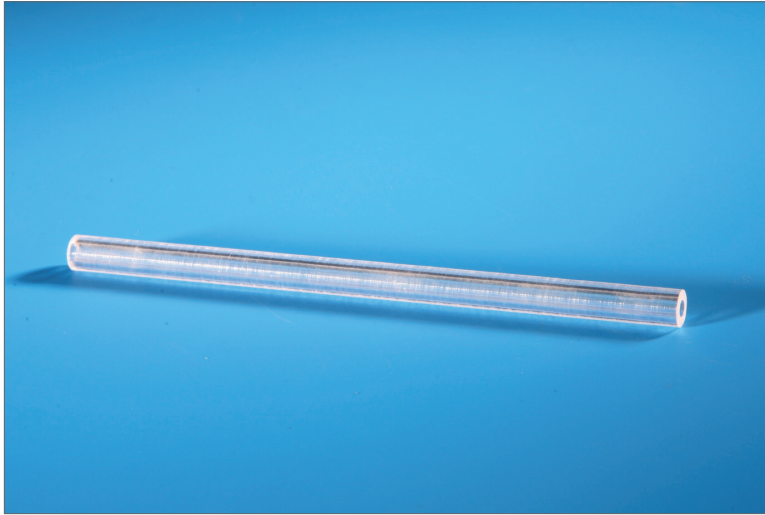


SAPPHIRE SURFACE FINISHES



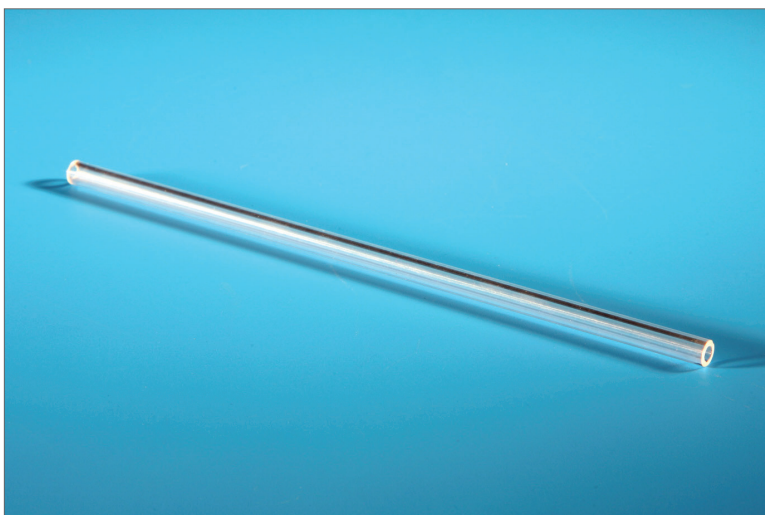
As Grown Sapphire Finish

As Grown Sapphire is clear but not mechanically polished. There is some optical distortion due to the growth process but there are no micro cracks. As Ground Sapphire is excellent for high vacuum systems such as plasma chambers & chemical processing, where purity is critical but optical clarity is not.

Fine Ground Sapphire is frosted. It's ground surface roughness can be fine tuned for diffuser & low stiction applications. Fine Ground Sapphire tends to have micro-cracks that can trap water, gas & other impurities.



Fine Ground Sapphire Finish



Polished Sapphire Finish

Polished Sapphire is clear and has little to no distortion & light scattering (depending on level of polishing). Polished Sapphire is ideal for optical applications, high purity semiconductor, chemical & vacuum processing.