



ENHANCING ENGINE PERFORMANCE AND RELIABILITY: UNLEASHING THE POTENTIAL OF HIGH-TEMPERATURE PROBES

Harness the power of high-temperature probes and achieve heightened operational efficiency, improved maintenance planning, and enhanced reliability, leading to significant cost savings and increased performance in their engine systems. Such a probe can be utilized in the following industries:

- Energy and Power
- Aerospace
- Military and Defense
- Industrial

These advanced probes, designed to withstand extreme temperatures, provide invaluable data on thermal behavior, enabling industries to implement targeted strategies for thermal management and maximize the longevity and efficiency of their turbine engine systems. For companies producing high-performance turbine engines and related products, the implementation of a high-temperature probe is not just an option but a strategic imperative.



According to your requirements, Access Optics has expertise in the optical design of lenses engineered to withstand high temperatures while ensuring efficient transmission into the infrared (IR) spectrum for diagnostics. We possess the capability to model thermal expansion with a particular focus on axial positioning and coefficient of thermal expansion (CTE) matching of materials, eliminating stress and fracturing while preserving impeccable optical performance within the cooling mechanism of the probe. By incorporating cutting-edge technical insights, our coated optics have successfully endured internal thermal shock and thermal cycling at extreme temperatures up to 900°C with external operating temperatures being much higher, a testament to our commitment to excellence. In our relentless pursuit of excellence, we prioritize durability by subjecting our designs to rigorous testing, evaluating their resilience against thermal shock and rapid temperature fluctuations.

In the realm of optical design, our proficiency extends to crafting specialized coatings that transcend conventional boundaries. By harnessing the power of advanced anti-reflective coatings, we achieve seamless light transmission and effectively mitigate unwanted reflections. Our meticulous selection of optical materials is guided by factors like refractive index matching, thermal stability, and environmental durability, ensuring our coatings can withstand extreme temperatures and deliver unparalleled optical excellence.

Access Optics emerges as the go-to source for high-temperature probes, leveraging our successful track record and expertise in developing specialized solutions. With a proven history of collaborating with prestigious companies, we possess the technical know-how and industry insights to deliver cutting-edge probes tailored to the unique requirements of high-brow organizations. Partnering with Access Optics ensures access to consummate quality, reliability, and unrivaled support in harnessing the full potential of high-temperature probe technology.