Glass & Glass Frit Processing Technology by NETZSCH-CONDUX

In its pure form, glass is a transparent, relatively strong, hard-wearing, essentially inert, and biologically inactive material which can be formed with very smooth and impervious surfaces. These desirable properties lead to a great many uses of glass. Glass is, however, brittle and will break into sharp shards. These properties can be modified, or even changed entirely, with the addition of other compounds or heat treatment.

Common glass contains about 70% amorphous silicon dioxide (SiO2), which is the same chemical compound found in quartz, and its polycrystalline form, sand.

FINE CLASSIFYING

For glass products, ground with dry ball mills or other mechanical Fine Mills the CFS/HD-S High Dispersion Air Classifiers can be used to remove coarse grit and provide a steeper Particle size distribution (PSD) more similar to a jet mill. Also, in some circumstances, fines removal may be desired, also to provide a steeper PSD.
CFS/HD-S High Dispersion Air Classifiers, with NETZSCH-CONDUX developed process technology are used with our ConVor Classifier wheel. The advantage of the CFS/HD-S High Dispersion Air Classifiers is low energy use, higher yields, very steep particle size distributions, stable operation, and high product purity.

Wear protection features in a CFS/HD-S Classifier
- Wear resistant classifier wheels of Alumina, Zirconia or Tungsten carbide
- Polyurethane and ceramic lined guide vane ring

The CFS/HD-S High Dispersion Air Classifier is a high efficiency air classifier for achieve ultrafine separation. The product is fed into the machine from above through the feeder. Process gas enters through the air inlet next to the feeder. The gas transports the product through the numerous adjustable guide vane slots of a static guide vane ring. Here the highly dispersed product is presented to the classifier wheel. The controlled rotation of the classifier wheel separates the coarse and fine particles. The fines exit the machine via the classifier wheel. Coarse particles are rejected by the classifier wheel and discharged through the rear of the spiral housing. The coarse outlet is located on the underside of the housing.