

THE DRY COLOR CLAIM

By *Peter Ford*

Some of our competitors are making extensive claims for their products based on their use of dry color rather than flush in the manufacture of their color inks. It is important to understand that this does not, in itself, make the ink in any way superior. Rather, the two are best regarded as alternate manufacturing routes and, indeed, there can be some disadvantages to using dry color.

Traditionally, the ink industry in Europe was predominantly dry color based whereas flushes have been used for many decades in the United States. Interestingly, over the last five years or so, there has been a major move towards flush in Europe. This was done in response to Sun Chemical's rapid growth in their heatset market. Sun's European competitors decided that they had to use the same manufacturing approach in order to compete on gloss and other performance characteristics.



Dry Color Pigment

The flush route is overall a more efficient process because the pigment is never allowed to agglomerate to the same extent that it is when it is dried to make the dry color powder. Instead, the water that is present from when the pigment is first created is directly displaced by ink vehicle in the flushing process. This gives excellent pigment wetting and dispersion with the result that flushes have very good strength development and promote print gloss in heatset and sheetfed printing on coated papers.

The lower overall dispersion energy requirement and their high color strength have traditionally led to good economics for flushes. Currently, very cheap dry color is available from certain Asian countries where the pigment manufacturing process is not subject to the same stringent environmental, health and safety regulations as apply here in the States. This, rather than ink quality issues, may be behind the choice that some of our competitors have made to use the dry color route.