

# Difference Between Impact and Non-Impact Printers

The difference between an impact and a non-impact printer is that an impact printer is more mechanical, requiring constant hitting of mechanical pins with ribbon ink to print on paper. In contrast, a non-impact printer can charge the paper electrically and then spray the ink on the paper, resulting in a print on paper.

## Differentiate Between Impact and Non-Impact Printers

Impact Printers	Non-Impact Printers
Impact printers produce characters and images on a piece of paper by striking it.	A printer prints text and drawings on paper without striking the paper.
Printing is done in impact printers by hammering a character dye or metal pin.	Printing with non-impact printers is done by splattering ink on paper.
Impact printers produce high-level noise.	Non-impact printers produce low-level noise.
These are low-speed printers and consume a lot of time.	These are very fast printers as they can print many pages in a minute.
They are unsuitable for printing photographs or other high-resolution materials.	They're ideal for printing photographs or other high-resolution materials.
These are generally less expensive.	Non-impact printers are more expensive compared to impact printers.
Impact printers use old printing technology.	Non-impact printers use the latest printing technology.

## Impact and Non-Impact Printers

Printers are classified into two categories depending on whether the printed image is generated by striking an ink ribbon against the paper. It is considered an essential topic in the [GATE CSE syllabus](#). As a result, printers are categorized into two categories:

- Impact printers
- Non-Impact printers

## What is an Impact Printer?

After discussing the difference between impact and non-impact printers, let us discuss in detail the impact printers. Impact printers function by making a direct touch between the ink ribbon and the paper. These printers make a lot of noise, but they're quite popular. To accomplish printing, impact printers use mechanical moving components.

Impact printers are no longer extensively used due to the noise they produce when the striker strikes the ink ribbon during printing, and they are mostly regarded as outdated. In situations when multi-part forms are necessary, these printers are still used.

**Examples of Impact Printers** are Dot-matrix printers, Daisy-wheel printers, line printers, etc.

## What is a Non-Impact printer?

In non-impact printers, there is no direct contact between the ink ribbon and the paper. They work with lasers, xerographic, electrostatic, chemical, and inkjet printing. These printers are quieter and don't use mechanical moving parts to print.

Because non-impact printers are quicker and quieter than impact printers, they are presently the most popular. Characters and pictures are formed without direct physical contact between the printing machine and the paper in non-impact printers.

**Examples of Non-Impact printers** are Inkjet, Laser printers, etc.

