Annealing and sintering boats.

You wouldn't trust your annealing and sintering boats to any old container, would you? Of course not. Because we only supply top-quality sintering and annealing boats. With our molybdenum, tantalum, niobium, tungsten and a wide range of alloys, we have the right material for your high-temperature process. We use these materials to manufacture sintering and annealing boats for continuous and batch furnaces.

Our boats offer outstanding dimensional stability and corrosion resistance coupled with excellent creep resistance and structural stability. The benefit to you? A particularly long service life with barely any distortion. And thanks to the smoothness of their surfaces and the use of special Alumina and Zirconia coatings, we can guarantee that nothing will adhere to our boats.
We can adapt the design of our annealing and sintering boats to your specific requirements. Our products are available riveted, deep-drawn or folded. Do you have very special requirements regarding the dimensional stability of our annealing and sintering boats? Then we recommend that you choose ML and TZM.

By using suitable alloys and optimized production processes, we are able to improve the properties of molybdenum. To achieve a particularly high level of ductility and creep resistance, we dope pure molybdenum with small quantities of $\text{La}_2\text{O}_3$. The stabilized microstructure and modified recrystallization behavior prevent the premature embrittlement and fracture of our furnace components.
What makes ML better than pure molybdenum?

- Higher recrystallization temperature
- Elongated grain structure for improved ductility
- Greater creep resistance

Whenever materials have to meet special challenges, we add titanium and zirconium to strengthen the microstructure of pure molybdenum. Mo-Ti solid solution and Ti-Zr carbides ensure that optimum strengths are achieved at temperatures up to 1 400 °C (2552 °F).

What can TZM do better than pure molybdenum?

- Better creep resistance
- Higher recrystallization temperature
- Greater thermal stability

We're here.

It makes no difference whether you need an entire hot zone or simply a spare part for your existing furnace. With Plansee, you are in good hands. We are happy to install your products for you at your premises. And, of course, we are there to lend a hand when it comes to inspecting, maintaining and optimizing existing furnaces.
A single source for all your needs.

We handle every stage in the manufacture of our products in-house. From the raw materials through to the finished product: including the development of new materials. In this way, we can guarantee that you benefit from the very best quality.

Why wait? Our ribbons, sheets, rods and wires manufactured from refractory metals are available for order online right now. Take a look: www.plansee.com/shop/