



Letterpress

GRC 101  
INTRODUCTION TO  
GRAPHIC COMMUNICATIONS

# PRINTING CLASSIFICATIONS

Information  
Sheet No.

902

This Information Sheet shows four of the major printing *classifications* in the industry and the physical appearance of the plate or image carrier, which, in turn relates to the characteristics of the press and the appearance of the image on the substrate. The fifth classification, Nonimpact printing, has no specific diagram but is described in Section 5. It will be discussed in later class sessions.

### RELIEF PRINTING

is done from an image carrier on which the printing areas are raised above the non image areas. *Letterpress, rubber stamps, block printing and Flexography* are examples of this classification.



RELIEF IMAGE CARRIER

### INTAGLIO PRINTING

utilizes image carriers in which the printing areas are depressed or sunken below the surface. Examples of this class include *gravure and steel, zinc or copper engraving*.



INTAGLIO IMAGE CARRIER

### PLANOGRAPHIC PRINTING

is typified by an image carrier where the printing areas are on an even plane with the nonimage areas. Often the delineation is accomplished through a chemical reaction. *Litho-graphy, collotype and spirit or "ditto" printing* are examples of processes in this classification.



PLANOGRAPHIC IMAGE CARRIER

### POROUS PRINTING

utilizes an image carrier with open pores through which ink passes to the substrate. Examples of process would include *screen printing, stenciling and mimeography*.



POROUS IMAGE CARRIER

Original **RELIEF PLATES** or image carriers are usually made from copper, zinc or an alloy of lead, tin and antimony. Often the actual printing is done from duplicate plates called electrotypes or stereotypes.

**INTAGLIO** printing in the United States usually means printing from engraved or etched cylinders made from a copper clad steel core and often chrome plated. This process makes image carriers which will run for 10s of millions and is ideal for large production runs.

**PLANOGRAPHIC** image carriers for lithography are often made from aluminum, aluminum clad paper or plastic, zinc or zinc oxide coated paper. A greasy ink image is affixed and the entire plate is moistened. Additional ink will not adhere to the damp background. Spirit printing normally utilizes a paper master and collotype traditionally prints from gelatin coated glass.

**POROUS** image carriers can be made from any strong mesh fabric, such as metal screening, silk or artificial weaves to which an open stencil is attached. Cardboard and punched metal typically is used for regular stenciling applications.