

# VICIS has top 4 helmets in impact testing by NFL, NFLPA

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VICIS had the top four performing helmets in the NFL/NFLPA's eighth annual study, with the second version of the company's position-specific helmet taking the top spot.

The VICIS ZERO2-R MATRIX ID TRENCH—a position-specific helmet for linemen—was the top-rated helmet, according to [results released by the NFL and NFLPA](#) on Thursday. The top four spots were held by VICIS.

The survey was conducted by engineers who assessed the performance of all [helmets](#) worn by NFL players in reducing head impact severity.

Biomechanical engineers appointed by the NFL and NFLPA tested 47 helmet models, including six new models never tested before by the league. Five of those six landed in the "top-performing" category.

"The helmet manufacturers are just really responding to the information we're giving them about how injuries happen," said Dr. Kristy Arbogast, NFLPA engineering consultant and co-scientific director and director of engineering at the Children's Hospital of Philadelphia. "The information they learn each year from us sharing their testing results with them, and really has just accelerated their (research and development) cycles such that there are new helmets being introduced every year. And for the most part, those new helmets perform very well in our test program."

Following the four VICIS helmets, five of the next six spots went to

helmets from Riddell, including its SpeedFlex models and a new Axiom model. Xenith and Schutt also had helmets that tested in the "top-performing" section.

The results of the testing are displayed on a poster shared with NFL players and team medical, training, coaching and equipment staffs informing players of what helmets are performing well and which ones are falling behind.

The league said 99% of players were in "top-performing" helmets at the end of last season. But [technological advancements](#) and the use of new materials is becoming more evident each year and leading to better results. For example, six helmets that just a year ago were in the "top-performing" group fell into the "not recommended" group for 2022.

Among new stipulations for this season are that current players who change helmets or players new to the league must choose from a helmet in the "top-performing category." In all, 21 helmets tested were placed in the "top-performing" category.

"At least for the last several years, we've seen new helmets go to the top of the chart, and in pretty significant numbers, which tells me that there continues to be room for improvement in the safety capabilities of the helmets that are being tested," said Jeff Miller, NFL executive vice president overseeing health and safety. "As we continue to see performance improve year over year with newer models, there's optimism that next year we're going to continue to see the same."

Several additional helmet models that are lesser worn but remain permitted were removed from this year's rankings poster and are included on a "legacy" list. One new helmet—the Light LS2—was added to the league's prohibited list.

Jeff Crandall, the NFL's biomechanical engineer, said the advancement of technologies is leading to more customization and position specificity. The goal is to have a helmet ratings system by position beginning with linemen as early as 2023.

"We really have not had a comprehensive way to evaluate one helmet versus another for a particular position, say offensive or defensive line," Crandall said. "That will come out this year. We anticipate having a poster next year that reflects that testing methodology and evaluation. So we believe that will really drive helmet innovation for position-specific going forward."

The league moved up the timing of the release of its helmet testing results by about a month, in part to help equipment managers who will be working with players on potential helmet changes. Some helmet manufactures ran into supply issues last year that led to delays or an inability to fill orders for teams at the college and high school level.

For example, the first version of the VICIS' TRENCH didn't reach some teams until the regular season had already started and was only used by a handful of players.

"The helmet chart has been a massive impact because it gives you a guidance. It's not just the NFL that looks at it," said Erik Kennedy, director of equipment for the Seattle Seahawks. "I got five calls from teams ... asking when this thing is coming out, from colleges. It does affect the lower levels. I don't know how much of the high school level, but it does affect massively the college. It's something we've talked about before is getting it out earlier, because you got to get your orders."

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