assignments:

Daily:

- 1. Before the press is run the form dampener and the steel rollers in the dampening system should be cleaned of all lint and ink deposits. The condition of the sock roller should also be checked at this time.**
- 2. Before webbing the press, pipe rollers should be checked and if necessary cleaned.**
- 3. When removing plates and before putting on new plates, the plate cylinder should be checked and cleaned.**

4. The press blanket should be thoroughly washed with a good blanket wash. It is preferable to complete this operation immediately after the press is shut down. Wipe blanket off with water when wash is complete and dry by hand.
5. The pH and conductivity of the incoming water and fountain solution should be tested. Adjustments should be made as necessary.
6. A check of all form roller settings should be made. With old plates still on the cylinder it is a simple step to drop ink forms and check their setting.

A simple formula for calculating the stripe necessary for a roller would be to multiply the diameter of the roller by 1/16 of an inch.

7. On color units be sure CIC (Common Impression Cylinder) is clean.
8. Check densitometers for proper calibration. Ensure that the proper standards are being used.
9. For injector presses, the rail should be dropped and a bead of ink run to see if all injectors are working properly.

Weekly:

1. The dampening systems should be completely drained and cleaned. Cleaners for the dampening systems are available from the fountain solution suppliers. Any cleaning material used in the system

should be flushed with water before refilling the system. This would include the following:

- A) The circulator tanks
 - B) The water fountain tray
 - C) The feed lines on recirculation type systems.
2. Check the blanket, first for tight lockup on cylinder and then with packing gauge for proper height.
 3. On brush type dampening systems, clean brushes.
 4. Check spray nozzles for proper spray patterns.

Monthly:

1. Check all iron-to-iron settings that are specified by the press manufacturer. The Press Manufacturers supplies GO-NO-GO gauges for this purpose or refer to foil marks on certain systems.
2. The inking rollers should be inked, checked, and properly set with the stripe method to insure good passage of ink from fountain to plate and provide clean wash up of the press. Check roller durometer (28 - 30 for new transfer rollers and take out by 40, 26 - 28 for new ink forms and take out by 40, and 24 - 26 for new dampening forms and take out by 35).
3. The lubrication schedule recommended by the press manufacturer should be followed at all times.

- 4. Check pH and conductivity meters for proper calibration. Ensure that the proper standards are being used.**
- 5. If the CIC has problems cleaning up, try a simple water loving technique. Clean excessive ink from drum with a solvent; then using a Lite-brite pad wash with Comet or AJAX; then remove leftover material. Then Gum the cylinder and let dry; then using warm water remove the gum. This will help the CIC to accept fountain solution more uniformly.**
- 6. Clean plate lock-ups and web detectors.**

In today's market of decreasing profit margins it is important to establish a press maintenance schedule and follow it religiously. An initial period of two to four months without following a maintenance schedule may not show many problems. However after this, if a maintenance program is not followed, the down time costs and excess paper waste due to repairs will far outweigh the costs of a good maintenance program.