

All sectors of the printing industry have been encouraged, during recent years, to be more conscious of the problems of environmental pollution. This, along with more stringent health and safety regulations, has pressured the graphic arts suppliers and manufacturers to develop products which present less of a problem to the environment and to persons using them.

The litho plate manufacturers have been particularly active in this area and developments have successfully eliminated the pollution and use of hazardous chemicals associated with the production of deep-etch plates. This has been achieved by a continued improvement in the performance of the positive pre-sensitised plate, to such an extent that it has now completely replaced the deep-etch plate. The developers used with these positive working plates are all aqueous-based and only mildly alkali, which is not true for many of the negative working plates. Consequently during the last few years a number of negative working pre-sensitised plates, developed by water only, or water-based developers, have become available. The manufacturers claim the new plates perform as well, or better than previous solvent developed plates, without the problems of pollution or health hazards. If these claims are justified it would be most advantageous if they found wide application.

This project aims to provide an objective assessment of their performance in comparison with a widely used solvent developed plate.