



Why do other muffles fail before Alloy Engineering muffles?

Pictured below are two muffles used in powder metal sintering furnaces. The bottom muffle failed because the roof collapsed, which is pretty evident from the photo. Parts could not be conveyed through the muffle after the roof collapsed.

But why did the top muffle fail?



Answer: The top muffle failed because it leaked atmosphere. Both muffles were pulled out of service in under two years, causing major, unnecessary disruption for the customer.

What are the Benefits of Alloy Engineering Muffles?

To begin, Alloy Engineering takes the time to understand the process differences for each muffle installation. We look at current muffle failure modes, we listen to the customer, and we offer solutions to make muffles last longer.

For the above muffles, Alloy Engineering fabricated new muffles with our strengthened, corrugated design. This design is much more effective than exterior rib supports, and the new muffle will resist collapsing much better. To prevent atmosphere leaks, our muffles are welded to ASME Section IX procedures by our ASME/AWS Certified welders. Alloy Engineering's welds are prepped to ensure 100% fusion of the base metals used in our muffles. We don't rely on just a bead of weld to hold atmosphere.

Let the Alloy Engineering Team Help You Achieve the Most Process Uptime per Muffle Installed.

