## Ingots



> GE Quartz is a world leader in providing high purity fused quartz solid shapes for fabricators of quartzware. The solid shapes are available in three standard material types, each with various purity levels.

## Type 124

Type 124 ingots have been the semiconductor industry's material of choice for fabricating diffusion CVD furnace components, and etcher components for more than two decades.

## Description

Clear fused quartz plate and window material produced in 72 inch diameter and 26 inch thick ingots. This material has high purity and will contain some fine bubbles. Various sizes and shapes are available.

## Typical Applications

Used to fabricate wafer carriers and flanges for the semiconductor industry and in a variety of optical applications where low cost commercial quality is specified.

Type 144
The advent of larger wafer sizes, smaller device geometries, and the drive for lower contaminant levels has stimulated GE's development of even higher purity grades.

Type 144 is specially processed to reduce alkali content by up to $90 \%$. Sodium is held to 0.2 ppm or lower, potassium is significantly reduced and lithium is about 0.2 ppm .

## Description

Same as Grade 124 with low aluminum, potassium and sodium.

## Typical Applications

Same as Grade 124 with low aluminum, potassium and sodium. For users who prefer lower aluminum, potassium and sodium material.

## Type 012

Type 012 provides the ultra high purity of synthetic fused silica, while maintaining low $(\mathrm{OH})$ - at less than 5ppm.

## Description

Clear synthetic fused silica ingots in the same form as GE 124.

## Typical Applications

Its ultra high purity makes it useful for plates and discs used in the most critical semiconductor processes.

