

PC

PLASMA CONSOLIDATION

Retech provides state-of-the-art Plasma Arc Melting (PAM) systems with material consolidation for production of economically recycled ingots.

Plasma Arc Melting systems use an electrically excited gas, typically helium or argon, to melt the materials in a sealed chamber, under inert atmosphere. The PAM process allows for low evaporative losses, thereby allowing consolidation of scrap material for secondary reprocessing with minimal effects on chemistry.

Production of ingots using plasma arc consolidation systems offers significant cost savings compared to cold hearth refining methods by processing the material in a lower energy higher throughput system. Material including scrap, drops and runners can be combined with sponge and master alloys to produce ingots.

Each PAM consolidation system is custom designed based on the desired product and the materials to be melted. Retech's experience in PAM equipment uniquely positions us to be able to provide each system for optimal performance. This includes mold design, torch power, material feed equipment required, ingot forming and withdrawal systems and process gas recycle systems.

Retech's experience allows us to provide additional equipment for any melt shop that can include material preparation, material handling and loading and ingot handling equipment. Utilizing plasma melting technology is the best option for processing a wide range of reactive and refractory metals.

Contact us to learn more.

