

# High precision of the CONELOG implant-abutment connection

As for the CAMLOG<sup>®</sup> Implant System, precision testings have confirmed the high precision of the CONELOG<sup>®</sup> implant-abutment connection, this to the benefit of the patient, the dentist, and the dental technician.<sup>(1,2)</sup>

Semper Hogg et al. (2015) compared the CONELOG implant-abutment connection to other systems with conical connections, i.e. Nobel Active, Ankylos C/X, Astra Tech, Straumann Bone Level, and Straumann Tissue Level. The abutments were **torque tightened** according to each manufacturer's recommendations.

**CONELOG showed the best results in terms of rotational displacement** (Fig. 1) and canting moment range (Fig. 2) and very good results in terms of vertical displacement range (Fig. 3).

## Importance of the results:

The precision of the implant-abutment connection is of major importance for the fabrication and later fit of the prosthetic restorations and their accuracy from the model to the patient's mouth. Stability of the implant-abutment connection is strongly influenced by the precision of fit, the connection design (incl. positional index design) and the manufacturing precision.

The CONELOG implant-abutment connection showed evidences of high-precision manufacturing and superior positional stability when compared with other conical connections.

### TAKE HOME MESSAGE:

**1. Superior precision of the implant-abutment connection for CAMLOG<sup>®</sup> and CONELOG<sup>®</sup> Implant Systems**

**2. Advantages of a good precision:**

- a. Positional stability of supraconstruction
- b. Better passive fit
- c. Less abutment screw failure
- d. Time saving (e.g. less adjustment)

**3. Beneficial for the patient, the dentist, and the dental technician**

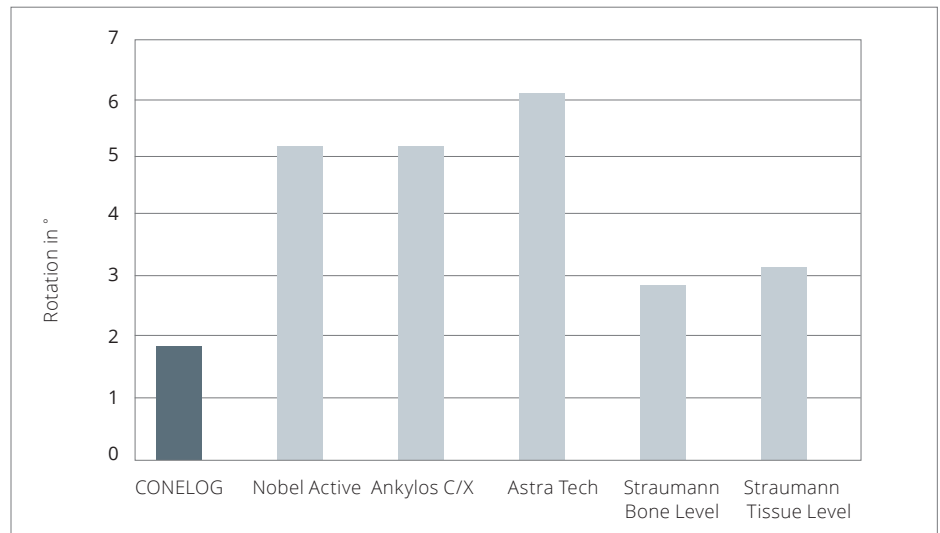


Fig. 1: Rotational displacement of 6 implant systems. (Graphic depicted from Semper Hogg et al. 2015)

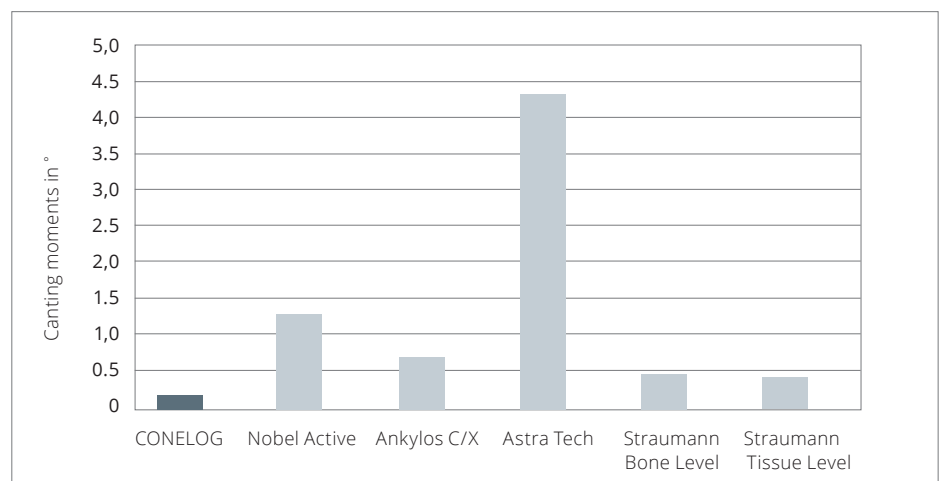


Fig. 2: Canting moments of 6 implant systems. (Graphic depicted from Semper Hogg et al. 2015)

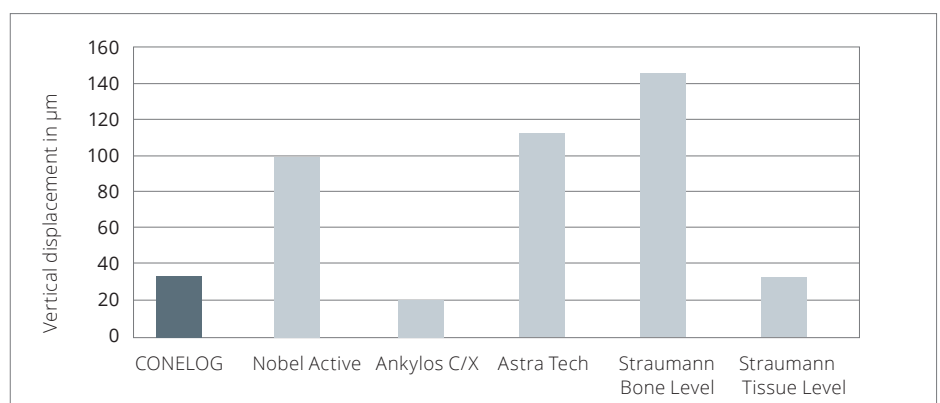


Fig. 3: Vertical displacement of 6 implant systems. (Graphic depicted from Semper Hogg et al. 2015)

## References

(1) **Semper Hogg W, Zulauf K, Mehrhof J, Nelson K.** The influence of torque tightening on the position stability of the abutment in conical implant-abutment connections. Int J Prosthodont 2015;28(5):538-541

(2) **Semper W, Heberer S, Mehrhof J, Schink T, Nelson K.** Effects of repeated manual disassembly and reassembly on the positional stability of various implant-abutment complexes: an experimental study. Int J Oral Maxillofac Implants 2010;25:86-94

The **CAMLOG®** and **CONOLOG®** trademarks are not registered in all markets.

## Headquarters

CAMLOG Biotechnologies GmbH | Margarethenstr. 38 | 4053 Basel | Switzerland  
Phone +41 61 565 41 00 | Fax +41 61 565 41 01 | info@camlog.com | www.camlog.com

Manufacturer of CAMLOG® and CONOLOG® products: ALTATEC GmbH | Maybachstr. 5 | 71299 Wimsheim | Germany

