

Separator head of Solna 635 mm A2 series showing the schematic design of the cams and arms that govern the movement of the suckers. Upper arm A is carried at its centre and contacts cam B via a cam follower. This cam governs the vertical movement of the sucker via arm C. Arm C contacts cam D via a roller. Cam D governs the horizontal movement of sucker E. The two rollers are held against the cams via a spring, which acts on arms A and C simultaneously. The movements of pressure foot G are controlled in the same manner by a third cam mounted on the same shaft

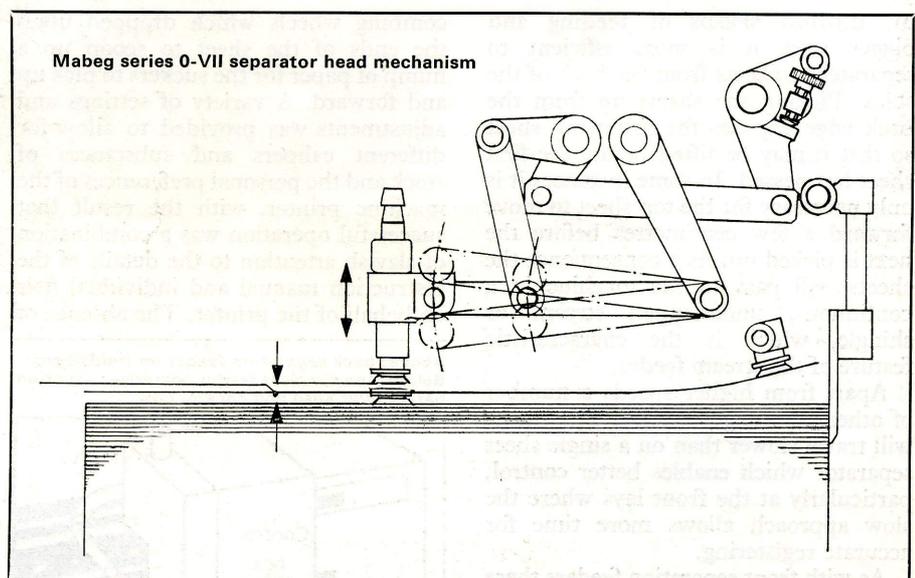
the centre sucker positioned in line with the blower. Sheets from 30 g/m² (banks) to 350 g/m² (fairly thick cards) can be lifted and forwarded at speeds up to 6,500 impressions per hour.

Specialised feeders

For larger sheets and higher speeds machine manufacturers have two options: either to develop their own individual sheet feeders or to offer a choice of feeder from the established specialists in this field. Solna for instance have continued to develop their own feeders as have Heidelberg (although other feeders have been used on these machines from time to time). On the other hand Roland have standardised on a preference for Mabeg sheet feeders, whereas those who believe that British is best may plump for a Crabtree-Vickers press with an Auto-feeds feeder.

Apart from the press manufacturers' own sheet feeders there are currently four major makes of back separation sheet feeders in common use in this country, two German and two British. These are Autofeeds and HTB (British) plus Mabeg and Spiess (German).

Some of the aims which manufacturers have in common are: (a)



fewest number of working parts (b) minimum movement of each part (c) fewest possible adjustments (d) quickest changeover from one job to the next.

Some features which large-sheet, back separation feeder manufacturers' have in common are: (a) two sets of suckers: lifting and forwarding (b) two phases of air blowing: fanning out and forwarding blast (c) programmed cycle

of events from lifting of one sheet to lifting of the next.

Sequence

A typical sequence of events for a modern back separation sheet feeder could be:

- (1) Fanning blow separates the back edges of the top few sheets.