

LAB MANAGEMENT TODAY[®]

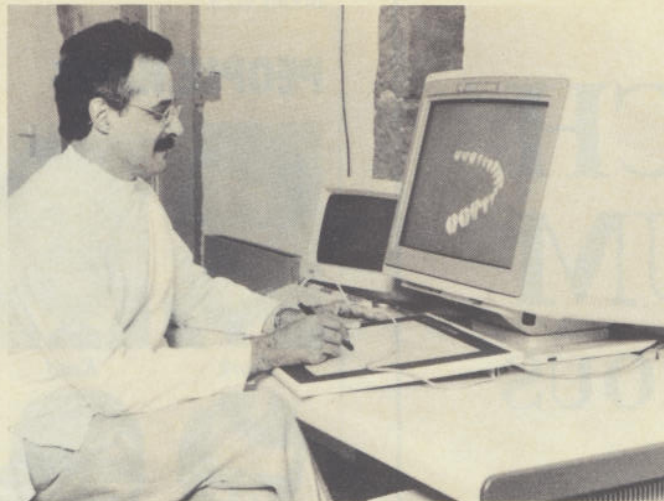
MARKETING/TECHNICAL/BUSINESS STRATEGIES FOR DECISION-MAKERS

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MORE NEWS ON LASER SCANNER



In September 1986, **LMT** brought you a brief news report on the laser scanner from Lyon, France, that is expected to revolutionize the production of dental crowns and dentures. The following is an update on that report.

Dr. Francois Duret, who developed the scanner with Hennson International, spent 15 years on research and development of medical imagery techniques before putting his idea into commercial use. In 1983, when Matra Datavision married three-dimensional optical scanning and digitizing techniques to CAD/CAM, his idea became a reality. Matra's 3-D CAD/CAM system, Euclid, is used to generate a machine tool program to fabricate a crown or bridge.

Hennson's prices for this imaging machine will be between \$35,000 and \$90,000. It plans to produce 10 prototypes in 1986 for field tests. Commercial production for the French and North American markets is scheduled to start in 1987.

Dr. Duret demonstrated the system on his wife, Elisabeth, at the International Congress of the French Dental Association in Paris, a year ago. Using the optical scanner and digitizer, he developed a 3-D image of his wife's mouth. The data was fed into Euclid's computer-aided design software that runs on a DEC (Digital Equipment Corp.) minicomputer.

The 3-D image was compared with a standard library of 32 teeth stored in the system's database. Then it was post-processed into a numerical-control (N/C) tape. This tape gives a profile of the ideal tooth. The dental professional can modify the tooth through an interactive process.

In the third and final stage, the tape is used to control a tiny 3-axis micro-milling machine that precisely "cuts" a crown or bridge from a dental ceramic. The entire cycle can be completed in less than one hour. The system can be operated either in a single or group practice or in cooperation with a prosthesis lab.

Dr. Duret will present his technique in a special three-hour clinic, *Computer Design for Dental Restorations*, at the International Education Congress of Dental Technology. Being held at the New York Penta Hotel, in New York City, the clinic is scheduled for Friday, Oct. 10 from 5:30-8:30pm (Clinic #7) and on Saturday from 12:30-3:30pm (Clinic #50).

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