



Since 1982, we've provided laboratory and production equipment to organizations spanning material science and engineering, mechanical and chemical engineering, extraction and processing, biotechnology, heavy industry, education, government, and healthcare.

QUARTZ MUFFLE FURNACE FOR CORROSIVE GAS

Many common sample materials, like fluorinated or chlorinated polymers, emit highly corrosive gases that jeopardize typical muffle furnaces.

As a ceramic chamber degrades, its insulation and heating element efficiency suffer. Eventually, corrosion may render the furnace completely unusable.

For teams that handle corrosive byproducts, we've developed a first-of-its-kind quartz-chamber muffle furnace.



HOW CORROSIVE GASES AFFECT CERAMIC CHAMBERS

Just how badly can corrosive gases damage a ceramic muffle furnace chamber? One SH Scientific customer kindly provided us with a firsthand example.

This jarring image is the result of processing plastic fluoropolymers, which emit hydrogen fluoride when heated.

Prolonged exposure to HF gas, an extreme corrosive, has damaged the coils and even caused the insulation to fall away.

There's also a conspicuous layer of additional insulation on the bottom. This was a later addition by the customer, since the original insulation was degraded by contact with hot samples.



INVESTING IN LONGEVITY WITH A QUARTZ CHAMBER

Quartz chambers maintain cleanroom-like conditions even in the presence of extreme corrosives.

- Quartz is vastly more corrosion-resistant than any comparable ceramic.
- Completely custom specs are our specialty, from chamber size to temperature range and beyond.
- We manufacture the quartz chambers ourselves, so we're able to retrofit almost any existing muffle furnace, as well.

Bringing this innovation to market is a testament to our deep desire to help the scientific community. It's the direct result of our close partnership with customers large and small—just like the lab featured above—whose unique needs slip through the cracks with bigger firms.

Whether it's a new quartz-chamber model, a chamber upgrade for your current muffle furnace, or a fully custom request, we've got the resources to make it a reality... often at a surprisingly reasonable cost.

If it might be time for a more resilient muffle furnace, then please reach out to our US sales team to learn more.



A BRIEF HISTORY OF SH SCIENTIFIC



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Serving North America Since 2013

In 2018, after particularly rapid growth in the American education and public sectors, we founded a US head office in Portland, Oregon. Whether you're visiting us on behalf of a major institution, a small lab, or anything in between, we're honored that you're considering SH Scientific as a potential partner. We look forward to a lasting relationship in support of your innovation and discovery.

