

LM

LABORATORY MELTING

Retech Laboratory Furnaces are designed to melt material in an inert atmosphere utilizing either a non-consumable electrode – **Tungsten electrode Button Melter (TBM)**, or a small plasma torch – **Plasma arc Button Melter (PBM)**. The lab furnaces are typically multiple cavity to allow more than one sample to be melted after closing and evacuating the furnace. The samples can be used for new material development or for quality control during production runs.

The lab systems are manually operated to allow the operator to observe the melt process. They are equipped with manual “flippers” to allow each sample to be flipped to ensure the material is fully melted through. A vacuum system is included to remove the air from the system prior to melting to reduce the contamination that can occur during melting. Once the system is evacuated it is backfilled with an inert gas (helium or argon) prior to melting.

Materials:

- Reactive Metals
- Refractory Metals
- Amorphous Metals
- Super Alloys
- Silicon

Applications:

- New Material Development
- Production Quality Control

Retech Systems LLC, a SECO/WARWICK Group Company, is the global leader in the production of Plasma Arc Melting (PAM) furnaces used for melting, refining, and casting reactive, refractory, and other metals, oxides, and metalloids like silicon. In fact, Retech’s customers are currently the only qualified PAM producers of rotor-grade alloys.

[Contact us to learn more.](#)

