

Errata

T. L. Bruns, J. M. Tucker, D. Caleb Rucker, P. J. Swaney, E. M. Boctor, E. C. Burdette, J. Burgner, and R. J. Webster III. Design of an Autoclavable Active Cannula Deployment Device. Design of Medical Devices Conference, 2011.

Dear Readers,

The authors apologize for an error in this manuscript. We incorrectly say that Loctite 648 is a biocompatible adhesive.

Instead, we direct the reader Loctite 4014. This adhesive explicitly states on its datasheet (<http://tds.loctite.com/tds5/docs/4014-EN.PDF>) that it can be autoclaved. With respect to biocompatibility, it has been tested by the manufacturer and meets ISO-10993 biocompatibility standards.

Furthermore, perhaps the best option is to eliminate use of adhesive altogether. After publication of this conference paper we moved to a collet-like closure for this design, holding the tube with three setscrews evenly spaced around the hub. We also note that it is possible (and desirable where extreme compactness is not required) to use a true collet closure, replacing the hub with a collet. We have done this in:

J. Das, D. C. Rucker, and R. J. Webster III. A Testbed for Multi-Lumen Steerable Needle Experiments. Design of Medical Devices Conference, 2010.

using a custom-made collet, compressed with a set screw.

We have also previously used ER-16 Spring collets, with a custom-designed closure. A photograph of such a device appears in figure 3.14 of:

D. C. Rucker. The Mechanics of Continuum Robots: Model-Based Sensing and Control. Ph.D. Dissertation, Department of Mechanical Engineering, Vanderbilt University, Nashville, TN, December 2011.

The one other use of the Loctite 648 in our paper is to hold the ACME nut into the main plate. We suggest eliminating the need for this adhesive by using a nut with a smooth external surface and press fitting it into the main plate.

Lastly, this paper focused mainly on a design that could withstand autoclaving. We note that for biocompatibility, before human use, we intend to anodize all aluminum components, passivate stainless steel components, and eliminate bronze components in favor of plastics such as Ultem. It is unclear whether all these changes are strictly necessary, since many components will always be relatively far from the patient, but we plan to implement them in any case, to be on the safe side.

Sincerely,
The Authors