

Difference between Impact and Non-Impact Printers

Printers produce hard copies of documents stored on, for instance, computers.

They can be broadly categorized into two types: impact and non-impact printers.

It is important to distinguish between these two types of printers to choose the right one according to the requirements like speed, quality, and price.

Impact Printers

It is a type of printer that works by direct contact of an ink ribbon with paper. These printers are typically loud but remain in use today because of their unique ability to function with multipart forms. An impact printer has mechanisms resembling those of a typewriter. Example of Impact Printers, Dot-matrix printers, Daisy-wheel printers, and line printers.

Advantages of Impact Printers

- **Durability:** Impact printers offer durability and long ago; this kind of printer works efficiently for large scale jobs.
- **Cost-Effective:** They are more often cheaper to run, particularly where many copies of the same document are to be produced.

Disadvantages of Impact Printers

- **Noise:** These printers are usually loud owing to the physical strikes of the printer.
- **Limited Print Quality:** Non-impact printers are comparatively poor in quality as far as the quality of print is concerned and thus is not much suitable for getting high quality images or graphics printed.
- **Slower Speed:** As much as impact printers are widespread, they are relatively slow when compared to non-impact printers.

Non-Impact Printers

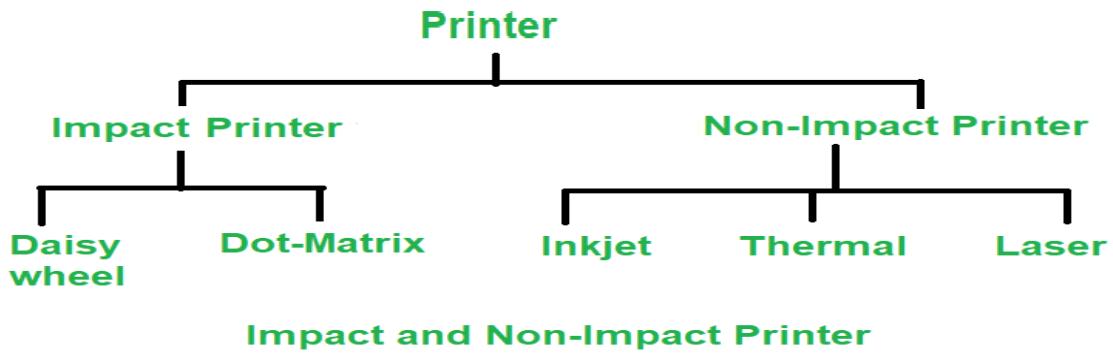
It is a type of printer that does not hit or impact a ribbon to print. They used laser, xerographic, electrostatic, chemical and inkjet technologies. Non-impact printers are generally much quieter. They are less likely to need maintenance or repairs than earlier impact printers. Example of Non-Impact Printers is Inkjet printers and Laser printers.

Advantages of Non-Impact Printers

- **Quiet Operation:** Non-impact printers have low noise producing capability; thus they can be used where noise is prohibited.
- **High-Quality Output:** These printers are also capable of printing with a very fine and clear detail or image and clear text or photo which is suitable for professional use or photos.
- **Faster Printing:** Non-impact printers are normally faster in the way they output their print especially for laser printers.

Disadvantages of Non-Impact Printers

- **Higher Cost:** There is a possibility for non impact printers and their components; ink or toner to be costly as compared to impact printers.



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Impact Printer	Non Impact Printer
Produces characters and graphics on a piece of paper by striking it is called impact printer.	A type of printer that produces characters and graphics on a piece of paper without striking.
It prints by hammering a set of metal pin or character set.	Printing is done by depositing ink in any form.
Electromechanical devices are used	No electromechanical device is used.
Faster speeds around 250 words per second.	Slower speeds around 1 page per 30 seconds.
Have banging noise of needle on paper	Works silently
Dot-matrix printer, Daisy wheel printers, line printer are examples .	inkjet printers, photo printers, laser printers are examples .
It generally cost less.	It cost more than impact printers.
They are not suited for printing photograph or any high quality media.	They are best suited for printing photograph or any high quality media.