## Standing tall

Goal posts designed to resist frenzied fans

80 301 FW ROW 30 4 5 11: 10

BY JOHN KMITTA

very autumn some things are certain to happen. Not only the changing of the leaves, shorter days and cool winds, but tailgate parties, marching bands and storied rivalries—the certainties of college football. Almost as certain is the prospect that raucous fans will charge football fields throughout the land as part of that questionable tradition of "tearing down" the goal posts. What is becoming less certain is that they will actually succeed.

Merchants Environmental Industries (MEI), a Chicagobased engineering and contracting firm, has spent the last decade designing goal posts to withstand the onslaught of overzealous attackers.

"We got into [the goal post business] a little over 10 years ago," said Bob Allen, vice president of MEI. "We were asked to get involved when Northwestern University was losing almost a goal post per week. They had lost a lot of games and the students had no reason to be happy, so they made themselves happy by tearing the goal posts down. The university asked us to design something that would be resistant to these weekly tear downs."

Northwestern, the University of Illinois, Notre Dame, Arizona State and Penn State are some of the 25 universities that now use MEI's goal posts.

"Mostly it is schools that are looking forward to really good seasons," said Allen. "The schools that are perpetually in the upper rankings are the schools that want them, because those are schools that do a lot of celebrating."

One company has spent a decade designing goal posts to withstand the onslaught of oversealous (and probably overserved) attackers.

MEI builds the posts and ships them to the facility they will be used at. Then MEI sends a crew of three or four men who will put the posts in and show the people at the university how to do it, so that they can take them out, put them back and adjust them in the future.

According to Allen, the posts are of steel construction with machined steel parts; the core is machined steel and then there is steel pipe. The posts weigh approximately a ton and a half, but they are

and a half, but they are removable for maintenance. They go into the ground approximately 6 feet. There is a sleeve in the ground and they slide into the sleeve.

"The posts have evolved over time," said Allen. "It's somewhat like building a safe. If you build a safe, someone figures out how to crack it. Then you build it better, and they figure out another way to crack it. So it's been an evolving situation."

According to Allen, the fans can't get the posts down simply with people.

"The posts that we've had problems with are those that fans have come at with tools," said Allen. "In one case the fans used a fire hose at the stadium and wrapped it around the posts. In another case they used chains that they found on campus. In two cases they used the television cables - approximately an inch in diameter - that were coming into the stadium. If you have enough people on the end of a 100-foot-long cable, then you have more people than could actually climb on the posts. So we've informed [school officials] that they can't let people get out there with tools, equipment, ropes, and chains."

Allen explained that the way the posts are built, even if they do bend, they don't come down.

"Accidents happen if a post goes down really fast and people are crushed in the fall," said Allen. "Or you get a bunch of people on a post and all of a sudden it goes over, whereas, with our steel posts, the steel won't buckle. It will bend, but it won't buckle. Even though the fans have been able to bend them, there has never been a situation in which people have been in danger. That's a big issue for the schools, and they understand that. If the fans bend it, nobody is going to get hurt in the bending process.

"They're not cheap. For just the goal posts alone without installation is about \$20,000. But you don't have to lose many goal posts to justify that cost."

John Kmitta is Senior Editor of SPORTSTURF magazine. He can be reached via e-mail at jkmitta@mail.aip.com.