Industrial Glass Ball Lens and Other Lenses by Miketysonwillson

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The precision balls are being used for the applications where higher precision is required. A lens is an optical device which is used to transmit and refract the light radiations. The glass ball lenses are made from glasses, silicon, sapphire and fused silica. It is used in endoscopy and in sensor applications. A Glass Ball lens can be effective if its diameter of input source, diameter of the ball lens, focal length, back focal length and index of the refractive index are precise. How these glass ball lenses look? The glass ball lenses are highly polished spheres with precise in diameter and of surface quality.

What is an effective focal length? What role do they play in glass ball lenses? A focal length determines the strength of the optical system in convergence and divergence of the light radiations. The glass ball lenses have thick lenses and the focal length in a lens is called as an effective focal length. The ball lenses sizes varies from 0.250 to 25 mm. The application of ball lenses can be found in medical devices as they have a high coupling capacity. A Glass Ball lens can be welded to a metal stem or even soldered with optoelectronics elements.

What are the materials used in half ball lens? Half ball lenses are made of glass, ruby or sapphire which will give a clear transparency in preventing the wear and tear while using. The diameter of the half ball lenses can vary from 1.0 mm to 10.0 mm.

Uses of half ball lenses are

â€¢ Fiber communication

â€¢ Endoscopy

â€¢ LED

â€¢ Microscopy

â€¢ Laser

What are the qualities of these half ball lenses? The qualities of a half ball lens or Half Ball Hemisphere are

â€¢ High surface quality

â€¢ Scratch proof surface

â€¢ High refractive index

â€¢ Heat resistant

Ruby and sapphire are the gem stones which come in pink or red and blue respectively. A ball made from ruby and sapphire is called as Ruby Ball and Sapphire Ball of their respective colors. The ruby balls can be found in opto-electronic devices whereas the sapphire balls are used in many industrial and optical functions. The sizes of these balls range from 0.25 mm to 8.0 mm in diameter and these lenses shows Excellencies in severe environmental conditions. Not only that, it has high strength and high chemical stability as its features. Sapphire has a greater optical transmission than

ruby even though they both share the physical and chemical properties.

Some of the ball point pen companies use ruby ball tips to bring a smoother and finer writing. Currently where are they being used?

They are used in

â€¢ Chemical and medical valves

â€¢ Ball point pens

â€¢ Gauge contact points

â€¢ Ball bearings

â€¢ Ball gauge

The above informationâ€™s would have helped you in understanding more about the balls and lenses. They are of vital use for many industries for various purposes as these exhibits a lot of features. They have different specifications and materials involved to compile the desired product. They are being tested 100% before it is delivered to the customers.

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