

## **Cresco™ – Perfect fit every time**

Cresco™ Precision Method is a restorative solution for screw-retained prosthetic restorations. A Cresco bridge can be produced using different framework materials, and can be used with different implant systems<sup>1-4</sup>. The Cresco precision method enables a passive fit between the final prosthetic restoration and the implants. This has been demonstrated in several studies<sup>3-9</sup>, although in one in vitro study passive fit was not achieved<sup>10</sup>. The Cresco precision method also provides flexibility to angulate the bridge-screw access holes and thereby bring them to optimal positions without the need for angulated abutments<sup>6</sup>.

Mechanical properties of the laser-welded joints of the Cresco framework have been investigated, and it has been shown that the strength of the joints exceeds clinical needs, and mechanical fracture is not to be expected<sup>11</sup>. Publications reporting on the clinical use of Cresco bridges cover detailed descriptions of the prosthetic technique<sup>9, 12-14</sup>, evaluation of the use of Cresco frameworks directly on implant level<sup>14-16</sup>, and in situations when an angulated abutment otherwise would have been required<sup>12, 17</sup>. One clinical study compared retention-screw stability between cast bars and bars manufactured with the Cresco method. The study demonstrated similar screw detorque values for Cresco and cast bars after clinical function<sup>2</sup>. Clinical follow-up data, from 12 months up to more than 5 years of functional use of Cresco bridges is presented and shows good results in terms of few mechanical complications, maintained bone and soft tissue health<sup>13-19</sup>.

1. Hjalmarsson L, Smedberg JL. A 3-year retrospective study of Cresco frameworks: preload and complications. *Clin Impl Dent Rel Res* 2005;7(4):189-99. [Abstract in PubMed](#)
2. Schmitt J, Holst S, Eitner S, Schlegel A, Wichmann M, Hamel J. Prosthetic screw detorque values in implants retained as cast bar superstructures or bars modified by the Cresco Ti Precision technique—a comparative in vivo study. *Int J Prosthodont* 2009;22(2):193-200. [Abstract in PubMed](#)
3. Calderini A, Maiorana C, Garlini G, Abbondanza T. A simplified method to assess precision of fit between framework and supporting implants: a preliminary study. *Int J Oral Maxillofac Implants* 2007;22(5):831-8. [Abstract in PubMed](#)
4. Helldén LB, Derand T. Description and evaluation of a simplified method to achieve passive fit between cast titanium frameworks and implants. *Int J Oral Maxillofac Implants* 1998;13(2):190-6. [Abstract in PubMed](#)
5. Helldén LB, Derand T, Johansson S, Lindberg A. The CrescoTi Precision method: description of a simplified method to fabricate titanium superstructures with passive fit to osseointegrated implants. *J Prosthet Dent* 1999;82(4):487-91. [Abstract in PubMed](#)
6. Helldén LB, Ericson G, Olsson CO. The Cresco Bridge and implant concept: presentation of a technology for fabrication of abutment-free, passively fitting superstructures. *Int J Periodontics Rest Dent* 2005;25(1):89-94. [Abstract in PubMed](#)
7. Torsello F, di Torresanto VM, Ercoli C, Cordaro L. Evaluation of the marginal precision of one-piece complete arch titanium frameworks fabricated using five different methods for implant-supported restorations. *Clin Oral Implants Res* 2008;19(8):772-9. [Abstract in PubMed](#)
8. Fischer J, Thoma A, Suter A, Luthy H, Luder HU, Hammerle CH. Misfit of suprastructures on implants processed by electrical discharge machining or the Cresco method. *Quintessence Int* 2009;40(6):515-22. [Abstract in PubMed](#)
9. Haupt R, Wynne J. Use of precision milling to achieve a passive fit on a lost-wax framework. *Pract Proced Aesthet Dent* 2009;21(4):233-37.
10. Hjalmarsson L, Ortorp A, Smedberg JL, Jemt T. Precision of fit to implants: a comparison of Cresco and Procera® Implant Bridge frameworks. *Clin Impl Dent Rel Res* 2009;E-pub Apr 23, DOI: 10.1111/j.1708-8208.2009.00171.x. [Abstract in PubMed](#)
11. Uysal H, Kurtoglu C, Gurbuz R, Tutuncu N. Structure and mechanical properties of Cresco-Ti laser-welded joints and stress analyses using finite element models of fixed distal extension and fixed partial prosthetic designs. *J Prosthet Dent* 2005;93(3):235-44. [Abstract in PubMed](#)
12. Calderini A, Andreoni D, Abbondanza T. Prosthetic rehabilitation in advanced osseointegration: clinical aspects and passivation. In: Santoro F, Maiorana C, editors. *Advanced osseointegration*: RC Libri srl; 2005. (ID No. 78411)
13. Oxby G, Lindqvist J, Nilsson P. Early loading of Astra Tech OsseoSpeed implants placed in thin alveolar ridges and fresh extraction sockets. *Appl Osseointegration Res* 2006;5:68-72. (ID No. 78735)
14. Helldén L, Ericson G, Elliot A, Fornell J, Holmgren K, Nilner K, et al. A prospective 5-year multicenter study of the Cresco implantology concept. *Int J Prosthodont* 2003;16(5):554-62. (ID No. 78728) [Abstract in PubMed](#)
15. Hedkvist L, Mattsson T, Hellden LB. Clinical performance of a method for the fabrication of implant-supported precisely fitting titanium frameworks: a retrospective 5- to 8-year clinical follow-up study. *Clin Impl Dent Rel Res* 2004;6(3):174-80. [Abstract in PubMed](#)
16. Nordin T, Graf J, Frykholm A, Hellden L. Early functional loading of sand-blasted and acid-etched (SLA) Straumann implants following immediate placement in maxillary extraction sockets. Clinical and radiographic result. *Clin Oral Implants Res* 2007;18(4):441-51. [Abstract in PubMed](#)
17. Turkyilmaz I, Patel NS, McClumphy EA. Oral rehabilitation of a severely resorbed edentulous maxilla with screwed-retained hybrid denture using Cresco system: a case report. *Eur J Dent* 2008;2(3):220-3. [Abstract in PubMed](#)
18. Testori T, Del Fabbro M, Capelli M, Zuffetti F, Francetti L, Weinstein RL. Immediate occlusal loading and tilted implants for the rehabilitation of the atrophic edentulous maxilla: 1-year interim results of a multicenter prospective study. *Clin Oral Implants Res* 2008;19(3):227-32. [Abstract in PubMed](#)
19. Thor A. Reconstruction of the anterior maxilla with platelet gel, autogenous bone, and titanium mesh: a case report. *Clin Impl Dent Rel Res* 2002;4(3):150-5. [Abstract in PubMed](#)