

## Operation: Relative Print Width and Relative Print Length

It is standard practice for platemakers to put register marks halfway down the length of the image and halfway across its width. In maintaining register, the pressman strives to precisely overprint these marks as each successive color is printed. It is

not uncommon for the pressman to find that he has managed to do this with one set of marks through all units, while all other marks are off.

Infrequently, this is the result of inaccurate placement by the platemaker. But usually this situation is the result of the growth or contraction of color images independent of one another. Two terms have come into use to describe these variations in image size: relative print length (RPL) and relative print width (RPW), the latter commonly known as fanout. The term "relative" print length

Fig. 87 This graph shows the results of a series of 18 tests comparing changes in RPL with settings of variable speed drives. (In the original experiment, all tests for each pair of settings were not conducted together. They are shown here grouped together only for the sake of presentation.) All tests were from the same press run. The results show a clear correspondence between variable drive settings and changes in RPL. And each of the process colors closely followed the same pattern of change in RPL. Variations in RPL tended to stabilize within each configuration of drive setting. Best results—RPL closest to zero—were obtained when one variable drive was set faster (advanced) than normal for that type of job, while the other drive was set slower than normal (retarded). A word of caution: the "best" settings as shown by these tests are particular to a specific press and paper, and probably cannot be generalized across most presses and most papers. And, note that these were not the settings that the pressman felt gave him best control of the web (normal-normal).

