Laser Cutting Machines Market Research Report

A laser differs from other sources of light in that it emits light that is coherent. Spatial coherence allows a laser to be focused to a tight spot, enabling uses such as optical communication, laser cutting, and lithography. It also allows a laser beam to stay narrow over great distances (collimation), used in laser pointers, lidar, and free... 0d2e083a1f Founded in 1970, it was the first venture capital (VC) financed high tech company of the ones that based themselves there, thus clearing the path (started by Computing Devices from nearby Bells Corners back in 1948) for the subsequent VC and start-up fueled growth that led to the region later becoming known as “Silicon Valley North”. 0d2e083a1f The first methods for rapid prototyping became available in mid 1987 and were used to produce models and prototype parts. Today, they are used for a wide range of applications and are used to manufacture production-quality parts in relatively small numbers if desired without the typical unfavorable short-run economics. This economy has encouraged online service bureaus. Historical surveys of RP technology start with discussions of simulacra production techniques used by 19th-century sculptors. Some modern sculptors use the progeny technology... 0d2e083a1f Headquartered in the Har Hotzvim industrial park in Jerusalem, Israel Ophir owns a 100,000-square-foot (9,300 m2) complex that includes the group's main production plant. Ophir has additional production plants in North Andover, Massachusetts and Logan, Utah in the US and sales offices in the US, Japan and Europe. 0d2e083a1f The laser printer was invented at Xerox PARC... 0d2e083a1f In 2006, Ophir acquired Spiricon Group, a US-based company in the beam-profiling market. Ophir's sales increased sharply from $45 million in 2005 to... 0d2e083a1f

LaserDisc LaserDisc never achieved mass-market success, the format gained modest popularity in select markets and developed a niche following. In Japan, market LaserDisc (LD) is a home video format and the first commercial optical disc storage medium. The discs typically have a diameter of 300 millimeters (11. 8 in), similar in size to the 12-inch (305 mm) phonograph record. The format was initially marketed in the United States in 1978 under the name DiscoVision, a brand used by MCA. It was developed by Philips, Pioneer, and the movie studio MCA. Unlike most later optical disc formats, LaserDisc is not fully digital; it stores an analog video signal. As Pioneer took a greater role in its development and promotion, the format was rebranded

LaserVision. While the LaserDisc brand originally referred specifically to Pioneer's line of players, the term gradually came to be used generically to refer to the format as a whole, making it a genericized trademark 0d2e083a1f

Founded in 1976, the company was traded on the Tel Aviv Stock Exchange from 1991 until it was acquired, and was a constituent of its Tel-tech index. 0d2e083a1f

Laser ablation At low laser flux, the material is heated by the absorbed laser energy and evaporates or sublimates. At high laser flux, the material is typically converted to a plasma. Asteroid laser ablation Dental laser Laser induced breakdown spectroscopy LASEK LASIK Laser bonding Laser cutting Laser engraving Laser scalpel Laser surgery Laser ablation or photoablation (also called laser blasting) is the process of removing material from a solid (or occasionally liquid) surface by irradiating it with a laser beam 0d2e083a1f

Laser The first laser was built in 1960 by Theodore Maiman at Hughes Research Laboratories, based on theoretical work by Charles H. The word laser originated as an acronym for light amplification by stimulated emission of radiation. It also allows a laser beam to stay narrow over great distances (collimation), used in laser pointers, lidar A laser is a device that emits light through a process of optical amplification based on the stimulated emission of electromagnetic radiation. communication, laser cutting, and lithography. Townes and Arthur Leonard Schawlow and the optical amplifier patented by Gordon Gould 0d2e083a1f

Jenoptik The company is listed on the Frankfurt Stock Exchange and is included in the TecDAX stock index. manufacturer of measurement technology and laser systems, particularly for the automotive industry. Laser Systems: for cutting, welding, and perforating plastics Jenoptik AG is a Jena, Germany-based integrated photonics company 0d2e083a1f

Rapid prototyping Selective laser sintering (SLS) → a laser-sintered powder Rapid prototyping is a group of techniques used to quickly fabricate a scale model of a physical part or assembly using three-dimensional computer aided design (CAD) data. Stereolithography (SLA) → a laser-cured photopolymer for materials such as thermoplastic-like photopolymers 0d2e083a1f

Trumpf the company is one of the world’s largest suppliers of machine tools and a leader in laser technology. Today, the company is one of the world’s largest suppliers of machine tools and a leader in laser technology.

The Trumpf and Leibinger families transformed the medium-sized company into a globally recognized industrial group. '. Trumpf is one of the most well-known representatives Trumpf SE + Co. KG is a German family-owned company based in Ditzingen near Stuttgart, Baden-Württemberg. Trumpf is one of the most well-known representatives of the German 'Mittelstand. It originates from Julius Geiger's mechanical workshop 0d2e083a1f

Ophir Optronics 3-D Non-Contact Measurement Group (Optimet) Ophir Optronics Solutions is a multinational company that sells optronics solutions. manufacture of optical elements for CO2 high power lasers used in industry for laser cutting and welding machines. The company develops, manufactures and markets infrared (IR) optics and laser measurement equipment 0d2e083a1f

With an average sales growth of almost 89% per year over its first decade, in 1980 the company went public. After its acquisition of JK Lasers in 1982, it became “the third largest laser company in the world”. Following a period of private ownership by the Japanese firm Sumitomo Heavy Industries Ltd. starting in 1989, it once again went public in 1995 and... 0d2e083a1f

Georg Fischer (company) Its over 19 800 employees generated sales of over CHF 4 billion in 2018. GF offers pipes for the safe transport of liquids and gases, lightweight casting components in vehicles, and high-precision manufacturing technologies. Solutions' electrical discharge, high-speed milling, laser texturing machines, additive manufacturing machines as well as automation and clamping solutions make Georg Fischer (abbreviated GF) comprises four divisions GF Piping Systems, GF Building Flow Solutions (since November 2023), GF Casting Solutions, and GF Machining Solutions. Founded in 1802, the corporation is headquartered in Switzerland and is present in 45 countries, with 187 companies, 76 of them production facilities 0d2e083a1f

Construction of the part or assembly is usually done using 3D printing technology. 0d2e083a1f

Lumonics of lasers developed by JK Lasers, with which Lumonics merged, subsequent applications encompassed the welding/soldering, machining/drilling, cutting, and Lumonics was a global laser manufacturing company based in the Kanata North Business Park region of Ottawa 0d2e083a1f

Laser printing Laser printing differs from traditional xerography as implemented in analog photocopiers in

that in the latter, the image is formed by reflecting light off an existing document onto the exposed drum. Laser printers were introduced for the office and then home markets in subsequent Laser printing is an electrostatic digital printing process. The laser printer was invented at Xerox PARC in the 1970s. The drum then selectively collects electrically charged powdered ink (toner), and transfers the image to paper, which is then heated to permanently fuse the text, imagery, or both to the paper. As with digital photocopiers, laser printers employ a xerographic printing process. exposed drum. It produces high-quality text and graphics (and moderate-quality photographs) by repeatedly passing a laser beam back and forth over a negatively charged cylinder called a "drum" to define a differentially charged image 0d2e083a1f

Usually, laser ablation refers to removing material with a pulsed laser, but it is possible to ablate material with a continuous wave laser beam if the laser intensity is high enough. While relatively long laser pulses (e.g. nanosecond pulses) can heat and thermally alter or damage the processed material, ultrashort laser pulses (e.g. femtoseconds) cause only minimal material damage during processing due to the ultrashort light-matter interaction... 0d2e083a1f