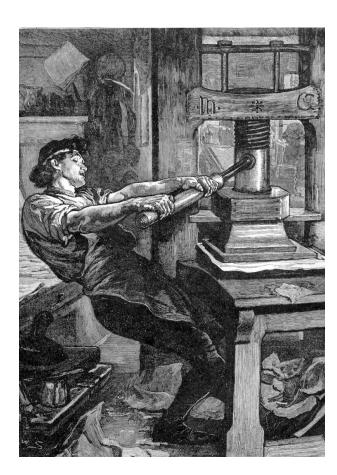
105A.D.	Invention of paper (China)
1041	Invention of movable type (China) made from hardened clay
1397	First text printed from metal type (Korea)
1455	Gutenberg's Bible (Germany): print becomes a manufacturing process
1798	Invention of lithography (Germany)  lithography = printing method using plates. Image areas attract ink and non-image areas repel ink. Non-image areas may be coated with water to repel the oily ink or may have a surface, such as silicon, that repels ink.
1814	First steam-driven mechanical press (England) It had two cylinders, which revolved one after the other and doubled the number o at a speed of 1,100 sheets per hour.
1879	Invention of gravure (Austria) gravure = the method of printing using metal cylinders etched with millions of tiny wells that hold ink
1885	First commercial halftone illustration in a newspaper (New York City)
1886	Linotype: first successful automated typesetting machine (New York City)
1893	First color-separated and screened halftone image (Philadelphia)

1906	"Accidental" invention of the offset rotary press in Nutley, NJ
1930	First four-color offset lithographic press
1948	First public demonstration of Xerography
1954	First commercial "cold type" phototypesetting machine
1985	"Desktop publishing" is born: Apple Macintosh; Adobe PostScript; Aldus Pagemaker; Linotype L300 imagesetter
1993	First digital offset presses (Indigo E-Print 1000; Agfa Chromapress)
1993	First direct-imaging (DI) offset press (Heidelberg GTO-DI)
1994	Industry adopts computer-to-plate (CTP) technology
1998	First "electronic book" reading device (Rocket eBook)
2000	Second-generation digital color presses (Heidelberg NexPress; Xerox iGen3 FutureColor)
2005	e-inks; high-speed, wide-format inkjet printers; "spray-on" lithographic image carriers; re-imageable lithographic presses; remote proofing; CIM (computer integrated manufacturing) workflows linking print production to MIS (management information systems)
2009	e-paper for magazine covers, signage, and e-reading devices (Amazon Kindle, etc.); digital inkjet presses; QR codes linking print to the mobile Internet; sustainable ("green") printing; reliable Web-to-print solutions for print procurement and management



## **The Gutenberg Press**

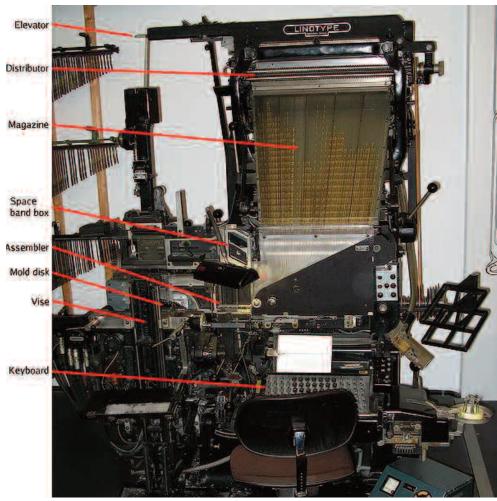
Introduceed to the Western world by Johannes Gutenberg in 1440.

Gutenberg is credited with combining movable cast metal type, ink, paper and a press to produce printed material.

Prior to this all books were handewritten by scribes.



Movable cast metal type



Clemens PFEIFFER, Vienna. Annotations by Paul Koning

## The Linotype (1965)

The machine completed changed the world of printing. For 400 years prior this the Linotype, all type was set by hand.

This machine is used to assemble lines of metal type into a single piece, called a slug. The machine gets it's name from the fact that it produced a complete line of type at once. It made typesetter quicker and easier.

## slug



by Stefan Kühn,