

Laser/Types

Types of laser:

Gas lasers

Helium-Neon Laser

Holography, spectroscopy, presentation (pointers), barcode scanning

Argon laser

Used for coagulation, i.e. surgery. Ophthalmic surgery, confocal microscopy, retinal phototherapy for diabetes

CO₂ laser

Used to excise tissue. Ophthalmic surgery. Cutting and welding material.

Chemical lasers

Hydrogen fluoride laser, deuterium fluoride laser. Used in scientific research, weaponry. They are usually much more powerful than gas lasers (can reach mega watt values)

Dye lasers

Dyes such as rhodamine, coumarin. They are used in medicine, spectroscopy, research.

Metal-vapor lasers

Copper vapor laser is used in dermatology and high-speed photography.

Solid-state lasers

Ruby laser is used in holography, tattoo removal. It was the first visible-light laser invented (1960).

Semiconductor lasers

Aluminium gallium indium phosphide (AlGaInP) laser is used for reading compact discs.