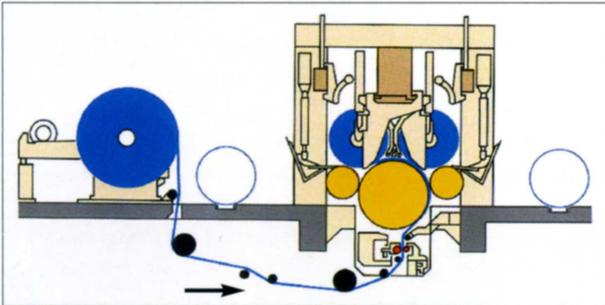


Rewinder

The function of the rewinder is to rewind the reels from one tambour to another tambour. Here, the web run can be changed, from the outer to the inner side, the reel edges may be cut and deficiencies in the paper can be removed.

Slitter rewinder

The finished paper, which on the tambour still has the full machine width, is cut to smaller reels on the slitter rewinder. Circular knives cut the tambour to reels of specified width while the tambour is being unwound. Depending on paper type, these reels are now ready for delivery to the customer, or they are transported to a cross cutter where the paper is cut to sheets.



Reel cutter

Cross cutter

In a cross cutter, the smaller reels that have been cut to size from tambours by the slitter rewinder, are cut to sheets of a specified size. Several reels can be processed simultaneously, depending on the design of the cross cutter and the "cutting weight" of the paper. The important thing here is to produce sheets with clean cutting edges, in other words, to prevent cutting dust from clinging to the edges, since this would cause problems in the printing process. The paper reels fed into the cross cutter are trimmed on both edges and separated in longitudinal direction by circular knives. The web is then cut off to the required size by the chopper knife.



Cross cutter

One important aspect is that the cutting process must be perfectly synchronised to produce the exactly right size and squareness. A conveyor belt directly after the knife section holds the sheets in position and transports them at high speed to a second conveyor belt. Here, the speed is reduced and the sheets are laid out in overlapping arrangement for further transport to the final stacked layout.

Modern cross cutters do more than just cutting. They check the quality of the paper surface, remove faulty sheets, count the sheets and insert counting strips. Some even allow for a "flying change" process of continuous operation, in which full pallets are automatically transported off and new pallets moved into position without halting the machine.

Guillotine

Guillotine type cutters are used for cutting relatively small quantities of paper in special sizes. In these cases, completely refitting the cross cutter would not be economically sensible. Guillotines are also used for the so-called four-sided trim which is necessary for certain print jobs.