## Scheduling of corrugated paper production

K. MATSUMOTO, H. MIWA, and T. IBARAKI

Corrugated paper is produced by gluing three types of papers. Given a set of orders, we first assign each order to one of the rolls with standard breadths, and then sequence the orders assigned to each roll so that they are continuously manufactured by the machine called corrugator. Here we are asked to minimize the total length of roll papers, total loss of papers caused by the differences between the standard breadths and breadths of orders, and the number of machine stops needed during production. We use integer programming to assign orders to standard breadths, and then develop a special purpose algorithm to sequence the orders assigned to each standard breadth.

