

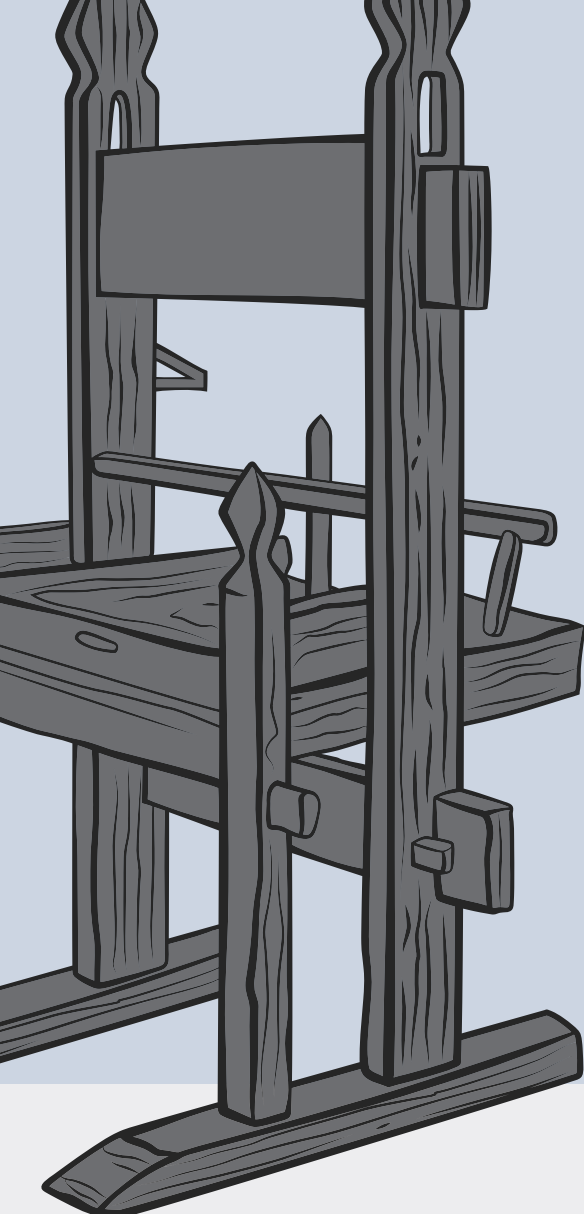
Risky Business

What You Need To Know About...

Commercial Printing

Printing presses have been around for centuries, shaping the way humans communicate. Throughout history, printing presses have progressed significantly. In the digital age, this progress is more important than ever.

The History of The Printing Press:



- ▶ Moveable-type printing was first developed in **China in 1040 AD** by Pi Sheng.¹
- ▶ Johannes Gutenberg invented the **first printing press** in 1440.
- ▶ In the 1500s, "**The Printing Revolution**" facilitated widespread circulation of information and ideas.
- ▶ In the 1800s, printing presses were **powered by steam**.

Commercial Printing Facts:

The most common in-use printing presses are:²



Digital Printers

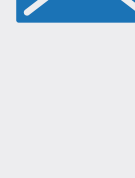


Offset Printers

The largest category of printing and writing papers is **uncoated free sheet paper**, used for:³



Office & Business Forms



Envelopes



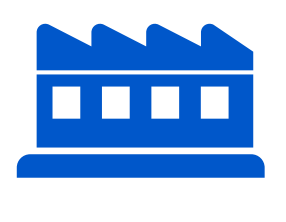
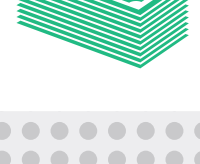
Books



Ink for a printing machine costs about **\$12,000/gallon**.⁴

The printing industry in the U.S. was the **14th ranked manufacturing industry** by market size.⁵

In the U.S., commercial printing is a **\$461 billion** industry.⁶



The U.S. commercial printing industry is made up of about **25,000 companies**.⁷

Industry Trends:



Printing revenue has fallen at a rate of **3% to \$82.9 billion** over the past five years, including a **3.4% decrease in 2023**.⁸

The U.S. printing industry is declining at a faster rate than the U.S. manufacturing industry.⁹

Nanographic printing provides print quality with unparalleled sharpness and color with stunning detail as well as scratch-resistant images.⁹



Nanography



Inkjet

Equipment Breakdown:

What are the most common causes of equipment breakdown?



Lack of Maintenance



Operator Error



Foreign Objects

Digital Press:

Low End **\$300**

High End **\$11,000,000**

How much do printing presses cost to replace?

Offset Press:

Low End **\$10,000**

High End **\$40,000,000**

Loss Prevention Tips:

Regularly schedule time to **remove paper, rags and other debris** from beneath the press, which can cause damage or even start a fire.

Lubricate the chains, bearings and motor assemblies to original equipment manufacturer specifications.

Commit to an ongoing **operator training program** as operator error is a leading loss driver.

¹ <http://www.crf-usa.org/bill-of-rights-in-action/bria-24-3-b-gutenberg-and-the-printing-revolution-in-europe>
² <http://www.johnsbyrne.com/blog/fast-5-facts-on-presses/>
³ <http://www.afandpa.org/our-products/paper/printing-and-writing-paper>
⁴ <https://www.businessinsider.com/why-printer-ink-so-expensive-2019-8>
⁵ <https://cash4toners.com/printing-statistics/>
⁶ <https://www.ibisworld.com/industry-statistics/number-of-businesses/printing-united-states>
⁷ <https://www.firstresearch.com/Industry-Research/Commercial-Printing.html>
⁸ <https://www.ibisworld.com/united-states/market-research-reports/printing-industry/>
⁹ <https://duggal.com/What-Is-Nanography-3-Things-to-Know-About-Landa-s-Patented-Digital-Printing-Technology>