The challenge of minimally invasive surgical instrumentation is met head on by Precipart engineers who specialize in the micro machining of small-scale instruments and components. Our team was able to assist one major medical OEM, for example, with the design concept, prototyping and production release of an ophthalmological instrument used to remove and deploy lenses in glaucoma and cataract procedures.

Even in its “small form envelope” Precipart was able to minimize the insertion force of a surgical needle via significantly reduced wall thickness (i.e. <0.004”) and taper angles. Offering the OEM options for multiple titanium material grades as well as needle features: angles, thickness, surface treatments, the new optimized design not only eliminated a multi-part assembly, but significantly improved performance, resulting in the successful launch of a new product platform.