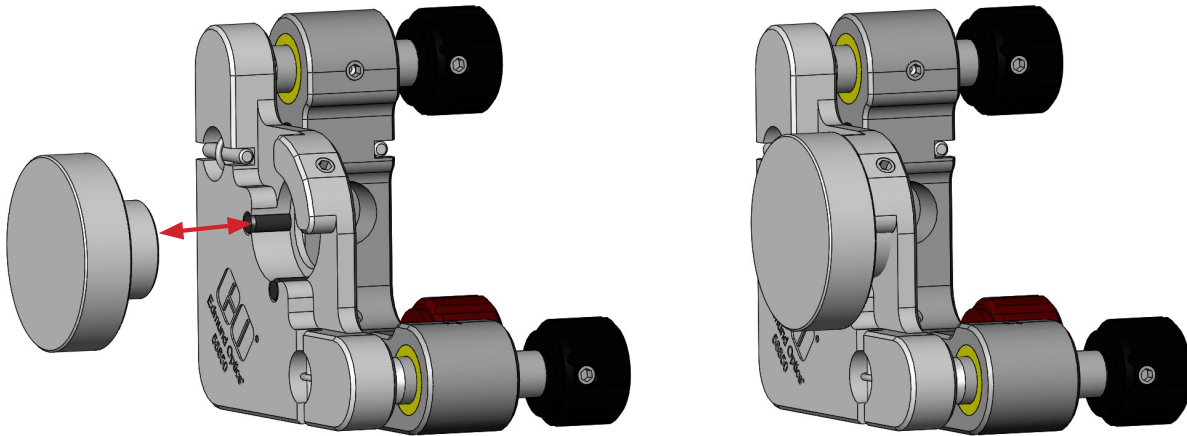


# TECHSPEC® Stemmed Mirrors

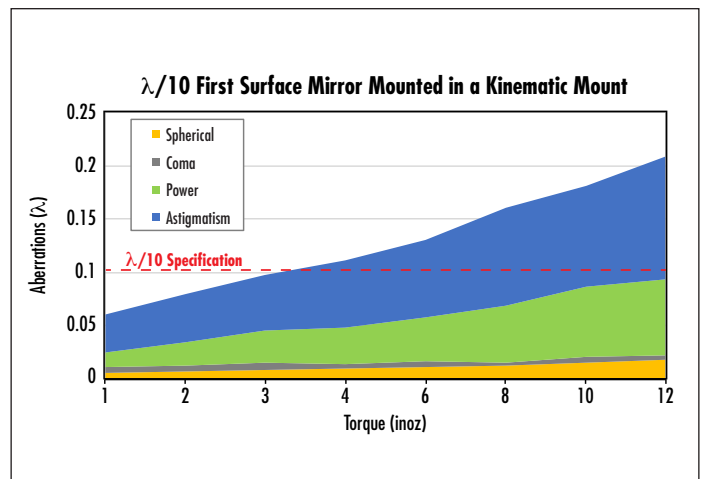
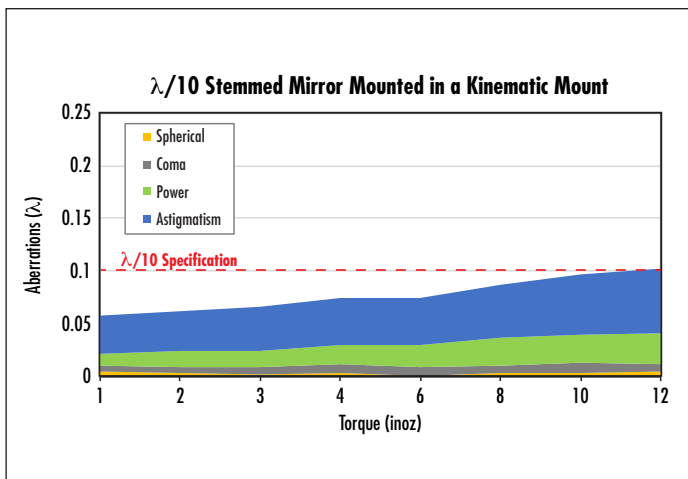
- Stemmed Design Reduces Stress on the Mirror Surface when Mounted
- Monolithic Fused Silica Construction
- Metallic Reflective Coatings



TECHSPEC® Stemmed Mirrors are flat mirrors designed to be mounted by a stem on their back surface to TECHSPEC® Kinematic Circular Optical Mounts. All contact between the mirror and the kinematic mount is through the stem, reducing the stress imparted on the optical surface of the mirror. These mirrors feature a monolithic design and are manufactured from fused silica. TECHSPEC® Stemmed Mirrors can achieve a higher surface flatness when mounted than  $\lambda/10$  flat mirrors directly mounted into kinematic mounts due to their stress-reducing design. These mirrors are available in standard metallic coatings, including enhanced aluminum, protected gold, and protected silver.



Stemmed Mirrors are mounted to kinematic mounts by a stem on their back surface, resulting in no contact with the edges of the mirror surface.



A comparison of the aberrations introduced to a  $\lambda/10$  Stemmed Mirror and a  $\lambda/10$  First Surface Mirror when mounted in a kinematic mount. As shown, a Stemmed Mirror stays within  $\lambda/10$  specification up to 12 inoz of torque ("hand-tight") while a First Surface Mirror becomes out of specification with a surface flatness of  $\lambda/5$ .