As Seen in November 2003 Twin Cities Business Monthly

DO YOU SPEAK Y14.5?

Greg Hetland does, and he's making manufacturers more competitive with it.

The hair dryer you bought six months ago is already broken. And that bookcase marked "some assembly required"? The pegs don't line up with the holes.

You're seeing the results of errors in product design, manufacture, and testing—the kind of thing Greg Hetland, founder of the International Institute of Geometric Dimensioning and Tolerancing in Hopkins (*www.iigdt.com*), believes his company can help others avoid.

Greg Hetland

Errors often stem from initial product drawings that lack precision, Hetland says, or from engineers who lack the training to interpret drawings correctly. "The level of precision required today is so much tighter than it has been in the past," he explains, especially in technology products.

Why the gaps in expertise? Engineers aren't well-versed in the current standard—Y14.5—for the international language of Geometric Dimensioning and Tolerancing, a standard issued by the American Society of Mechanical Engineers. Two years ago, Hetland decided to launch his institute to offer training in Y14.5.

Better application of the standard can save companies 10 to 40 percent of the price they pay for production delays and redesign, says Hetland. That can help U.S. manufacturers stay competitive with overseas businesses, he adds, "even with the [higher] labor rates we have."

Lake Region, a Chaska-based manufacturer for Medtronic and other medical device companies, recently tapped Hetland for in-house training. While manufacturing a tool used in Lasik eye surgery, Lake Region discovered that its quality control engineers didn't have the expertise needed to interpret product tests. Sixteen hours of Hetland's seminars saved the project, worth $1.5 million to Lake Region and major market share to its customer, says Doug Thielbar, director of engineering. "Without this, we could probably have delayed the whole project by six months or so," he says. "I'm sure I could say 30 percent of that [$1.5 million] we wouldn't have been able to generate this year."

—Sara Aase