

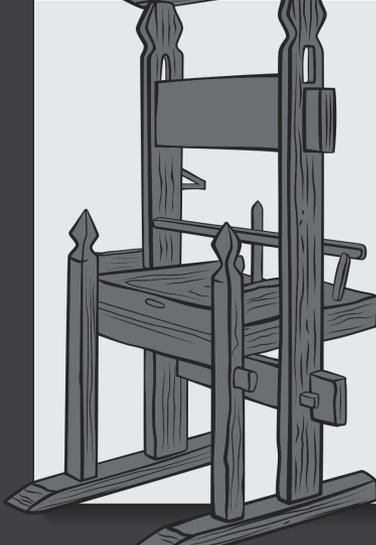
RISKY BUSINESS

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:



- Movable-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 **\$9,600/gallon**.⁴

About **88%** of commercial printing businesses are small- to medium-sized, with an annual revenue of **\$3 Million**.⁶

In the U.S., commercial printing is a **\$76 BILLION** industry.⁵



The U.S. commercial printing industry is made up of about **28,000 BUSINESSES**.⁷

INDUSTRY TRENDS AND BENEFITS:



Since 2000, **more than 30%** of print businesses have **consolidated** or **disappeared** due to changing consumer demand.⁸

Modern presses can print **2X as fast** — and in **higher quality** — compared to 20 years ago.

Nanography, the use of nano-sized ink particles, is projected to be the **next big trend** in commercial printing.⁹ The **first nanographic printing press** was installed in 2017.



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 **\$9,000,000**

OFFSET PRESS:

Low End **\$10,000**

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

How much do printing presses cost to replace?

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 OEM specifications.



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



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References

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² <http://www.johnsbyrne.com/blog/fast-5-facts-on-presses/>

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⁴ <https://www.consumerreports.org/cro/news/2014/04/4-all-in-one-printers-that-won-t-break-your-budget/index.htm>

⁵ <https://www.ibisworld.com/industry-trends/market-research-reports/manufacturing/printing-related-support-activities/printing.html>

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⁷ <https://www.bls.gov/iag/tgs/iag323.htm#workforce>

⁸ <http://www.npes.org/Portals/0/pdf/NPESNewsMarchApril2016.pdf>

⁹ <http://print21.com.au/1st-landa-nanographic-press-goes-into-israel/145173>