

Bachelor of Journalism & Mass Communication

JMC 107 Design and Graphics

UNIT III

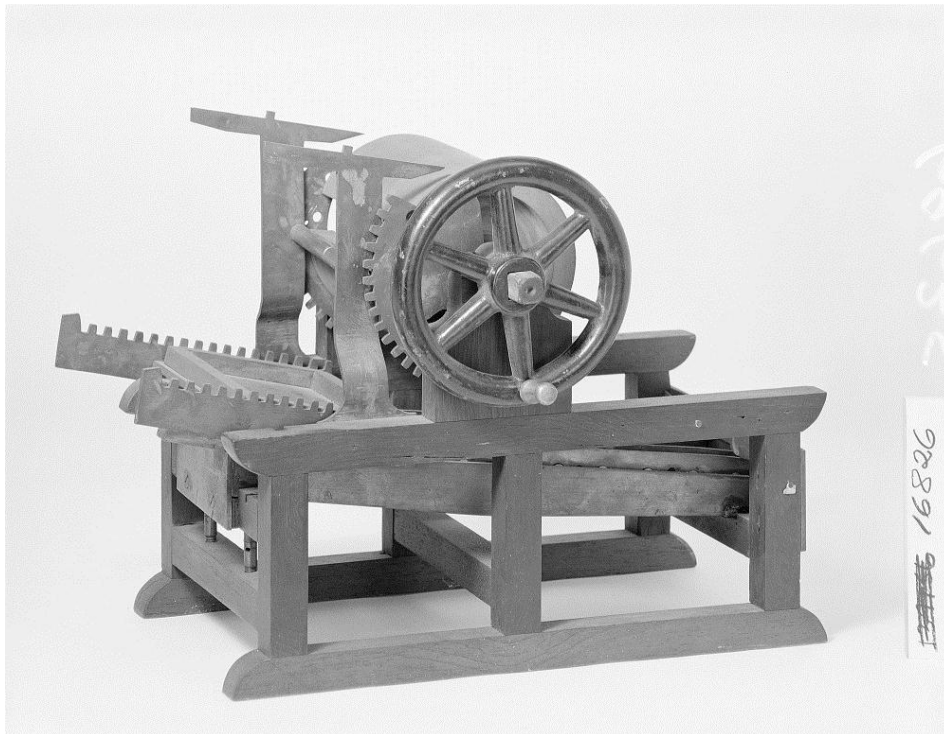
Printing Methods

Letterpress, Cylinder, Gravure, Screen, Offset printing, Plate Making.

Cylinder Printing

A Platen Press - the surface on which the paper to be printed is placed for printing is flat and is called platen, and the master/printing surface is also placed on a flat surface known as the flatbed. Since the paper is put on the platen flat surface), therefore this group of machines is also known as platen press.

These types of machines are best suited for printing letter heads, cards, bill forms, leaflets, pamphlets, inserts, visiting cards, office files, serial numbering, etc. platen presses can also do embossing, die cutting, creasing and foil stamping, numbering, etc. which other printing presses just cannot. One main advantage is that printing work can be stopped in between and any correction can be carried out.



B) Flat to cylinder or plane surface to cylinder- these groups of letterpress machines are known as flat bed cylinder presses. The surface of the printing surface remains flat while the surface carrying paper is cylindrical. Earlier these presses were operated by steam power. But now days they are operated by electrical power.

These machines are efficient enough to print considerably longer run jobs i.e. in larger numbers and for much bigger paper sizes. The great advantage is that flat to cylinder type of machines are cheaper and flexible in printing. Since there is a revolving impression cylinder and is power driven, the printing speed is quite high.

C) Cylinder to cylinder Rotary - here the printing surface as well as the platen are cylindrical. The printing surface is prepared by a duplicating process in round shape (curved or flexible) to be wrapped around the cylinder. The printing surface or the master has relief images. It is known as stereotype. These are prepared by electronic and mechanical techniques. The printing surface or cylinder and the impression cylinder maintain consistency and proportion with each other. The paper printed is in rolling form. After printing it is cut into sheets as per the requirement. This is a fast method of printing. These machines are suitable for printing of newspapers, magazines, books, etc in a large quantity. Also the use of paper in the web form allows continuous printing. Two, three or four colors are possible in these machines. The number of colors that can be printed depends on the number of units through which the paper passes during printing. Since the cylinders are in continuous motion, energy is not wasted in accelerating them again and again.