

SCANTECH launches Microscan and the laser diode scanner

SCANTECH '99 SHOW DAILY
FEATURE

Sometimes all it takes to revolutionize an industry is a good idea and a little bit of exposure. Working out of his garage sixteen years ago, an engineer in-

vestment and demonstrate the year-old product at the show.

SCANTECH site of first public demonstration

To prove the MS-1000 could actually read 400 scans per second, they used a desktop fan as the exhibit display. They placed bar code labels on the blades of the fan and the scanner read the spinning labels. The closest competi-

by Microscan, said it was the MS-1000's size that really made it popular. "The small size of our laser diode scanner made it ideal for embedded applications, which was virtually impossible with helium-neon scanners because of their size," Thomas recalled. "Many of the early scanners started out the size of a small suitcase and some were as large as the engine block in an automobile." At the time of the MS-1000's introduction, even emerging hand-held

short life. They were known to last only 1,000 hours before they had to be replaced. Laser diodes had an average life of 50,000 hours and did not exhibit the same explosive tendencies found in helium-neon lasers. "Some of the original MS-1000s are still in operation today in several European plants." Naumcheff added, "I just received an MS-1000 a few months ago that had been retired after 10 years of 24-hour non-stop operation."



Cutting edge technology, old and new: The MS-1000 (above) wowed 'em at SCANTECH in 1983

tegrated a laser diode into a bar code scanner and developed the first laser diode scanner. One year later at SCANTECH, the product changed the future of fixed mount bar code scanning.

Development of the first laser diode scanner

The laser diode scanner was first developed in 1983 by Mike Mertel, an engineer working on the project during his spare time. By integrating a laser diode into a bar code scanner, he dramatically reduced the size of the scanner. When the scanner was added to the special decoder board, the final product was superior to anything else available on the market at the time. Not only was the new scanner considerably smaller than other bar code scanners, it read at the unprecedented rate of 400 scans per second. Mertel named the product the MS-1000 and started Microscan Systems.

Although the MS-1000 was the smallest and fastest fixed mount scanner in the world, Microscan had a hard time getting the word out about the new product. They had received a few leads from their product releases printed in trade publications, but they weren't generating the sales Microscan needed. The opportunity to exhibit at SCANTECH came up. After some serious discussion, the company decided to make the in-

vention was a scanner approximately one and a half feet long and capable of only 100 scans per second. "The response from attendees was overwhelming," remembered Jim Larson, one of the first 10 employees. "People couldn't believe we could actually read that fast." At the close of the show, Microscan had a purchase order in hand for 900 scanners and several significant leads that matured into sales. Microscan was established as the leader for high performance, small fixed mount scanners in the automatic data collection industry.

Scanning Technology Prior to the Laser Diode Scanner

Prior to the MS-1000, bar code scanners were built with helium-neon lasers that came in six-inch tubes and were fairly explosive. The tubes made it nearly impossible to design a scanner that wasn't in the shape of a torpedo. Jim Thomas, the fifth employee hired

scanners were awkward to handle, some measuring six to eight inches in length. The MS-1000, in contrast, was only 5 inches wide, 4 inches deep and 2 1/2 inches high. Small enough to fit on the end of a person's thumb, the laser diode's size made it possible to make a smaller scanner. The laser diode scanner was also considerably less expensive and a lot more reliable. "Our laser diode scanners were almost bullet proof," said Jerry Naumcheff, also one of the first 10 original employees. "You could literally take an MS-1000 and throw it across the room, drop it on the floor and it would still work whereas a scanner with a helium-neon tube would break." Helium-neon lasers also had a



Microscan repeats history

Today, members of the same engineering team which helped fill that original order in 1984 continue to design leading edge products for Microscan. Microscan is setting a new record, again, for high speed scanning in a small, fixed-mount scanner with its latest product the MS-911. Introduced this year at SCANTECH, the MS-911 is capable of decoding 2,000 scans per second in real time. "Microscan has a significant past, but more importantly, we have an even brighter future. In 1998 Microscan introduced more industry-leading products than ever in its history.



... and today, the new MS-911 gets its debut at the show

This year we are breaking the world record for high speed scanning in our product class," stated Dennis Kaill, president of Microscan. "As the Auto ID industry moves forward into the new millennium, Microscan will continue to be a leader in technology development." Microscan is demonstrating the MS-911 in booth 1529. And looking for history to repeat itself with another huge success thanks to a good idea and the right kind of exposure. ■