Okamoto Optics possesses the unique capability to manufacture and produce high precision Silicon (Si) spheres, which can be used as mass standards or spherical optical references. Utilizing over 70 years of optical experience, we are able to provide Si spheres for our customers with high accuracy. Our manufacturing and polishing process produces a scratch free surface, with very low surface roughness and near perfect sphericity.

Okamoto Optics has invested into areas of R&D as well as in specialized equipment. Our investments into technology and development have enabled us to push the limits of what is possible and to continually seek out new processes and capabilities. In turn, we provide our customers with the best quality and service possible.

One of the advantages that Okamoto Optics offers to its customers is that we produce our Si spheres out of one solid piece of material; unlike many others who manufacture them in sections. As a result, we can offer more flexibility and increased customization to our customers.

Okamoto Optics is the company for producing high precision Si spherical standards and references.

In 2013, Okamoto Optics manufactured four Si spheres. Two are now being used as mass standards. One at the BIPM (Bureau International des Poids et Mesures) in France, and the other at AIST (National Institute of Advanced Industrial Science and Technology) in Japan.