

FOR IMMEDIATE RELEASE: Sept. 23, 2020

Media Contact

Amanda Gong, Carestream Dental
470.481.6797
amanda.gong@csdental.com

CS 3700 Ranked First in Trueness in Latest In-Vitro Study

ATLANTA— Scientific literature has shown intraoral scanners to be highly successful in creating digital impressions for designing short-span restorations and partial prosthesis; however, scanning fully edentulous arches is less studied. Now, a new comprehensive in-vitro study testing the trueness of 12 intraoral scanners when scanning full-arch implant impressions has found the CS 3700 intraoral scanner to offer the truest results when capturing scan bodies in an edentulous arch, giving doctors more confidence that they're getting the best results when creating digital impressions with the CS 3700.

The [study](#) compared the trueness—or how closely the digital scans matched the actual object—of 12 intraoral scanners when scanning a stone model of an edentulous arch with scan bodies. Two methods were used to assess trueness. Method 1 directly evaluated the quality/accuracy of the scan of each intraoral scanner. Method 2 evaluated the resulting accuracy of each intraoral scanner in early stages of prosthetic CAD modeling.

Carestream Dental's newest scanner, the CS 3700, was shown to have the best trueness, with a mean error 30.4 μm , when tested by Method 1. The study found the performance differences between the scanners tested to be statistically significant, with CS 3700 outperforming all the other 11 scanners.

"Being able to confidently scan a full edentulous arch is every scanner manufacturer's goal," Ed Shellard, D.M.D., chief dental officer, Carestream Dental, said. "The CS 3700 features advanced acquisition software—CS ScanFlow—that ensures the accuracy of the dataset while making it 20 percent faster than the Carestream Dental CS 3600 intraoral scanner."

Taking into consideration the results of both methods, the study ranked the CS 3700's performance among the intraoral scanners with the highest accuracy, defined as having a mean error of $<40 \mu\text{m}$ with Method 1 analysis and $<25 \mu\text{m}$ with Method 2 analysis. Carestream Dental's CS 3600 intraoral scanner was also included in the study and was also listed among the scanners with the highest accuracy.

Both scanners are capable of high-speed scanning and include smart features like guide arrows that show users the ideal direction to scan. Users can choose from orthodontic, restorative and implant-borne restorative workflows. They can also capture different bite registrations for fabricating sleep devices.

To learn more about the CS 3700, the CS 3600 or any of Carestream Dental's innovative solutions, visit carestreamdental.com.

###

About Carestream Dental

Carestream Dental is committed to transforming dentistry, simplifying technology and changing lives. In this pursuit, we focus on providing the latest in high-quality scanning technology, the smartest chairside systems, the most intuitive practice management software, incredibly accurate imaging software and the data intelligence that helps continually refine patient outcomes. And we offer these solutions for the full range of dental and oral health professionals. For more information please visit carestreamdental.com.

