

Abstract Submitted  
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**Construction of a Progressive Lens with an aspheric carrier using a Freeform Lens generator** MARIO CARCAMO, None — Progressive lenses are a very commonly used multifocal lens in which the lens power transitions between two values while keeping the transition area on the surface smooth. The final surface design of a progressive lens is typically solved for using numerical methods. An aspheric lens is another type of lens that aims to make a slimmer design than their perfectly spherical counterpart and usually used to make high powered lenses. I present an algorithm in which you can take an existing progressive surface and add to it an aspheric treatment to make a progressive that is slimmer than its non-aspheric counterpart while still achieving high quality optics. The software that was made that employs the algorithm was designed to produce a surface to be made by a Freeform lens generator. The quality of the optics was determined by its deviation from its spherical counterpart ensuring no more than a 0.12 diopter difference inside a given optical zone.

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None

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