## PRODUCTS FROM QUARTZ

There are two entirely different major uses for quartz crystal. One of these is as a gemstone. The varieties known as rock crystal, amethyst, smoky quartz, rose quartz, and citrine are in demand as low-priced but attractive gemstone or display specimens. For gem applications, the quartz is usually cut and faceted for jewelry, or is carved into various shapes by hand or by laser.

Cultured quartz is used in electronic applications, where its special physical properties are valuable. Quartz is one of several minerals which are piezoelectric, meaning that when pressure is applied to quartz, a positive electrical charge is created at one end of the crystal and a negative electrical charge is created at the other. It is also strongly pyroelectric which means that temperature changes can cause the development of positive and negative charges within the crystal. These properties make quartz valuable in electronics applications. While some other minerals may have these properties, quartz is used because it is transparent, tough, and of_unvarying_chemical_composition.

Electronics-grade manufactured quartz is used in a large number of circuits for consumer electronics products such as computers, cell phones, televisions, radios, and electronic games, to name just a few. It is also used to make frequency control devices and electronic filters that remove defined electromagnetic frequencies. In industry, quartz is also used in a variety of electronic devices.


Quartz crystal


Rock quartz crystal

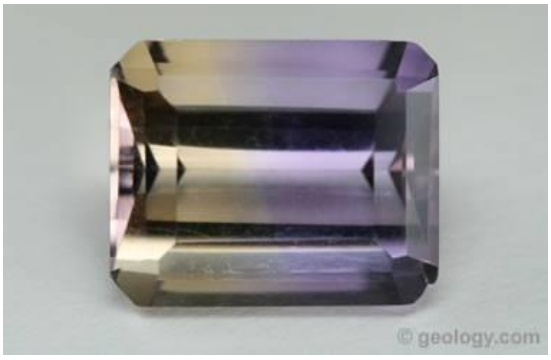

Amethyst quartz


Flint

Jasper beads


Chert


Rose quartz




Ametrine

Quartz glass windows


- Owing to its hardness and corrosion resistance, quartz is often used to make abrasive items such as sandpaper and other such abrading articles. Other than that quartz is used for the manufacture of grinding media and the process of sandblasting.
- Whetstones or smooth stones for sharpening edged tools or knives can be made from quartz given their hardness. Even hones are made from quartz which in turn are used to sharpen razors. Also, refractory bricks are made of quartz due to the sheer strength of the mineral.
- Quartz is a very popular material which is used for kitchen countertops, given that it is not extremely porous and so food particles and fluids do not get trapped in it. Subsequently, the growth of germs is harnessed by quartz. Also, quartz is available in myriad colors and is majorly stain resistant. So, in a battle between quartz vs. granite

countertops, the former wins hands down. Also, for very similar reasons, quartz can be and is widely used in bathrooms as well.

- Quartz is used to make crucibles, which are basically vessels that do not melt easily and are employed for performing for high temperature chemical reactions. It also does not actively react with chemicals or yield to their corrosive effects.
- Quartz can channelize ultra violet light and, therefore, is used for manufacturing UV prisms and lenses.
- Quartz is used in quartz wristwatches, clocks, computers, mobile phones, radios, television receivers, and navigational instruments that function with the help of a quartz oscillator. This quartz oscillator is nothing but an electrical circuit that has a crystal displaying piezoelectric properties. This means that under a particular amount of mechanical stress, the crystal can whip up a temporary electrical signal that has a very steady and rhythmic frequency by vibrating incessantly. Quartz is one such crystal that generates piezoelectricity and is thus used to not only keep a tab on time but also for stabilizing radio frequencies.
- Quartz is used for making glasses of all kinds including fiberglass and container glass. Sometimes, both glass and quartz is commingled to produce lenses and other glass products that exhibit the qualities of both.
- Silica based quartz sand is often used as foundry sand which is blended with cohesive agents such as clay and oil, among others, and then used for the purpose of molding and casting. Also, any crude edges on metals after they have been cast, cut or drilled is also burred or removed with the help of microcrystalline quartz.
- As a continuation of the previous point, flint – a microcrystalline quartz (*a.k.a.* cryptocrystalline quartz) – is today used in the medical field as sharp cutting sides of highly refined surgical tools for ultimate precision and efficincy.
- Quartz sand is also added to molten metals so that it bonds with impurities which then can be easily removed.
- Quartz sand is also used in beaches, baseball arenas, golf courses, volleyball courts, as well as children's sand boxes and also employed for traction purposes in rail tracks and mines.
- Making for fantastic filter media, once they have been screened and washed, quartz sand grains are also expended as effective fillers in the paint, putty, and rubber industries.

- Quartz crystal has a metaphysical and spiritual healing properties which helps a person to de-clutter. When placed on the particular *chakra* that is choked up by negative elements. Quartz can help ventilate negative energies and restore positive vibrations in a person's mental and physical space so as to allow the person to think clearly and optimistically. It is believed by some healers that the rose quartz can help an individual to reconnect with one's basic self. A verve enhancer, it is believed to fortify teeth and bones, detoxify the body and boost sleight.
- Tripoli, a very high quality, crystalline silica is used in toothpastes, soaps, as well as buffing, metal polishing and jewelry polishing compounds owing to its very mild abrasive qualities.